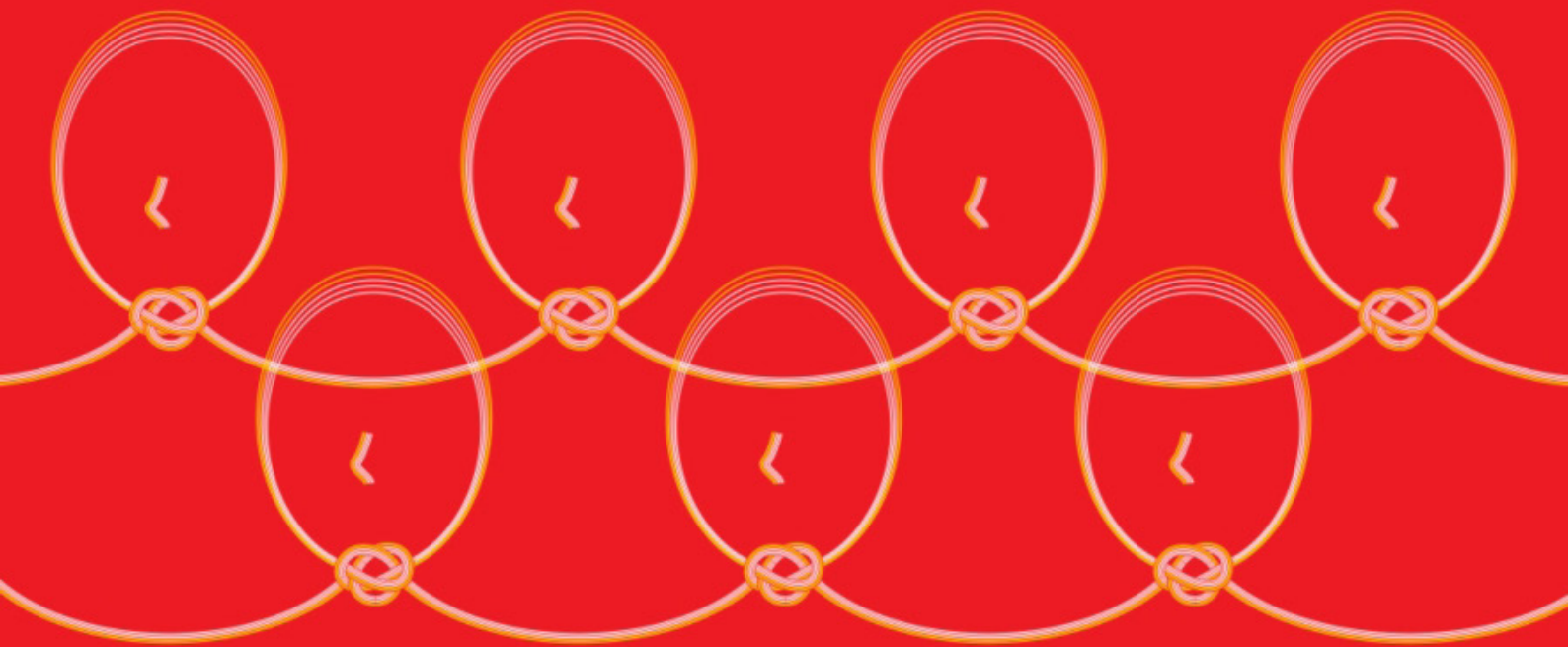# Public Opinion Research at Crossroads

Proceeding of
2014 ANPOR Conference
at **Toki Messe Niigata Convention Center**
Niigata, JAPAN
November 29 - December 1, 2014

Co-organized by Asian Network for Public Opinion Research (ANPOR)
University of Niigata Prefecture
Faculty of Management Science, Silpakorn University

Public Opinion Research at Crossroads

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Committee

Conference Committee

Kheokao, Jantima (University of the Thai Chamber of Commerce, Thailand)	Chair
Byun, Jong-Seok (Hanshin University, Korea)	Member
Idid, Syed Arabi (International Islamic University Malaysia)	Member
Zhou, Bauhua (Fudan University, China)	Member
Inoguchi, Takashi (University of Niigata Prefecture, Japan)	Member
Siriwong, Pitak (Silpakorn University, Thailand)	Member

Scientific Committee

Name	Position	Affiliation
Associate Prof. / Dr. Jantima Kheokao	Chair	School of Communication Arts University of the Thai Chamber of Commerce, Thailand
Professor / Dr. Rhayun Song	Member	College of Nursing, Chungnam National University, Korea
Professor / Dr. Monica Swahn	Member	Institute of Public Health Georgia State University, USA
Associate Prof. / Dr. Sureeporn Thanasilp	Member	Faculty of Nursing, Chulalongkorn University, Thailand
Dr. Robert Chung	Member	Public Opinion Programme (POP) University of Hong Kong
Assistant Prof. / Dr. Angus W.H. Cheong	Member	ERS e-Research & Solutions (Macau), and Department of Communication of Faculty of Social Sciences and Humanities at the University of Macau
Professor / Dr. Dieter C. Umbach	Member	Law Faculty, Potsdam University, Germany
Syed Arabi Idid	Member	International Islamic University Malaysia
Professor Mingue Park	Member	Korea University, Korea
Dr. Yuichi Kubota	Member	University of Niigata Prefecture, Japan
Dr. Jianbin Jin	Member	Tsinghua University, China
Dr. Ren Fujun	Member	CRISP China

Local Organizing Committee

Chair

Takashi Inoguchi (University of Niigata Prefecture)

Member

- Ofer Feldman (Doshisha University)
- Shingo Hamanaka (Yamagata University)
- Noriko Iwai (Osaka University of Commerce)
- Kazufumi Manabe (Aoyama Gakuin University)
- Takafumi Suzuki (Toyo University)
- Ryozo Yoshino (The Institute of Statistical Mathematics)
- Yuejun Zheng (Doshisha University)
- Seiji Fujii (University of Niigata Prefecture)
- Yuichi Kubota (University of Niigata Prefecture)
- Nobuko Murayama (University of Niigata Prefecture)
- Takeshi Uemura (University of Niigata Prefecture)

Conference Schedule

Friday, November 28, 15:30 – 17:30

ANPOR Council Meeting @ NIIGATA TOKYU INN

Friday, November 28, 18:00 – 20:00

Welcome Party @ Toki Messe Observation Room

Saturday, November 29

Registration 8:30 -

	International Conference Room 4F	Cherry A 302A	Cherry B 302B	Sunflower 306+307
Capacity	*230*	*84*	*84*	*63*
9:30 -- 10:00	Opening Remarks: Sung Kyum Cho, Jantima Kheokao, Takashi Inoguchi (ANPOR)			
10:15 -- 11:45	Keynote Speeches: Miguel Basanez (Tufts University), Ijaz Gilani (PIPO), Ichiro Tanioka (Osaka University of Commerce) Moderator: Takashi Inoguchi (ANPOR)			

Time				
12:00 – 13:00	Lunch @ Toh-Lee			
13:15 – 14:45	Social Capital and Social Inequality in Asia -Ryozo Yoshino O1	Health Promotion and Nursing Science (1) -Kee-Jae Lee	Social Media and Dividable Persons (1) –Takafumi Suzuki	Citizen's Political Efficacy and Participation: Comparative Perspective in Shanghai, Hong Kong, Macau, and Taipei -Ching-hsin Yu O2
15:00 – 16:30	Has Public Opinion Research Helped Sustain Representative Democracy in Asia? (1) -Shin Dong Kim O3	Health and Nutrition in the Changing Asian Society - Nobuko Murayama O4	Trust in Governments – Syed Arabi Idid	Well-Being and Quality of Life in Asia (1) –Takashi Inoguchi
16:45 -- 17:45	Has Public Opinion Research Helped Sustain Representative Democracy in Asia? (2) -Ryosuke Nishida O5	Well-Being and Quality of Life in Asia (2) -Hiroo Harada O6	Self-Sustainable Societies in Asia? -Midori Aoyagi O7	***ANPOR General Meeting***
18:00 – 20:00	Banquet @ Toh-Lee			

Sunday, November 30

Registration 7:30 -

	Rose A 201A	Rose B 201B	Lily 202	Cosmos 203+204	Cherry A 302A	Cherry B 302B	Iris 304	Daisy 305	Sunflower 306+307
Capacity	*84*	*84*	*27*	*63*	*84*	*84*	*27*	*27*	*63*
8:30 – 10:00	Displaying posters (8:00 – 10:00)	Tutorial session (Taketoshi Sugisawa)	Administrative Office	Evaluating and understanding societal communication- Sung kyum Cho	Health Promotion and Nursing Science (2) –Robert Chung	Social Media and Dividable Persons (2) Yuejung Zheng	Eating Habits in Asia –Takafumi Suzuki		How to Measure to Take Care of Aging Societies in Asia (1) -Shalinder Mahajan
10:15 – 11:45	Poster Session 1	Gambling Research (joint session with Asian Health Psychology Association) -Kyo heon Kim O8	Administrative Office	Survey Methodology and Environmental consciousness- Kazufumi Manabe	Electoral Studies –Christian Collet	Social Media and Dividable Persons (3) –Zeti Azreen Ahmad	Business and Tourism -Ofer Feldman		How to Measure to Take Care of Aging Societies in Asia (2) - Dr. Kultida Panidchakul

Time									
12:00 – 13:00	Lunch @ Toh-Lee (Luncheon Session: Kazuhiko Takeuchi)								
13:15 – 14:45	Poster Session 2	Is Social Capital in Neighborhood Community Critical in Disaster Mitigation? Motoo Kusakabe O9	Administrative Office	Environmental Risk and Public Opinion-Yuichi Kubota O10	Health Promotion and Nursing Science (3) - Surasak Soonthorn	Media and Politics –Shingo Hamanaka	Journalism and Intellectual Property Right –Chan Zhang	*13:15-15:15 AJPOR Board Meeting*	Nurturing Norms and Values among Children in Asia –Dusadee Charoensuk
15:00 – 16:30	Poster Session 3	Current Challenges in Education in Asia -Reiko Ishii O11	Administrative Office	Social Capital and Social Integration - Eric Yu	Health Promotion and Nursing Science (4) –Dr. Sirikul Karuncharempanit	Social Media and Dividable Persons (4) –Angus Wh Cheong	Asia's Future- Takeshi Uemura	*15:30-16:30 Awards Selection Meeting*	Well-Being and Quality of Life in Asia (3) – Noppanon Homsud
16:45 –	Removing posters								

17:00–17:30 @ 302

Closing Ceremony (Includes awards presentations and brief introduction from next year's ANPOR conference host)

Monday, December 1, 8:30-15:15

Post-Conference Tour: Castle Town Shibata/ Northern Culture Museum, Lunch (Lunch Meeting)/ Niigata Senbei Oukoku (literal translation is "Rice cracker kingdom" – where you can have an experience of cooking rice crackers yourself)   *Meeting Place is Toki Messe 1F Entrance

List of Presentations

Friday, November 28   15:30–17:30

Hotel Tokyu Inn
ANPOR Council Meeting

Friday, November 28   18:00–20:00

Toki Messe Observation Room
Welcome Party

Saturday, November 29   9:30–10:00

International Conference Room 4F
Opening Remarks

Sung Kyum Cho, Jantima Kheokao, Takashi Inoguchi (ANPOR)

Saturday, November 29   10:15–11:45

International Conference Room 4F
Key Note Speeches

Miguel Basanez (Tufts University)
Ijaz Gilani (PIPO)
Ichiro Tanioka (Osaka University of Commerce)
Moderator: Takashi Inoguchi (ANPOR)

Saturday, November 29　13:15–14:45

International Conference Room 4F
Social Capital and Social Inequality in Asia

Organizer: Ryozo Yoshino, The Institute of Statistical Mathematics, Japan

"Social Capital and Social Inequality in Asia," Ryozo Yoshino, The Institute of Statistical Mathematics, Japan

"Has Japan's Social Capital been Deteriorated?-Evindence from the 2013 National Survey of Social Capital-," Yoji Inaba, Nihon University, College of Law, Japan

"Social Capital and Subjective Happiness," Yoshimichi Sato, Tohoku University, Japan

Cherry A 302A
Health Promotion and Nursing Science (1)

Chair: Kee-Jae Lee

"Factors Affecting the Occurrence of Aedes Aegypti Linnaeus in Households at Amphoe Nakhon Chai Si, Nakhon Pathom Province, Thailand," Phimlada Anansirikasem, Boromarajonani College of Nursing, Chakriraj, Thailand

"The Application of Student Development Activities Program Based on the Contemplative Education Model," Wantanee Naksrisang, Sukjai Charoensuk and Nongnuch Suapumee, Boromarajonani College of Nursing, Chakriraj, Thailand

"Research Title "Socio-cultural change with obesity problem in Thailand."" Assist. Prof. Dr. Dusadee Charoensuk, Eastern Asia University, Thailand

"Assessing Self-reported Smoking Status by urinary cotinine measurement in the Korean National Environmental Health Survey," Kee-Jae Lee, Korea National Open University, Korea

Cherry B 302B
Social Media and Dividable Persons (1)

Chair: Takafumi Suzuki, Faculty of Sociology, Toyo University

"An Investigation of Influentials and Noninfluentials' Profiles and Message Properties on the Microblog Platform," Cong Liu and Yi Liu, Shanghai Jiao Tong University, China

"Relationship between Internet Use and Social Identification," Yungeng Xie, Wei Chen and Yi

Liu, Institute of Arts and Humanities, Shanghai Jiaotong University, China

"Brand Crisis in Social Network: A New Model from Entertainment Perspective," Rungsiman Nararatwong[1,3], Roberto Sebastian Legaspi[2], Hitoshi Okada[3], Tetsuro Kobayashi[3] and Hiroshi Maruyama[2]

[1]The Graduate University for Advanced Studies, Japan

[2]The Institute of Statistical Mathematics, Japan

[3]National Institute of Informatics, Japan

"Factory Workers' Public Opinion on Issues in Malaysia: The Role of Media," Aini Maznina A manaf, Zeti Azreen Ahmad and Mazni Buyong, International Islamic University Malaysia, Malaysia

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Sunflower 306+307

Citizen's Political Efficacy and Participation: Comparative Perspective in Shanghai, Hong Kong, Macau, and Taipei

Organizer: Ching-hsin Yu, Election Study Center, National Chengchi University, Taiwan, Taiwan

"Citizen's Political Efficacy and Participation in Taipei," Ching-hsin Yu and Eric Cheng-hua Yu, Election Study Center, National Chengchi University, Taiwan, Taiwan

"The understanding of the relationship among social media usage, political efficacy and political participation in Macao," Angus Wh Cheong, Athena Seng and Yuan Liu, Macao Polling Research Association, Macao

"Political Efficacy and Participation in Hong Kong: Quality versus Quantity," Robert Ty Chung and Winnie Wy Lee, Public Opinion Programme, The University of Hong Kong, Hong Kong

"Media Use, Citizen Engagement and Political Efficacy in Shanghai," Baohua Zhou, Shuanglong Li, Bofei Zheng and Bing Tong, Media and Public Opinion Research Center, Fudan University, China

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Saturday, November 29　15:00-16:30

International Conference Room 4F

Has Public Opinion Research Helped Sustain Representative Democracy in Asia? (1)

Organizer: Shin Dong Kim, Hallym University, Korea

"Voting Advice Applications in Japan: An Overview," Takayoshi Uekami[1] and Hidenori Tsutsumi[2]

[1]Kochi University, Japan

[2]Kagawa University, Japan

"Next Step for Voting Advice Applications: Taiwan's Experience of Online Meeting with Legislators," Boyu Chen[1], Da-chi Liao[2] and Peng-hsiang Shih[3]

[1]Institute of Political Science, National Sun Yat-sen University, Taiwan

[2]Institute of Political Science, National Sun Yat-sen University, Taiwan

[3]Department of Political Science, National Chengchi University

"The Effects of VAAs on Voter's Sophistication in Japan," Hidenori Tsutsumi[1], Takayoshi Uekami[2] and Inamasu Kazunori[3]

[1]Kagawa University, Japan

[2]Kochi University, Japan

[3]Kwansei Gakuin University, Japan

"Voting Advice Applications in Korea," Myoungho Park, Dongguk University-Seoul, Korea

Cherry A 302A
Health and Nutrition in the Changing Asian Society

Organizer: Nobuko Murayama, University of Niigata Prefecture, Japan

"CHIRDREN MALNUTRION OUTBREAK IN WEST OF LOMBOK," Dr. Chairun Nasirin, College of Health Science (STIKES MATARAM) INDONESIA, Indonesia

"Socioeconomic factors, health and nutrition among elderlies in Japan," Asami Ota, Health and Nutrition, University of Niigata Prefecture, Japan

"Relationship between eating behaviors, body mass index, and blood pressure: Study among hypertensive older adults in Saraburi province, Thailand," Tassanee Krirkgulthorn[1,2], Bang-on Phoanoi[2] and Kanyanat Kerdchein[1]

[1]Boromarajonani College of Nursing, Nakhon Ratchasima, Thailand

[2]Boromarajjonani College of Nursing Saraburi, Thailand

[3]Boromarajonani College of Nursing, Nakhon Ratchasima Thailand

Cherry B 302B
Trust in Governments

Chair: Syed Arabi Idid, International Islamic University Malaysia, Malaysia

"An Empirical Study of the Impact of Media Use on Government Trust in College Students,"
Hong Chen[1], Jia Guang Zheng[1] and Yang Xu Zhang[2]

[1]School of Communication, East China normal university, China

[2]Institute of Arts and Humanities, Shanghai Jiao Tong University

"Framing Corruption in the Public Imagination: Evidence from China's Media Landscape,"
Scott Fritzen[1] and Fanyijing Wang[2]

[1]New York University Shanghai, China

[2]East China Normal University

"How to Earn Public Trust in Risk Communication: Factors Specifying Trust in Japanese
Government in the Concern of Nuclear Power Plants," Satomi Furuno[1] and Naoya Ito[2]

[1]Graduate School of International Media, Communication, and Tourism Studies, Hokkaido
University, Japan

[2]Faculty of Media and Communication, Hokkaido University

"An Empirical Study of the Impact of Media Use on Government Trust in College Students,"
Guangjia Zheng[1], Jia Guang Zheng[1] and Yang Xu Zhang[2]

[1]School of Communication,East China normal university

[2]Institute of Arts and Humanities, Shanghai Jiao Tong Universit

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Sunflower 306+307
Well-Being and Quality of Life in Asia (1)

Chair: Takashi Inoguchi, University of Niigata Prefecture, Japan

"Satisfaction with Daily Life Aspects: Japan 2013," Takashi Inoguchi, University of Niigata
Prefecture, Japan

"Women's Higher Education and the Future of Family Values in Asian Societies," Hachiro Iwai,
Graduate School of Education, Kyoto University, Japan

"Cross-national Analysis on the Oriental Cultural Sphere Based on Survey Data," Yuejun Zheng,
Doshisha University, Japan

"Well-Being Among East Asia's Ageing Populations," Nicole Claudine Naurath, Gallup,
Thailand

Saturday, November 29   16:45-17:45

International Conference Room 4F
Has Public Opinion Research Helped Sustain Representative Democracy in Asia? (2)

Organizer: Ryosuke Nishida, Ritsumeikan University, Japan

"Has Public Opinion Research Helped Sustain Representative Democracy in Asia?," Satoshi Narihara, The University of Tokyo, Japan

"Investigation of campaign and policymaking for a harmonious system," Fumiko Kudoh, Independent, Japan

"Did the Online Election Campaign Fail?: a Survey Analysis of the Effects of the Online Campaign in the 2013 Japan Upper House Election," Morihiro Ogasahara, Kansai University, Japan

"Comment on the session "Has Public Opinion Research Helped Sustain Representative Democracy in Asia?"," Naoto Ikegai, The University of Tokyo, Japan

"How Did the Online Election Campaign Change the Election of Japan?," Ryosuke Nishida, Ritsumeikan University, Japan

Cherry A 302A
Well-Being and Quality of Life in Asia (2)

Organizer: Hiroo Harada, Economics Department, Senshu University, Japan

"Social Well-Being/Capital in Asia: From the Questionnaire Approach," Hiroo Harada, Economics Department, Senshu University, Japan

"Social Network, Family Policy, and Fertility Decision,"Masayuki Kanai, Senshu University, Japan

"Community Awareness and Life Satisfaction of Citizens in Kawasaki City," Satoshi Kambara, Senshu Uni. School of Commerce, Japan

Cherry B 302B
Self-Sustainable Societies in Asia?

Organizer: Midori Aoyagi, National Institute for Environmental Studies, Japan

"Environmental Attitudes and Behaviors: Analyses of the Philippines using ISSP 1993, 2000, and 2010 surveys," Joseph anthony Lazareto Reyes, Tohoku University, Philippines

"The key for the building Self-Sustainable Societies in Asia – Energy Choices," Midori Aoyagi, National Institute for Environmental Studies, Japan

"Environmental Issues, Public Responses, and Media Communication in China," Shaojing Sun, Fudan University, China

"People's Attitudes Toward Nuclear Energy Policy: The Impact of Fukushima Daiichi Nuclear Accident," Noriko Iwai[1] and Kuniaki Shishido[2]

    [1]JGSS Research Center, Osaka University of Commerce, Japan

    [2]Osaka University of Commerce, Japan

Sunflower 306+307
ANPOR General Meeting

Sunday, November 30　8:30–10:00

Rose B 201 B
Tutorial session

"Introduction to Multilevel Modeling"
SUGISAWA Taketoshi (Faculty of Education, Niigata University)

Cosmos 203+204
Evaluating and understanding societal communication

Chair: Sung kyum Cho, Chungnam National University, Korea

"Exploring Communication Etiquette in Online Communities through the Presence of Foul Language and Network Statuses," Jin ah Kwak[1], Sung kyum Cho[2] and Jong-seok Byun[3]

    [1]KAIST (Korea Advanced Institute of Science and Technology) Korea

    [2]Chungnam National University

    [3]Hanshin University

"Using a Communication Index in the Age of Digital Polarization," Sung kyum Cho[1] and Bumjune Lee[2]

    [1]Chungnam National University, Korea

    [2]Seoul National University

"Variance estimation of the population proportion estimator based on the randomness due to RDD and nonresponse in telephone survey," Mingue Park, Korea University, Korea

Cherry A 302A
Health Promotion and Nursing Science (2)

Chair: Robert Chung, Public Opinion Programme, The University of Hong Kong, Hong Kong

"Fatigue Relief among Cervical Cancer Patients in Thailand: Praying and Meditation," Suppakorn Wankrathok, Boromarajonani College of Nursing, Chon Buri, Thailand

"Factors Influencing Intention to Have Pap Smear Screening Among Thai Women in Rajvithi Campus, Mahidol University Bangkok," Ashfaq Ahmed Khawaja khail[1], Pimsurang Taechaboonsermsak[2] and Khin Swe swe[1]

[1] Faculty of Public Health, Mahidol University, Bangkok, Thailand, Thailand

[2] Faculty of Public Health, Mahidol University, Bangkok, Thailand

"Response rate of adverse events following immunization monitoring: lessons learned from surveillance in Chiang Mai, Thailand," Kannika Thiankhanithikun, FACULTY OF PHARMACY, CHIANG MAI UNIVERSITY, Thailand, Chiang Mai ADR Network

"Promoting reproductive health care services for women migrant workers: be healthy with friendly service," Wirawan Klayhiran, Boromarajonani College of Nursing, Ratchaburi, Thailand

Cherry B 302B
Social Media and Dividable Persons (2)

Chair: Yuejun Zheng, Doshisha University, Japan

"Improving community life through Public Relations," Masateru Noguchi[1] and Ito Naoya[2]

[1] Hokkaido University, Japan

[2] Research faculty of Media and Communication, Hokkaido University, Japan

"Cybercrime: traditional crime conducted through the internet," Mazni Buyong, Aini A.manaf and Zeti Ahmad, International Islamic University Malaysia (IIUM), Malaysia

"Effect of Use and Gratifications Theory to Knowledge Sharing in Social Media: Evidence from Officers in Thailand," Noppanon Homsud and Pattraporn Trongchookiat, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

~~"Chinese Internet Users' Communication Behaviors in Public Events: A Survey on Internet Users from 36 Cities," Rui Qiao, Institute of Arts and Humanities, Shanghai Jiao Tong University, China~~

Iris 304
Eating Habits in Asia

Chair: Takafumi Suzuki

"Factors influencing urban and rural Thai adolescents' eating behavior," Kamonporn Patcheep, Boromarajonani College of Nursing, Ratchaburi, Thailand

"Hedonic and Utilitarian Values of Eating Fast Food: A Case Study of Undergraduate Students in Thailand," Pattraporn Trongchookiat and Noppanon Homsud, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

"Facebook: An Attractive Channel through Restaurant selection on Holiday," Jittapon Chumkate and Narisa Chuminjak, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

"The Factor Related in Foreign Food Restaurant Selection of Thais Teenagers in Bangkok," Thapanee Saeong and Thirawat Chantuk, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

Sunflower 306+307
How to Measure to Take Care of Aging Societies in Asia (1)

Chair: Shalinder Mahajan, Team Cvoter, India

"Analysis of Personal Networks Maintained by the Elderly in Japan, Satoshi Watanabe[1], Hirohide Shibutani[2], Harumasa Yoshimura[3] and Atsushi Kokubo[2]
[1]Akita Prefectural University, Japan
[2]Aomori University, Japan
[3]Nara University, Japan

"A Study in Labor Force Participation of Elderly Affecting an Enchantment of Economic Strength on the Community in Phetchaburi Province," Thirawat Chantuk, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

"Factor affecting decision to purchasing life Insurance for elderly of government official in Pranburi Prachuap Khiri Khan," Noppadol Towichaikul, Teerapat Eamla-or and Kromatan Wongwaiamornwate, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

"Behavior and Factors that Affecting the Money Saving Choice of Elder Consumers in Hua-Hin District, Thailand," Supawadee Pandoung and Thitiporn Sumransat, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

Rose A 201A
Poster Session (1)

"Demand Forecasting for Pharmacy Technicians of the General Hospitals and Private Hospitals in Northern Thailand in the Year 2013-2022 by System Dynamics Modeling," Nicha Suriyakanont[1], Sakon Supakul[2] and Thosaporn Promwong[3]

　[1]Sirindhorn College of Public Health, Phitsanulok, Thailand

　[2]Faculty of Pharmacy, Chiang Mai University, Chiang Mai, Thailand

　[3]Faculty of Engineering, Chiang Mai University, Chiang Mai, Thailand

"Tobacco Smoking Survey in the Higher-Education Network: A Pilot Study in Schools of Engineer in a Northeast Province of Thailand," Supawadee Chaidachatorn and Ratchanee Choonkor, Boromarajonani College of Nursing, Nakhonratchasima, Thailand

"Research on network sexual content influence on young women," Li Yongjian, China Youth University of Political Studies, China

"The Effect of the Dietary Education Through Korat Song for Thai Type II Diabetic Patients," Wiparat Suwanwaiphatthana, Jongkolnee Tuicharoen and Patchareeporn Kumram, Boromarajonani College of Nursing, Nakhon Ratchasima, Thailand

"Stress and Mental Health of Baccalaureate Nursing Students From the Five Southern Border Provinces of Thailand," Duangrat Kathalae, Boromarajonani College of Nursing, Nakhonratchasima, Thailand

"The Relating Factors to Health Promoting Behaviors of Diabetes Mellitus type 2 Patients Treated at Nongkratum Primary Care Unit, Muang District, Nakhonratchasima," Thassanee Thipsungnoen, Praphaphon Suemram and Apiradee Sooksangdown, Boromarajonani College of Nursing, Thailand

"PREPARING THE FAMILY FOR AGING CARE SUPHANBURI PROVINCE, THAILAND," Umakorn Jaiyungyuen, Supaporn Voraroon, Sarinthorn Mangkamanee and Chakkrit Luk-in, Boromarajonani College of Nursing, Suphanburi, Thailand

"Understanding SNS usage behavior in college students: Application of the Planned Behavior Theory," Min-jeong Kim[1] and Kyo heon Kim[2]

　[1]Dep. of Psychology, Chungnam National University

　[2]Dep. of Psychology, Chungnam National University

"Client Satisfaction of Academic Service focusing on Health Education Provided by Nursing Instructors and Nursing Students from Boromarajonani College of Nursing,

"Uses of Mass Media and Online Media among Students in Colleges under Jurisdiction of the Praboromarajchanok Institute of Health Workforce Development," Associate Prof. Jantima Kheokao, PhD, School of Communication Arts, University of the Thai Chamber of Commerce, Thailand

Rose B 201 B
Gambling Research (joint session with Asian Health Psychology Association)

Organizer: Kyo heon Kim, Dep. of Psychology, Chungnam National University, Korea

"A Psychosociocutural model of problem gambling in the Korean society," Kyo-heon Kim[1], Sun joong Kwon[2], Se jin Kim[3] and Sook hee Im[4]

[1]Dep. of Psychology, Chungnam National University, Korea

[2]Dept. of Counseling Psychology, Korean Baptist Theological University

[3]Center of Addiction Behavior, Chungnam National University

[4]Center of Addiction Behavior, Chungnam National University

"A study on the psychometric validity of psychosociocutural model of problem gambling," Hyun ji Shin[1], Kyo heon Kim[2], Sun joong Kwon[3] and Sook hee Im[4]

[1]Chungnam National University, Korea

[2]Dep. of Psychology, Chungnam National University

[3]Dept. of Counseling Psychology, Korean Baptist Theological University

[4]Center of Addiction Behavior, Chungnam National University

"Epidemological study of problem gambling in the Korea," Sook hee Im[1], Kyo heon Kim[2], Sun joong Kwon[3] and Se jin Kim[4]

[1]Center of Addiction Behavior, Chungnam National University

[2]Dep. of Psychology, Chungnam National University

[3]Dept. of Counseling Psychology, Korean Baptist Theological University

[4]Center of Addiction Behavior, Chungnam National University

Cosmos 203+204
Survey Methodology and Environmental Consciousness

Chair: Kazufumi Manabe, Aoyama Gakuin University, Japan

"Problems with and Future Prospects for the Data Analysis of Cross-National Comparative Surveys," Kazufumi Manabe, Aoyama Gakuin University, Japan

"Use of semantic analysis of texts for item analysis and generation," Cheongtag Kim and Sungjoon Park, Seoul National University, Korea

"Examining A Social-Cognitive Model Predicting Chinese People's Information Seeking Behavior Regarding Environmental Risks: Toward A Public-Oriented Way of Risk Communication," Yiwei Li[1], Yu Guo[2] and Naoya Ito[3]

[1]Hokkaido University, Japan

[2]Hokkaido University, Japan

[3]Hokkaido University, Japan

"Causal Analysis on Garbage Increase and People's Environmental Consciousness in Rural China," Yanyan Chen[1] and Yuejun Zheng[2]

[1]Doshisha University, Japan

[2]Doshisha University, Japan

Cherry A 302 A
Electoral Studies

Chair: Christian Collet, International Christian University, Tokyo, Japan

"AII (Anti Incumbency Index): Democratisation & Fresh evidences," Yashwant Deshmukh and Shalinder Mahajan, Team Cvoter, India

"Shortcuts and Alibis: What Response Latencies Suggest about the Role of Party Identification in Japanese Political Decisionmaking," Christian Collet[1] and Gento Kato[2]

[1]International Christian University, Tokyo, Japan

[2]Waseda University

"A Silent Revolution: How Political Polling Shapes Indonesian Politics," Agus Trihartono, R-GIRO, Ritsumeikan University, Japan

"Electronic Voting and Civil Referendums in Hong Kong," Jazz Ma, Wai kin frank Lee and Robert Ty Chung, Public Opinion Programme, The University of Hong Kong, Hong Kong

Cherry B 302B
Social Media and Dividable Persons (3)

Chair: Zeti Azreen Ahmad, International Islamic University Malaysia, Malaysia

"Bridging the Gap between the Governmental Public-opinion Field and the Civilian: The Case of the People's Daily Micro-blog," Xiaoping Luo and Pei Li, China Southwest University of Political Science and Law, China

"Spiritual support for the senior and media responsibility in an aging society: The case of Chongqing TV," De-an Cheng, China Southwest University of Political Science and Law, China

"Social media as social infrastructure," Kazuhiro Suda, Chuo University, Japan

"Crises in Malaysia: New media and new audience," Zeti Azreen Ahmad[1], Aini Maznina A. manaf[2] and Mazni Buyong[3]

[1]International Islamic University Malaysia, Malaysia

[2]International Islamic University Malaysia, Malaysia

[3]International Islamic University Malaysia, Malaysia

Iris 304
Business and Tourism

Chair: Ofer Feldman, Doshisha University, Japan

"The Study on the perception of human resource management of personnel at Borommaratchonnani College of Nursing, Nakhon Ratchasima in fiscal year 2013," Thananat Yod Sakrasan, Boromarajonani College of Nursing, Nakhonratchasima, Thailand

"The study on factors affecting decision of Thai tourists travel to Japan, Nitikorn Muangsornkhiaw, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

"Pattern and Approach to Conducting Business under Social Enterprise Concept of Market Fairs in Amphur Hua-Hin, Prachuap Khirikhan Province," Jittapon Chumkate, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

"The Factor Analysis in Hotel Selection of Foreign Elder Tourists in Hua-Hin Prachubkirikhan," Issaraporn Onsomkrit and Kedwadee Sombultawee, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

Sunflower 306+307
How to Measure to Take Care of Aging Societies in Asia (2)

Chair: Kultida Panidchakul, Boromrajonani College of Nursing Saraburi, Thailand

"Attitude towards elderly of public health students under Praboromarachanok Institute," Suwanna Vudhironarit[1], Siritorn Yingrengreung[2], Hataya Petcharoen[3], Yolludee Tantasit[4] and Kiattisak Saeio[5]

[1]Boromrajonani College of Nursing Cholburi, Thailand

[2]Boromarajonani College of Nursing Bangkok, Thailand

[3]Sirindhron College of Public Health, Chonburi, Thailand

[4]College of Public Health, Khon Kaen, Thailand

[5]College of Public Health, Phitsanulok, Thailand

"The Health Behavior of Elderly Payom Subdistrict, Wang Noi District, Ayutthaya Province," Aphisara Manarantsan, Noppadol Towichaikul, Patjanan Siriratmongkhon and Sarocha Meksuwan, FACULTY OF MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

"The monitoring activities of daily living by family caregivers caring for older adults with functional disabilities," Rojanat Choojai and Nongnuch Wongsawang, Boromarajonani College of Nursing Ratchaburi, Thailand

"Attitudes toward Older People of Nursing, and Public Health Undergraduate Students in Thailand, Indonesia and Myanmar," Sirikul Karuncharernpanit[1], Tassanee Krirkgulthorn[2], Kultida Panidchakul[3], Nur meity sulistia Ayu[4], Chairun Nasirin[5] and Win Win[6]

[1]Boromarajonani College of Nursing, Chakriraj, Thailand

[2]Boromarajonani College of Nursing, Nakhonratchasima, Thailand

[3]Boromarajonani College of Nursing, Saraburi, Thailand

[4]STIKES Hang Tuah Tanjung Pinang, Indonesia

[5]STIKES Mataram Lombok, Indonesia

[6]University of Mandalay, Myanmar

Sunday, November 30　13:15-14:45

Rose A 201A
Poster Session (2)

"Factors impacting nursing students on the difference of perception levels of stigma about receiving counseling," Kotchakorn Kaewprom and Apiradee Sooksangdow, Boromarajonani College of Nursing Nakhon Ratchasima, Thailand

"Pathway model of problem gambling focused on child abuse, self-esteem and an irrational belief," Chang hyun Jung[1,2,3], Ji su Jeon[2] and Kyo heon Kim[3]

[1]Department of psychology, Chungnam university, Korea

[2]Department of psychology, Chungnam university, Korea

[3]Department of psychology, Chungnam university, Korea

"The Effect of Instructional Video Compact Physiotherapy of Cerebrovascular Accidents for Village Health Volunteers," Jongkolnee Tuicharoen[1], Wiparat Suwanwaiphattana[2], Nattineeporn Chantaranothai[3], Warunya Dondee[4], Siriporn Pakdeekit[5] and Manop Phasom[6]

[1]Boromarajonani College of Nursing, Nakhon Ratchasima, Thailand

[2]Boromarajonani College of Nursing, Nakhon Ratchasima, Thailand

[3]Boromarajonani College of Nursing, Nakhon Ratchasima, Thailand

[4]Maharat Nakhon Ratchasima Hospital, Nakhon Ratchasima

[5]Maharat Nakhon Ratchasima Hospital, Nakhon Ratchasima

[6]Nongphalan Tambon Health Promoting Hospital, Nakhon Ratchasima

"Differences between respondents and non-respondents of questionnaires from participants of Japan Environment & Children's Study in Toyama area," Mika Kigawa[1], Hamazaki Kei[1], Tanaka Tomomi[1], Ito Miho[1], Adachi Yuichi[2] and Inadera Hidekuni[1]

[1]Toyama Regional Center for JECS, University of Toyama, Japan

[2]Department of Pediatrics, Faculty of Medicine, University of Toyama

"Factors Affecting The Quality of Work Life and Work Happiness among Nursing Instructors in Colleges of Nursing, Praboromarajchanok Institute, Ministry of Public Health," Lakana Siratirakul, Wassana Uppor and Charoonlux Pongcharoen, Boromarajonani College of Nursing, Suphanburi, Thailand

"The Power of Living in the Present Moment among Diabetics," Kanchana Thearmtanachok, Savika Sikkalaya, Mahachulalongkornrajavidyalaya University, Thailand

"Factors of Gambling Addiction from the view of Public Health," Hyun ji Shin[1] and Kyo heon Kim[2]

[1]Chungnam National University, Korea

[2]Chungnam National University, Korea

"A comparative analysis of shoppers' information behavior in commercial districts and shopping malls using a questionnaire survey," Ryosuke Yoshimoto[1], Fuyuki Yoshikane[2] and Takafumi Suzuki[3]

[1]Graduate School of Library, Information and Media Studies, University of Tsukuba, Japan

[2]Faculty of Library, Information and Media Science, University of Tsukuba

[3]Faculty of Sociology, Toyo University

"The Influence of Confirmation Bias on Irrational Decision-Making," Jisu Jeon[1] and Kyoheon Kim[2]

[1]Chung Nam National University, Korea

[2]Chung Nam National University, Korea

"The Results of the Buddhist Integrated Model of Caring End-of-Life Stage Cancer Patients," Dutchanee Sinthuvongsanon, Pakthongchai Hospital, Thailand

"The Study on the perception of human resource management of personal at Boromaratchajonnani of Nursing, Nakhon Ratchasima in fiscal year 2014," Thananat Sakrasan[1], Laorwan Oungsakul[2] and Jidapa Jittasusudto[3]

[1]Boromaratchajonnani college of Nursing, Nakhon Ratchasima, Thailand

[2]Boromaratchajonnani college of Nursing, Nakhon Ratchasima, Thailand

[3]Boromaratchajonnani college of Nursing, Nakhon Ratchasima, Thailand
"The study of Helping Relationship of Nurses Preceptor and Stress level during Clinical Practice in Labor Room of fourth-year nursing students from class 54th; Boromrajonani College of Nursing, Nakhonratchasima," Pitsamai Ubonsri, Nuchamart Gaewgoontol and Pattamaporn Khongkhoontot, Boromrajonani College of Nursing Nakhonratchasima, Thailand

"The Handicapped Elderly Care Taking at Home by Community Network," Viliporn Runkawatt[1], Siriwan Kuttiyawithayakoon[2], Nongpaga Leelayana[2], Sirinthip Konsantia[2], Pronthip Srisombul[2] and Yaowamal Tomyawit[2]
[1]Borommarajonnani Nakhonratchasima Nursing College, Thailand
[2]Nakhonratchasima Health Provincial Office

"Alcohol product placement on television in Thailand," Anchalee Pichedpan[1], Jantima Kheokao[1], Siritorn Yingrengrueng[2] and Tassanee Krirkgulthorn[2]
[1]University of the Thai Chamber of Commerce Thailand
[2]Boromarajonani College of Nursing Saraburi, Thailand

"Relationship between Internet Contents and Internet Addiction in Children," Su jeong Lee[1], Hyunji Shin[2], Minjeong Kim[2] and Kyoheon Kim[3]
[1]Chungnam national university, Korea
[2]Chungnam national university, Korea
[3]Chungnam national university, Korea
[4]Chungnam national university, Korea

"The comparision of Two Screening Test for Depression in Pregnant Women," Piyarat Sangbumrung, Boromarajonani College of Nursing, Nakhonratchasima, Thailand

"Does the school-based program, physical activity and balance of food consuming style improve the effectiveness of childhood obesity prevention?," Dussadee Triyawong, Boromarajajonani college of Nursing, Nakhon Ratchasima, Thailand

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Rose B 201B
Is Social Capital in Neighborhood Community Critical in Disaster Mitigation?

Organizer: Motoo Kusakabe, Open City Institute Co Ltd, Japan

"Social capital is essential for community resilience," Motoo Kusakabe, Open City Institute Co Ltd, Japan

"Is Social Capital in Neighbourhood Communities Critical in Disaster Mitigation?," Emi(ko) Kusakabe, Open City Institute Co Ltd, Japan

"The Importance of Social and Natural Capital in *Satoyama* Landscape Conservation: Learning from the Great East Japan Earthquake," Kazuhiko Takeuchi, United Nations University, Japan

"Resettling from the 2004 Chuetsu earthquake - decision making and community cohesiveness," Kanako Iuchi, Tohoku University, Japan

Cosmos 203+204
Environmental Risk and Public Opinion

Organizer: Yuichi Kubota, University of Niigata Prefecture, Japan

"The Fukushima Nuclear Accident and Environmental Risk: A Questionnaire Survey of Fukushima Residents," Takeshi Miyawaki[1] and Sasaoka Shinya[2]

[1]Nihon university, Japan

[2]Hiroshima Shudo University

"A New Prospect of the Protection of the Oceans: Focusing on Increasing Japanese Interes," Yuta Komori, Meiji University, Japan

"How Nuclear Risks Should Be Perceived and Communicated with the public?," Yui Nakagawa, Tokyo Institute of Technology, Japan

Cherry A 302A
Health Promotion and Nursing Science (3)

Chair: Surasak Soonthorn, SIRINDHORN COLLEGE OF PUBLIC HEALTH SUPHANBURI, Thailand

"Adjuvant effect of chitosan for intranasal Japanese Encephalitis (JE) Vaccine," Worawan Boonyo[1], Supavadee Boontha[2], Hans E Junginger[3], Neti Waranuch[3], Assadang Polnok[3], Suthee Yoksan[4], Narong Nitatpattana[4] and Tasana Pitaksuteepong[3]

[1]Sirindhorn College of Public Health, Phitsanulok, Thailand

[2]School of Pharmaceutical Sciences, University of Phayao, Phayao

[3]Department of Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, Naresuan University

[4]Department of Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, Naresuan University

[5]Department of Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, Naresuan University

[6]Center for Vaccine Development, Mahidol University, Institute of Science and

Technology for Development, Mahidol University at Salaya, Nakhonpathom

[7]Center for Vaccine Development, Mahidol University, Institute of Science and Technology for Development, Mahidol University at Salaya, Nakhonpathom

[8]Department of Pharmaceutical Technology, Faculty of Pharmaceutical Sciences, Naresuan University

"Effectiveness of the Dengue Hemorrhagic Fever Prevention and Control in Community Program using a Participatory Learning Process," Nongnuch Suapumee, Kuleudee Chittayanunt, Wandee Wongrattanarak and Wantanee Naksrisang, Boromarajonani College of Nursing Chakriraj, Thailand

"Health promotion behaviors of elderly in Banpong District, Ratchaburi Province," Sabaitip Cheuaiam, Boromarajonani College of Nursing Chakriraj, Thailand

"Public Opinions on the Role of Pharmacy Technicians in Performing Healthcare Services in Suphanburi Province, Thailand," Dr. Surasak Soonthorn," SIRINDHORN COLLEGE OF PUBLIC HEALTH SUPHANBURI, Thailand

Cherry B 302B
Media and Politics

Chair: Shingo Hamanaka, Yamagata University, Japan

"Military Service as a process of Political Socialization," Shingo Hamanaka, Yamagata University, Japan

"Political Interviews on Japanese Television: A Study of Communicative Conflicts and Defending the Face," Ofer Feldman[1], Ken Kinoshita[1] and Peter Bull[2]

[1]Doshisha University, Japan

[2]York University, the UK

"Study on Government's New Media Platforms Credibility," Hong Chen[1], Mingzhe Li[1], and Cong Liu[2]

[1]School of Communication, East China Normal University

[2]Institute of Arts and Humanities, Shanghai Jiao Tong University

"Chinese Public's Cognition and Attitude towards Significant Political Event under the Circumstances of "Two Opinion Fields"," Bofei Zheng[1,2], Shuanglong Li[1,2] and Bing Tong[1,2]

[1]Media and Public Opinion Research Center of Fudan University, China

[2]Fudan Journalism School

Iris 304
Journalism and Intellectual Property Right

Chair: Chang Zhang, Fudan University, China

"Intellectual Property Rights at Crossroads," Li Gu, China Southwest University of Political Science and Law, China

~~"Status of science Journalism in Nepal with reference to Witch Accusation in Nepal," Sanat Kumar Sharma, Co-executive director, B.P.K.M. planetarium observatory and science museum development board, ministry of science, technology and environment, Nepal~~

"A Study on strategy for International Training Course for Asian Journalists," Sook Choi[1] and Sung kyum Cho[2]

[1]Institute for Communication and Information at Hankuk University of Foreign Studies, Korea

[2]Cungnam National University

Daisy 305
13:15–15:15
AJPOR Board Meeting

Sunflower 306+307
Nurturing Norms and Values among Children in Asia

Chair: Dusadee Charoensuk Eastern Asia University, Thailand

"How parental discipline influence violent behaviour in Thai adolescents?," Rungrudee Wongchum, McCormick Faculty of Nursing, Thailand

"FAMILY SUPPORT TO SELF – CARE BEHAVIORS FOR TEENAGE PREGNANCY," Pattawan Choolert, Boromarajonani collage of nursing, Chakriraj, Thailand

"ENGLISH LANGUAGE PROFICIENCY OF VIETNAMESE STUDENTS MAJORING IN ECONOMICS," Akinori Seki[1,3], Toan Luu duc Huynh[2] and Xuan Thiminh Nguyen[3]

[1]Tokyo Keizai University, Japan

[2]Banking University, Vietnam

[3]Asia Association of Education and Exchange

Rose A 201A
Poster Session (3)

"The Satisfaction to The Facilities That are Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhonratchasima Year 255," Prayoon Artlaor, Laorwan Oungsakul, Valaporn Tunthasuvanna, Manothai Wongsala and Udomluk Knajanarungsichai, Boromarajonani College of Nursing Nakhonratchasima, Thailand

"Knowledge and Factors Related to Tobacco Smoking of Undergrads in Nakhon Ratchasima, Thailands," Ratchanee Choonkor and Supawadee Chaidachatorn, Boromarajonani college of nursing, Nakhon Ratchasima, Thailand

"Public opinion on the reliance of Thai Government: Case Study of High school student in Thailand during 2014," Naksit Sakdapat[1,2,3], Pornpong Sakdapat[2] and Ploytip Wanitmaniboot[3]
[1]National Institute of Development Administration
[2]National Institute of Development Administration
[3]Chulalongkorn University

"Facebook users' upward and downward comparisons with others' standard of living and their life satisfaction: Exploring the comparative impact of Facebook friends versus surrounding people," Indeok Song[1] and Hyeseung Yang[2]
[1]Joongbu University, Korea
[2]Kyungsung University

"Attitudes toward Elderly of Nursing Students under Praboromarachanok Institute Ministry of Public Health, Thailand," Kanyarat Ubolwan[1], Tassanee Krirkgulthorn[2], Jantima Kheokao[3], Thitarat Sarkongdang[4] and Suwanna Vudhironarit[5]
[1]Boromarajonani College of Nursing Saraburi, Thailand
[2]Boromarajonani College of Nursing Nakhon Ratchasima, Thailand
[3]University of the Thai Chamber of Commerce, Thailand
[4]Boromarajonani College of Nursing Bangkok, Thailand
[5]Boromrajonani College of Nursing Cholburi, Thailand

"Reflection on postpartum clinical learning experiences guided by KORAT Model of reflection among nursing student, Thailand," Wareewan Siriwanij, Waraporn Tantawatana, Suchada Wongsawart and Nattineeporn Chantaranotai, BOROMARAJONANI COLLEDGE OF NURSING, NAKHONRATCHASIMA, Thailand

"Survey of cigarette use and media exposure among Thai adolescents," Prapas Thana[1], Siritorn Yingrengreung[2] and Jantima Kheokao[3]

[1]Boromarajonani College of Nursing Saraburi, Thailand

[2]Boromarajonani College of Nursing Bangkok

[3]University of the Thai Chamber of Commerce

"The Thai version of Kogan's Attitude toward Old People (Kogan's OP): Evaluation of validity and reliability assessment, Kannika Hansoongnoen[1], Tassanee Krirkgulthorn[1], Viliporn Runkawatt[1], Siritorn Yingrengreung[2] and Jantima Kheokao[3]

[1]Nakhonratchasima Nursing College, Thailand

[2]Boromarajonnani Nursing College, Bangkok, Thailand

[3]University of the Thai Chamber of Conference

"Fruit and vegetable consumption, eating habits, and intention to increase consumption of Thai students," Kingtip Phasuktoy[1], Siritorn Yingrengreung[2] and Prakit Ratchawat[3]

[1]Boromarajonani College of Nursing Saraburi, Thailand

[2]Boromarajonani College of Nursing Bangkok, Thailand

[3]Boromarajonani College of Nursing Saraburi, Thailand

"Depression, relationships with parents, and expose to domestic violence of Thai youths," Waraporn Chansong1, Siritorn Yingrengreung[2] and Prapas Thana[3]

[1]Boromarajonani College of Nursing Saraburi, Thailand

[2]Boromarajonani College of Nursing Bangkok, Thailand

[3]Boromarajonani College of Nursing Saraburi, Thailand

"Opinion towards abortion of Thai youths," Siriwan Tumcheua[1], Siritorn Yingrengreung[2], Pourpen Krinara[3] and Pachaneeya Chiengta[3]

[1]Boromarajonani College of Nursing Saraburi, Thailand

[2]Boromarajonani College of Nursing Bangkok, Thailand

[3]Boromarajonani College of Nursing Saraburi, Thailand

[4]Boromarajonani College of Nursing Saraburi, Thailand

"Perceptions of Stroke Risk Factors and Warning Signs of Nursing Students under Praboromarachanok Institute Ministry of Public Health, Thailand, Kultida Panidchakul[1], Siritorn Yingrengreung[2], Boontuan Wattanakul[3], Panitnat Chamnansua1 and Smerchan Teerawatskul[2]

[1]Boromrajonani College of Nursing Saraburi, Thailand

[2]Boromarajonani College of Nursing Bangkok, Thailand

[3]Boromarajonani College of Nursing Chon Buri, Thailand

"Using electronic document system in Nursing College: Perceived benefits and Barriers," Kanokporn Noi Mongkoltae and Tassanee Krirkgulthorn, Boromaratchajonnani college of nursing, Nakhon ratchasima, Thailand

"Perceived Health Status and Health Promoting Behavior of Hand-woven Local Fabric Makers in Community," Payao Phongsakchat, Sujira Laungpikulthong, Jeeraporn Cheanchum and Sakmongkol Cheauthong, Boromarajonani College of Nursing Saraburi, Thailand

"Gambling Motivation and Addiction: moderating effects on stages of change in Gambler," Seo young Byeon[1], Hyun ji Shin[2] and Kyo heon Kim[3]

[1]Chungnam national university, Korea

[2]Chungnam National University

[3]Chungnam National University

"Addictive Behaviors in Gambling based on Ajzen's Planned Behavior Model," Hyun ji Shin, Byeon Seo young and Kim Kyo heon, Chungnam National University

Rose B 201B
Current Challenges in Education in Asia

Organizer: Reiko Ishii, University of Niigata Prefecture, Japan

"Expatriate parent perceptions of educational issues in Japan," Melodie Lorie Cook, University of Niigata Prefecture, Japan

"Development of English Language Education in Nepal," Akinori Seki, Tokyo Keizai University, Japan

"Difficulties in interpersonal relationships between Japanese children," Yotaro Katsumata, Department of Child Studies, University of Niigata Prefecture, Japan

"A Longitudinal Study on the Growth Evaluation Using Abdominal Skinfold Thickness in Preschool Children," Kiyoshi Ito, University of Niigata Prefecture, Japan

Cosmos 203+204
Social Capital and Social Integration

Chair: Eric Yu, National Chengchi University, Taiwan

"Gain or Loss? Modeling the Relationship among Differentiated Social Media Functions, Perceived Social Capital and Psychological Wellbeing," Yu Guo[1], Yiwei Li[2] and Naoya Ito[3]

[1]Hokkaido University, Japan

[2]Hokkaido University, Japan

[3]Hokkaido University, Japan

"Why Do Taiwanese Youngsters Support the 318 Sunflower Student Movement? An Analysis of Issue Cleavages," Eric Yu and Kah-yew Lim, National Chengchi University, Taiwan

"Social Rituals in South East Asia from the Aspect of Social Network," Katsumi Shimane, Senshu University, Japan

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Cherry A 302A
Health Promotion and Nursing Science (5)

Chair: Jaratsri Petchkong, Boromarajonani College of Nursing, Chakriraj, Thailand

"FACTORS INFLUENCING THE 21st CENTURY SKILLS OF THE NURSING STUDENT: BOROMMARAJONNANI COLLEGE of NURSING CHAKRIRAJ, MINISTRY OF PUBLIC HEALTH, THAILAND," Jaratsri Petchkong, Boromarajonani College of Nursing, Chakriraj, Thailand

"Humanistic Care Behavior on Nursing Student Volunteer in Health Service: A Service Learning," Warunee Meelai[1], Worapanit Sukrapat[2] and Orawan Duangchai[3]

[1]Boromarajonani College of Nursing Chon Buri, Thailand

[2]Boromarajonani College of Nursing Chon Buri, Thailand

[3]Boromarajonani College of Nursing Chon Buri, Thailand

Cherry B 302B
Social Media and Dividable Persons (4)

Chair: Noppanon Homsud, Silpakorn University

"The lifted the curtain agenda setting of UGC of social media in china," Yunfeng Xi[1], Professor Dadoo Mohdo Hamdan Adnan[2] and Chang Peng Kee' Ph.D[3]

[1] University Malaysia Sabah, China

[2] Universty Malaysia Sabah' the dean of school of social sciences

[3] University Kebangsaan Malaysia

"Chinese Internet Users' Communication Behaviors in Public Events: A Survey on Internet Users from 36 Cities," Yungeng Xie, Rui Qiao and Cong Liu," Institute of Arts and Humanities, Shanghai Jiao Tong University, China

"Intimate Comrade or South China Sea Trouble Maker? Online Elite Chinese Perception of Vietnam: Content Analysis of Zhihu," Shengyang Zhong and Wang Guohua, School of Public Administration, Huazhong University of Science and Technology, China

"POLITICAL EFFICACY AMONG MALAYSIAN VOTERS: THE ROLE OF
TRADITIONAL AND NEW MEDIA," Syed Arabi Idid[1], Ismail Sheikh yusuf ahmed
Dhaha[2] and Rizwanah Souket[2]

[1]International Islamic University Malaysia, Malaysia
[2]International Islamic University Malaysia, Malaysia
[3]International Islamic University Malaysia, Malaysia

Iris 304
Asia's Future

Chair: Takeshi Uemura, University of Niigata Prefecture, Japan

"Territorial dispute between China and Japan and support for the Prime Minister Abe: An
Examination of Rally-round-the-flag effect through survey experiments," Tetsuro
Kobayashi[1] and Azusa Katagiri[2]

[1]National Institute of Informatics, Japan
[2]Stanford University

"Cultural misunderstandings in Sino-Japan relations," Takeshi Uemura, University of Niigata
Prefecture, Japan

"Asia's Future," Jeong hwa Joo, PUKYONG NATIONAL UNIVERSITY DIVISION OF
INTERNATIONAL & AREA STUDIES, Korea

"Trends in partial disability-free life expectancy for working age population in Japan:
1989-2010," Yasuhiko Saito, Nihon University, Japan

Sunflower 306+307
Well-Being and Quality of Life in Asia (3)

Chair: Zeti Azreen Ahmad, International Islamic University Malaysia, Malaysia

"Quality of Life of Old and Older Thai Elderly and Factors affecting on Their Quality of Life,"
Chanuttha Ploylearmsang, Chaupaka Wanasabdumrong and Wannaporn Wannathip, Social
Pharmacy Research Unit, Faculty of Pharmacy, Mahasarakham University, Thailand

"An Assessment of Service Quality through 30 baht treats all scheme projects at Cha-am Public
hospital by using SERVQUAL scale," Kedwadee Sombultawee, FACULTY OF
MANAGEMENT SCIENCE, SILPAKORN UNIVERSITY, Thailand

"The Analysis of Factors Affecting to Choose Health Insurance Package of Customers in
Bangkok," Konwipa Thongkon and Patcharin Phrarat, FACULTY OF MANAGEMENT
SCIENCE, SILPAKORN UNIVERSITY, Thailand

"The access a legal rights of the disabilities and a social welfare system that promotes the rights of people with disabilities in Thailand" Porntida Visaetsilapanonta et al., Department of Education, Faculty of Social Science and Humanities, Mahidol University, Hakornpathom, Thailand

Sunday, November 30　17:00-17:30

Cherry 302
Closing Ceremony (Awards presentations and brief introduction from next year's ANPOR conference host)

Monday, December 1　8:30-15:15

Post-Conference Tour: Castle Town Shibata/ Northern Culture Museum, Lunch/ Niigata Senbei Oukoku (literal translation is "Rice cracker kingdom" - where you can have an experience of cooking rice crackers yourself)
*Meeting Place is Toki Messe 1F Entrance

Papers

Demand Forecasting for Pharmacy Technicians of the General Hospitals and Private Hospitals in Northern Thailand in the Year 2013 – 2022 by System Dynamics Modeling

Nicha Suriyakanont

Sirindhorn College of Public Health,Phitsanulok,Thailand

Sakon Supakul

Sirindhorn College of Public Health,Phitsanulok,Thailand

Thosaporn Promwong

Sirindhorn College of Public Health,Phitsanulok,Thailand

Abstract

Prediction of pharmacy technician demands has been estimated with limited actual input data from health care settings. The objective of this study was to forecast the demand for pharmacy technician of the general hospitals (that are not under the auspices of the Ministry of Public Health, MOPH) and private hospitals from 2013-2022 using a system dynamics modeling (SDM) and compare supply and demand for pharmacy technicians in each subsector of the general hospitals and private hospitals. Demand data were collected from the above public health care settings in northern Thailand. The demand of pharmacy technician data was the sum up of the demand in each subsector. The amount of the existing pharmacy technician would be affected by the number of the new pharmacy technician, lost from death, retirement and quit. Then, simulation model using the "Stella Software for Windows" was formulated.

The results from the simulation model showed that 628 pharmacy technicians would be required to fill the jobs at public health care settings in studied region by the year 2013-2022. The required numbers of pharmacy technician ranked from private hospitals (329 persons) and general hospitals (299 persons). Comparisons of demand and supply of pharmacy technician in 10 years showed that, overall, there was no supply to the system both general hospitals and private hospital while the demand was increasing in every year during 2013-2022. The overall demand of pharmacy technician increases 3.4 times of the number of existing pharmacy technician. Subsector demand analysis showed that there were shortages of supply for pharmacy technician in both general hospitals and private hospital.

Keywords: *forecasting, pharmacy technician, system dynamics, stella*

Demand Forecasting for Pharmacy Technicians of the General Hospitals and Private Hospitals in Northern Thailand in the Year 2013 – 2022 by System Dynamics Modeling

Introduction

Human resources for health, including personnel from varied professions and supporting staffs, play a key role on promoting good health, medical care, disease control and prevention, and rehabilitation (Ministry of Public Health, 2007). Pharmacy technician is regarded as the supporting staff produced by the Ministry of Public Health (MOPH) through Sirindhorn College of Public Health (SCPH) under the supervision of Praboromarajchanok Institute for Health Workforce Development with seven colleges across the country. The role purpose is to provide provincial public health care settings (Ministry of Public Health, 2000). At the present time a shortage of the supporting staff is also occurred at the general hospitals that are not under the auspices of the Ministry of Public Health, MOPH and the private hospitals. Human resource management for healthcare system is a major problem in Thailand (Thamarangsri, 2005), in particular, an inadequate number of personnel due to numerous factors – more access to the national health security scheme, higher average of life expectancy, a greater number of the elders with chronic conditions, and an increasing of foreign workers (Chunhara, 1998). Such a situation, a shortage of pharmacy technician would be occurred at the general hospitals and the private hospitals because of there is no supply of pharmacy technicians while there is a high demand for the pharmacy technicians (Mirintangkurn, Tuntanatanith and Ueimsir, 1999). The researcher prioritizes importance of the study on the number of pharmacy technicians in 17 provinces in Northern Thailand to forecast the demand for pharmacy technicians in public health care settings in order to enhance the education of pharmacy technicians to be qualified pharmacy technicians.

Methods

The research divided this study into two phases as followed.

Phase I: A survey study was conducted using a set of questionnaires, numbers of pharmacy technician required in 2013. The researcher sent questionnaires to 58 public health care settings, including general hospitals and private hospitals in 17 provinces in the northern part of Thailand. Heads of pharmacy department at each health care setting were asked to provide the data. Demand data of pharmacy technician would be used as input data in the simulation modeling to forecast future demand.

Phase II: A simulation modeling was developed to forecast demand of pharmacy technicians in 10-year period (2013-2022) by developing the causal-loop diagram based on the data from the Phase I referred to as Fig.1. Then, the researcher computed the probability (P) of the variables affecting the demand of pharmacy technicians. The

recruitment of new pharmacy technicians had an effect on increasing demand of pharmacy technician whereas death, retirement, and job change had an effect on decreasing demand of pharmacy technician. Then the causal-loop diagram (Nataniel JM, 1986) was translated into computer model using the "Stella Software for Windows" (Fig. 2).

Fig.1 Causal-loop diagram of pharmacy technicians.

Fig 2
System dynamics modeling of the demand for pharmacy technicians in other hospitals and private hospitals in 17 Northern Provinces.

Results and Discussion

The demand survey was distributed to 58 health care settings, 19 other hospitals and 39 private hospitals. The response rate was 78.95% from the other hospitals and 74.36% from the private hospitals.

The results of the simulation model showed that 628 pharmacy technicians would be required by public health care settings in the studied regions in the year 2013-2022. Sub-analyses based on types of health care setting showed that 299 persons required in other hospital and 329 in private hospital. (Fig.3)

Fig 3
Estimated demand for pharmacy technicians in each subsector
(OH: Other hospitals, PH: Private hospitals, Total: overall).

Comparison between the demand and supply for pharmacy technicians in the other hospital in the year 2013-2022 showed that there would be a shortage of pharmacy technician in other hospitals. The estimate shortage of supply was approximately 2-3 persons per year. Within 10 years (2022), the demand for pharmacy technicians would approximately increase 3.4 times compared with 2013. (Fig.4)

Fig 4

Comparison between demand and supply for pharmacy technicians
in other hospitals in 2013-2022.

Fig 5

Comparison between demand and supply for pharmacy technicians
in private hospitals in 2013-2022.

There was no supply of pharmacy technicians to the private hospitals in the same situation with the other hospitals. The estimate shortage of supply was approximately 3-4 persons per year. Within 10 years (2022), the demand for pharmacy technicians would approximately increase 1.9 times compared with 2013. (Fig.5)

Fig 6

Comparison between overall demand and supply for pharmacy technician in 2013-2022.

Compare between demand and supply for overall (Fig.6) showed that there was no supply of pharmacy technicians to both the other hospitals and the private hospitals, a shortage of pharmacy technicians would be occurred while the demand of pharmacy technicians is increasing in average 6-7 persons in every year. The demand of pharmacy technician in next 10 years will be 628 persons.

Conclusion

This study was aimed to identify the number of pharmacy technicians required in public health care settings in 17 Northern Thailand during 2013-2022 in each subsector, other hospitals and private hospitals. The study also compared the demand and the supply of pharmacy technicians over 10-year period using the simulation modeling.

The study found that within 10 years (2013-2022) an increasing demand of pharmacy technicians would occur in every sub-sector, the demand of pharmacy technicians in the private hospitals is a bit higher than the other hospitals.

Comparisons of the demand and the supply of pharmacy technician in 10-year period showed that, there was no supply of pharmacy technicians to both the other hospitals and the private hospitals while the demand of pharmacy technicians is increasing in every year.

The results of this study could be used as a decision making tool for Ministry of Public Health and the designated pharmacy technician education institutions to consider demand data to plan for educating adequate number of pharmacy technicians to meet the demand in 17 provinces in Northern Thailand, which could reduce chance of shortage in the future.

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Voting Advice Applications in Japan
An Overview

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Abstract

In this paper, we aim to outline the characteristics and history of voting advice applications ("VAAs") in Japan and discuss future issues surrounding VAAs.

In the typical VAA, users view the questions on policies and respond with either 'Agree' or 'Disagree'. Since the parties' or candidates' responses are already known, the users' responses are matched to those patterns, and the degree of compatibility is calculated from the number of matching answers.

For example, Japanese Votematch poses questions on 20 to 25 issues. The issues that are mentioned the most are selected by quantitatively analyzing each party's manifesto and other policy documents. In addition, the manifestos are analyzed and the parties are surveyed in order to narrow down the issues into those ones on which the parties take different stands. This means the application uses salient and positional issues.

From 2003 onwards, Japan's political parties touted their manifestos in the national elections, attracting the attention of a large number of voters. Voters were encouraged to use the parties' policy platforms to help them decide who to vote for, and VAAs began to gain popularity.

The first reported use of VAAs was in the 2001 HC election, but this was limited to Tokyo Prefecture. The first nationwide deployment was in the 2007 HC election. After that, Japan's major newspapers and media outlets began offering VAAs, which received media coverage each time there was a national election, and it became commonplace for voters to broadcast their results via social networking sites.

But there are several restrictions of VAAs in Japan. For instance, the primary users for online tools such as VAAs are thought to be young people, but the younger generation displays little interest in politics. The lowest voter turnout in 2009 HR elections is the group aged 20 to 24, while the highest is the group aged 65 to 69, and the difference between the two is nearly 40%.

To promote the advancement of VAAs in Japan, a wider swath of the population will need to develop and use these applications, and expert consulting will play an important role in propelling this forward.

Keywords: Voting Advice Applications, Japan, Overview

Voting Advice Applications in Japan: An Overview

Introduction

In this paper, we aim to outline the history and characteristics of voting advice applications ("VAAs") in Japan and discuss future issues surrounding VAAs.

Japan employs a parliamentary system of government, and the National Diet is composed of two chambers, the House of Representatives ("HR") and the House of Councillors ("HC"). Although the authority of both Houses is equal, the Constitution affords the HR more power in several areas, including the election of the Prime Minister. For this reason, HR elections are considered more important.

Japan has long been known as an example of a one-party dominant system. The Liberal Democratic Party ("LDP") governed Japan from 1955 to 2009 with the exception of a brief interruption in 1993-1994. Among advanced industrial democracies, the LDP stands out, along with the Swedish Social Democratic Party, as a unique case. In 1994, however, electoral reforms of HR were enacted, and a SMD plus PRelectoral system was adopted, which resulted in a shift to a system centered on two major parties. In 2009, the LDP lost the HR election, ushering in a Democratic Party of Japan ("DPJ")-led administration.

The LDP took back the reins of government by winning the 2012 HR election, but the party had changed significantly compared to when it was previously the dominant party. This was due a decline in the LDP organization and changes in election campaigns. In the past, the LDP practiced pork-barrel politics focused primarily on public works projects in rural areas, and it worked to build a clientelistic network of regional politician and voters headed by national political leaders and their supporting Diet members. However, as the economy stagnated and the population aged, Japan was faced with a massive deficit and was forced to change its spending priorities. In addition to this, a party-centered election style fostered by a new electoral system was a great blow to the clientelism of the LDP and led to the emergence of the DPJ, which tried to win voters' support by issuing a manifesto, instead of advocating individual interests.

From 2003 onwards, Japan's political parties touted their manifestos in the national elections, attracting the attention of a large number of voters. Voters were encouraged to use the parties' policy platforms to help them decide who to vote for, and VAAs began to gain popularity.

History and Development of Japanese VAAs since 2006

The history of VAAs in Japan is relatively short. The concept was first introduced in the academic literature by Sato (2003) and Uekami (2006). The first reported use of VAAs was in the 2001 HC election, but this was limited to Tokyo Prefecture. The first nationwide deployment was in the 2007 HC election. After that, Japan's major newspapers and media outlets began offering VAAs, which received media coverage each time there was a national election, and it became commonplace for voters to broadcast their results via social networking sites.

Traits of VAAs in Japan

There are several well-known VAAs in Japan, and Table 1 lists the characteristics of five such applications.

All of these applications share a handful of traits. The first application is called Votematch. The Votematch program was first discussed in Japan by Uekami (2006). This paper described the Dutch version of Votematch, after which VAAs began to make serious inroads into Japan. In the Netherlands, Votematch is known by the Dutch term 'StemWijzer', which is recognized as the first VAA in the world.

Another feature of VAAs is that they are usually provided by newspapers. There are several major newspapers in Japan. The Yomiuri Shimbun and the Asahi Shimbun have daily circulations of 10 million and 8 million, respectively, followed by the Mainichi Shimbun. All three companies have nationwide distribution networks and are highly influential.

Table 1
Types of VAAs in Japan

	Implemented by	Diet Election	Measuring distance from
Japanese Votematch	Yomiuri Newspaper Company	2007HC, 2009HR, 2010HC, 2012HR	party
Mainichi Votematch	Mainichi Newspaper Company	2007HC, 2009HR, 2010HC, 2012HR, 2013HC	candidate
Asahi Votematch	Asahi Newspaper Company	2013HC	candidate
Manifesto Match	Yahoo! JAPAN	2009HR, 2010HC, 2012HR, 2013HC	party
Vote Matching	Nihonseiji.com	2012HR, 2013HC	party

VAAs were developed primarily to help voters select candidates, but since they are provided by newspapers, they are not closely tied to citizenship education. While we will explore this again later, school education in Japan is rooted in a firm belief that it should be politically neutral, so there has been a strong resistance to discussing actual politics in schools. This is why VAAs are not being used as tools for educating citizens, as they are in the Netherlands and Germany.

Japanese voters either vote for a candidate or a party, and VAAs assess users' political proximity to either a given candidate or party. Most of the major newspapers survey all of the candidates before national elections, so VAA users can be easily matched to candidates by answering the same questions as candidates on an online survey. On the other hand, the prevailing approach for assessing one's political proximity to a given party is to use the party manifesto as a basis for the determination.

The assessment of political proximity to a candidate or a party is largely contingent

on the types of issues covered and the types of questions used. The newspapers and internet sites that provide VAAs use a disparate array of development processes. Uekami and Tsutsumi (2008) shed light on the methods used to extract issues from party manifestos by way of quantitative analysis the methods for question formulation[1]. These methods were used in Japanese Votematch, which is discussed later in this paper. Another method, which is employed by Mainichi Votematch, is to determine issues based on discussions of opinion leaders.

Background of the Diffusion

As mentioned in the Introduction, changes in HR electoral system have had a significant impact on the diffusion of VAAs. Before the adoption of single-member district system for the HR in 1994, three to five candidates typically ran in each district, and each voter cast his ballot for one candidate. Victorious candidates were then selected in order of the total number of votes garnered. Since major parties such as the LDP would run multiple candidates in each district, the elections became competitions over the services that each candidate promised to provide, instead of differences in political parties. The individual relationships that developed between politicians and voters were a breeding ground for clientelism (Curtis 1971; Scheiner 2006).

Since each party only puts up one candidate under the single-member district system, the competition shifts from being candidate-based to being party-based. In 2003, the DPJ prepared a manifesto for the campaign leading up to the general election for the HR, after which the LDP and other parties followed suit. Party platforms and manifestos soon became important campaign tools, and voters began paying more attention to each party's policies (Kabashima and Steel 2010; Rosenbluth and Thies 2010). However, the party manifestos were voluminous, so it was no easy task to make a decision by comparing the policies of multiple parties. This is when VAAs first came into play.

Figure 1 shows the number of Mainichi Votematch users over time, and one can see that more people use the application in HR elections than HC elections.

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[1] See also Shinada (2006).
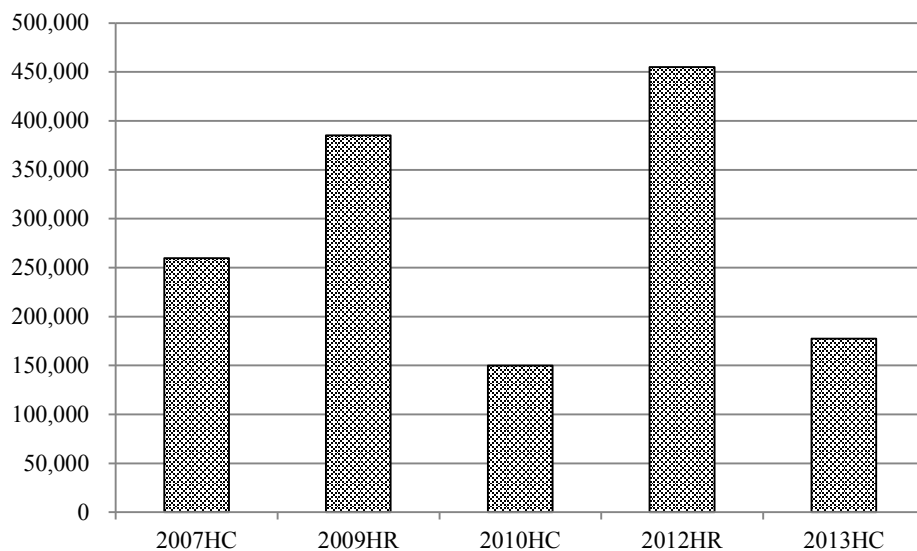
Source: Mainichi Newspaper

Figure 1

Number of Users: Mainichi Votemach

One important factor underlying the spread of VAAs in Japan is the increase in the internet penetration rate. According to a Ministry of Internal Affairs and Communications survey, 79.5% of Japanese use the internet regularly[2].

How do Japanese VAAs Work?

How are VAAs in Japan created and how do they work? As an example, we will describe Japanese Votematch, a VAA that we developed[3].

The Making of Japanese Votematch

Japanese Votematch poses questions on 20 to 25 issues. The issues that are mentioned the most are selected by quantitatively analyzing each party's manifesto and other policy documents. In addition, the manifestos are analyzed and the parties are surveyed in order to narrow down the issues into those ones on which the parties take different stands. This means the application uses salient and positional issues (Uekami and Tsutsumi 2008; Uekami and Sato 2009).

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[2] Source: Ministry of Internal Affairs and Communications (2013, Chapter 4),

[3] Japanese Votematch ("JV") was developed by a team of scholars affiliated with Yomiuri Newspaper Company from 2008 to 2012. JV 2009 and 2010 were provided exclusively by Yomiuri Online. Yomiuri is the largest newspaper company in Japan with a circulation of 10 million a day.

Table 2 compares the question topics used in Japanese Votematch and Mainichi Votematch for the 2010 HC election. Japanese Votematch used 25 questions, while Mainichi Votematch used 20.

Table 2

Similarities between Question Topics

Question Topics of JV 2010		Question Topics of Mainichi 2010		Similar to JV 2010
1.	Greenhouse gases	1.	Revision of the Constitution	4
2.	Alternative energy	2.	Collective self-defense	
3.	Eco-friendly car tax breaks/ Eco Points	3.	Nuclear armament	
4.	The Constitution	4.	Japan-US security treaty	8
5.	Free high school education	5.	Foreign policy toward North Korea	
6.	Teacher license renewals	6.	Futenma air base	
7.	Consumption tax hike	7.	Macroeconomic policy	
8.	Japan-US security treaty	8.	Consumption tax hike	7
9.	Strengthening international economic relations	9.	Environmental tax	(3)
10.	Consolidation of pension systems	10.	Basic Pension funding	(11)
11.	Establishment of a minimum pension	11.	Child allowance	
12.	Health care for the elderly	12.	Free highway	(15)
13.	Social insurance number	13.	Separate family name	
14.	Raising the minimum wage	14.	Banning corporate donations	19
15.	Investment in highways	15.	Bureaucrats answer in Diet session	
16.	Deregulation of postal savings / insurance	16.	Open program review	
17.	Reduction of rice acreage	17.	Coalition partner	
18.	Corporate acquisition of farmland	18.	Two party system	
19.	Banning corporate donations	19.	Voting rights of permanent residents	
20.	Reducing seats elected by proportional representation	20.	More transparency in investigations	22
21.	Lay judge reforms	21.	Decentralization	(25)
22.	More transparency in investigations			
23.	Procurement reforms			
24.	Subsidy reform			
25.	Regional state system			

Looking at the Japanese Votematch questions, five topics (No.4, No.7, No.8, No.19 and No.22) were almost identical to those on Mainichi Votematch, and four topics (No.3, No.11, No.15 and No.25) were similar, which means nine questions covered similar content.

How Japanese Votematch Works

In the Votematch application, users view the questions and respond with either 'Agree' or 'Disagree'. Since the parties' responses are already known, the users' responses are matched to those patterns, and the degree of compatibility is calculated from the number of matching answers.

Figure 2a shows a question screen from Japanese Votematch. One screen contains four issues and response buttons. Users can select three responses, 'Agree', 'Disagree' or 'Don't know', and they can choose which issues they deem important. The same basic design is also employed in Mainichi Votematch (Figure 2b), but there is only one question per screen. Here, users can select from three responses: 'Agree', 'Disagree' or 'No answer'.

Figure 2a
Japanese Votematch Question Screen

Figure 2b
Mainichi Votematch Question Screen

Once a user answers all of the questions, those responses are compared with the parties' platforms and the closest match is displayed. Figure 2c shows a bar graph from Japanese Votematch that displays the degree of political affinity between the user and the various parties. In this example, the user's responses are most closely in alignment with the Democratic Party of Japan.

Figure 2c
Japanese Votematch Results Screen

Like European VAAs, Japanese VAAs utilize a user's responses to questions about issues to match him or her with a political party or a candidate.

Effects on Voters

VAAs are designed to help voters cast their votes based on policies. Casting votes based on policies means voters must have an idea of each party's political positions and must be able to compare them with their own views in order to identify the party that is the most politically similar to them (Campbell *et al.* 1976). This requires voters to shoulder large information costs. If voters do not understand or misunderstand the political views of the parties, they run the risk of voting on the issues inaccurately. If voters use VAAs, they do not need to bear any information costs, and they can identify which party is the closest to their own political views[4].

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[4] Some scholars have argued that voters can use a variety of heuristics to reduce information costs (e.g. Downs 1957; Lupia 1994), but many others have pointed out the limitations of heuristics (e.g. Lau and Redlawsk 1997; 2001).

But the question remains as to how accurately voters understand the political platforms of the parties. Tsutsumi and Uekami (2013) analyzed voter recognition for the 25 issues used in Japanese Votematch for the 2010 HC election. According to this analysis, 31.5% of voters mistakenly perceived a party with different views as a party similar to themselves. For the six major parties, the average percentage of voters whose political views actually aligned with the party they perceived as being the most similar to themselves was 66.1%.

As this shows, voters do not always correctly recognize the political platforms of the parties. Furthermore, when we analyzed the kinds of voters who accurately recognize the party that is closest to their views, we found that possessing accurate information on the issues and having more opportunities to be exposed to information about policies played important roles. This suggests that VAAs, which match voters and parties on a range of policy issues, can be effective tools for voters who have a poor understanding of or little interest in politics.

Future Prospects of Japanese VAAs

So what lies in store for VAAs in Japan? Let us discuss the difficulties and opportunities for VAAs.

Difficulties

The primary users for online tools such as VAAs are thought to be young people, but the younger generation displays little interest in politics. Figure 3 shows voter turnout rates by age in the HR elections from 2005 to 2009. As the graph reveals, the lowest voter turnout is the group aged 20 to 24, while the highest is the group aged 65 to 69, and the difference between the two is nearly 40%. If the younger generation remains disinterested in politics, then the use of VAAs may not spread.

Instead of trying to heighten young people's interest in politics to promote the use of VAAs, we should think about piquing their interest in politics by having them use VAAs. In any case, this will require further consideration.
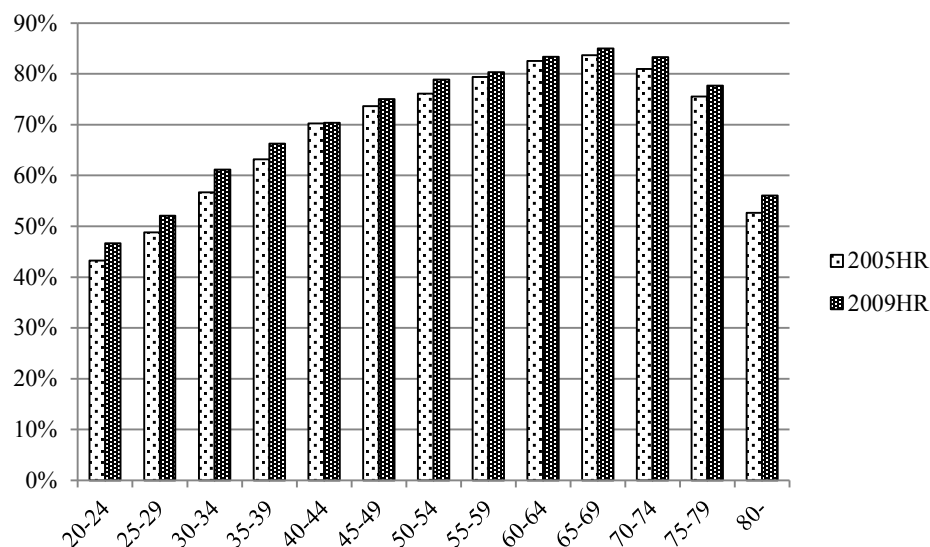
Source: The Association for Promoting Fair Elections

Figure 3

Turnout Rates for House of Representatives Elections

The second difficulty facing VAAs is the arduousness of the Japanese election system. For voters to cast votes based on their assessment of the policies, they need to collect a vast amount of information, compare policies with their own preferences and select the party that is most suited to them. This takes time, but Japan's Public Offices Election Act prohibits campaigning outside of the designated campaign period, which is extremely short. Table 3 shows the amount of time spent on campaigns for the most recent national elections.

Table 3

Days Spent on National Election Campaigns

	starting date	voting date	days
2007HC	2007/7/12	2007/7/29	17
2009HR	2009/8/18	2009/8/30	12
2010HC	2010/6/24	2010/7/11	17
2012HR	2012/12/4	2012/12/16	12
2013HC	2013/7/4	2013/7/21	17

Only 12 days and 17 days are allocated for HR and HC elections, respectively, and parties are prohibited by law to distribute any materials outlining their campaign platforms outside of these time frames. For this reason, the parties are unable to sufficiently publicize their policies to voters, and policy discussions among politicians and among voters remain superficial. VAAs came into use precisely because of these restrictions, but if no one is seriously debating the policies, then only a handful of voters may attempt to use the applications to find the party closest to them.

Another restriction, in place until the HC election of 2013, was the prohibition of the internet for campaign activities. This internet ban was lifted with the revision of the Public Offices Election Act, but several restrictions remain. For instance, voters are not allowed to use e-mail to urge other voters to go to the polls, and minors under the age 20 are forbidden from engaging in any and all online campaign activities. Distributing printouts of the homepages established by parties or candidates is also forbidden. In particular, the prohibition of minors from campaign activities contributes to keeping young people disinterested in politics. This restriction could be considered a hindrance to the diffusion of VAAs among the younger generation—the segment of the population with the least resistance to internet usage.

The next difficulty facing VAAs is the poor level of citizenship education in Japan. The Basic Act on Education, the fundamental Japanese law on school education, prohibits political activities in schools, so teachers have been careful to avoid engaging in discussions on politics. This restriction stems from a bitter standoff between the Ministry of Education, Culture, Sports, Science and Technology and the unions to which elementary school, junior high school and high school teachers belong.

As a result, citizenship education in Japan's schools has been limited to learning about the democratic system and voting methods. In other countries, it is not unusual to hold mock elections in class, but almost no schools in Japan do this.

Opportunities

Having discussed the restrictions of VAAs, what kinds of opportunities must be taken advantage of to ensure the diffusion of these applications throughout Japan?

First, there needs to be diversification of VAA developers. As mentioned earlier, the main VAAs in Japan have all been developed by major newspapers. As such, the questions about parties and candidates tend to follow the same pattern, and the user interfaces are all similar, making it difficult to discern how the applications are different. Also, these applications do not differ very much from their original European counterparts, so it is hard to claim they have been improved based on new ideas.

In addition to these existing VAAs, there is surely room for VAAs developed by many different segments of the population, including students, women and senior citizens. For example, VAAs focused on youth unemployment, irregular employment, education spending and other issues in which young people are interested would be useful for university students. VAAs developed with students in mind could also be used to provide citizenship education in schools.

VAAs should also be developed for regional elections. Voter turnout rates in regional elections are lower than those for national elections, and the voters tend to express little interest in the races. In most cases, candidates rely on their personal networks to run campaigns, and they have not traditionally stressed their political differences with their opponents. However, the promotion of decentralization is gradually leading to situations in which regional politicians must make decisions on important policies, so the role of VAAs is expected to grow.

If a diverse array of developers creates VAAs for many different elections, then new ideas will be born and innovative concepts and technologies will likely follow. The pace of innovation will accelerate if VAA developers actively exchange information and discuss improvements.

The role of researchers, first and foremost, is to analyze and assess VAAs. As Table 1 shows, there are several primary applications that appear similar, but surely they also have some differences. For example, if the same user were to use different applications, would he or she receive different results as to which party or candidate was most in alignment with him or her politically, and if so, why? It is up to researchers to analyze and assess these applications and notify users about them. If a wider variety of VAAs comes into play, then users will need to be guided to these applications based on their goals.

By studying various countries' VAAs, researchers can provide advice on how they can be improved from a neutral standpoint. Diversifying the developer pool will require researchers to supply specialized knowledge.

Another restriction on VAAs in Japan is the law, but this cannot be changed easily. To promote the advancement of VAAs in Japan, a wider swath of the population will need to develop and use these applications, and expert consulting will play an important role in propelling this forward.

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The Effect of the Dietary Education Through Korat Song for Thai Type II Diabetic Patients

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Abstract

The purpose of this quasi-experimental study was designed to determine the effectiveness of the dietary education through Korat Song on knowledge and blood glucose level of Type II diabetic patients. The participants were recruited from the Primary Care Unit (Family Clinical Practice and Community) in the Maharaj Nakhonratchasima Hospital, Thailand, and consisted of twenty-four Type II diabetic patients. The participants received the dietary education through Korat Song (Folk Song of Nakhonratchasima province) and a food model. The researchers collected data by using a questionnaire, a dietary knowledge test and a blood glucose test. Three diabetes clinical experts examined the contents of the dietary knowledge test (Reliability=.98, KR-21). The analysis of data was done to establish the frequency, percentage, mean, standard deviation and a comparison dependent t-test.

The result showed that knowledge scores of Type II diabetic patients who attended the dietary education through Korat Song at post-test were significantly higher than pre-test ($t = -3.80$, $p < .05$). Unfortunately, there was not a significant difference between the mean score of the blood glucose level before and after attending the dietary education through Korat Song.

According to the result of the study, the dietary education through Korat Song affected knowledge, but did not affect the blood glucose level of Type II diabetic patients at the Primary Care Unit (Family Clinical Practice and Community) in the Maharaj Nakhonratchasima Hospital. Therefore, nurses should be constantly concerned to decrease the blood sugar level and develop the program of the dietary education for a better quality of life in Type II diabetic patients.

Keywords: *Korat Song, dietary education, and Type II diabetic patient*

The Effect of the Dietary Education Through Korat Song for Thai Type II Diabetic Patients

Significance of the Study

Diabetes mellitus is one of the most important health problems in Thailand. The report of World Health Organization showed that there were 250 million Diabetes patients and will increase more than 360 million patients in the year of **2030 if there is no suitable solution of this problem (Ministry of Public Health, 2010**). In Thailand, it would have 501,299 new cases of diabetes mellitus in 2011, and 18,816 of those in Nakhonratchasima, northeast of Thailand.

Diabetes Mellitus is the chronic illness affected to daily life, economic status, self image, and health status. If these patients cannot adapt, they would have a stress, feel less autonomy, or self esteem (Sunthornyothin & Buranasupkajohn, 2012). The most important treatment of this disease is to control blood glucose level for reducing the complications such as a renal failure, heart disease, blind, or foot wound.

From the literature review found that the dietary education was the effective way to help patient control blood glucose level (Owathagarn & Suntra, 2012). The investigators were interested to apply Korat song (Folk song of Nakhonratchasima province) into the dietary education and measure knowledge and blood glucose level of Type II diabetic patients from the Primary Care Unit (Family Clinical Practice and Community) in the Maharaj Nakhonratchasima Hospital .

Statement of the Purpose

The purpose of this quasi-experimental study was to determine the effectiveness of the dietary education through Korat Song on knowledge and blood glucose level of Type II diabetic patients from the Primary Care Unit (Family Clinical Practice and Community) in the Maharaj Nakhonratchasima Hospital, Thailand.

Sample

A sample of Patients of adult or elderly (more than 20 years old) who had been diagnosed with Type II diabetic for at least 1 year was recruited from outpatient clinic at the Primary Care Unit (Family Clinical Practice and Community) in the Maharaj Nakhonratchasima Hospital, Thailand. The inclusion criteria for the sample consisted of Type II diabetic patients who (a) had the ability to speak, read, and understand the Thai language; (b) were not treated by insulin injection; (c) had no complication such as hyperglycemia, renal failure etc. The sample was derived from the population of Type II diabetic patients who reside in the metropolitan area in Nakhonratchasima.

The setting of this study was the outpatient clinics from the Primary Care Unit (Family Clinical Practice and Community) in the Maharaj Nakhonratchasima Hospital.

Protection of Human Subjects

The Institutional Review Board (IRB) application was submitted to the IRB of the Boromarajonani College of Nursing, Nakhonratchasima. The proposal and the consent form were reviewed by the IRB to determine that the rights of human subjects were not violated. The investigators obtained approval from the IRB of the Boromarajonani College of Nursing, Nakhonratchasima and the permission from the director of the Primary Care Unit (Family Clinical Practice and Community) in the Maharaj Nakhonratchasima Hospital, Thailand before data collection.

Instrumentation

The instruments were used in the study consisted of Dietary education lesson plan, demographic questionnaire, a dietary knowledge test, and a blood glucose measurement.

Research assistants used Dietary education lesson plan for singing Korat song. It was developed based on the literature review. Demographic questionnaire included sex, age, educational level, occupation, income, duration of disease. A dietary knowledge test was two choices, 20 items, examined the contents by three diabetes clinical experts (Reliability=.98, KR-21).

Data collection

Twenty-four Type II diabetic patients were recruited from the outpatient clinic and received the dietary education through Korat Song (Folk Song of Nakhonratchasima province) and a food model during June – September, 2013. Before implement the intervention, the investigator tested the blood glucose (Dextrostix) and administered a demographic questionnaire and a dietary knowledge test to the participants (pre test). The dietary education through Korat Song and a food model were given to a group of participants approximately 30 minutes. After two weeks, the investigator visited the participant's home and tested the blood glucose (Dextrostix), then administered the dietary knowledge test (Post-test).

Data Analysis

The analysis of data was done to establish the frequency, percentage, mean, standard deviation and a comparison dependent t-test.

Results

The result showed that knowledge scores of Type II diabetic patients who attended the dietary education through Korat Song at post-test were significantly higher than pre-test (t = -3.80, p < .05). Unfortunately, there was not a significant difference between the mean score of the blood glucose level before and after attending the dietary education through Korat Song (Table 2 and 3).

Table 1

Demographic Data   (N=24)

	Number	%
Sex		
Male	5	20.80
Female	19	79.20
Age (year old)		
40-49	2	8.33
50-59	6	25.00
more than 60	16	66.67
($\bar{x}$ = 62.71 years old, S.D.=9.79)		
Educational level		
Primary school	15	62.50
Secondary school	5	20.80
High school	1	4.20
Bachelor	3	12.50
Occupation		
None	3	12.50
Farmer	0	0.00
Housewife	6	25.00
Merchant	12	50.00
Government office	0	0.00
Other	3	12.50
Monthly income (Baht / 1 US dollar = 30 Baht)		
less than 1,000	7	29.17
1,000 – 5,000	9	37.50
5,001 – 10,000	7	29.17
morethan 10,000	1	4.16
($\bar{x}$ = 6,275 ,S.D.= 11,926.96)		
Duration of disease (year)		
1 – 5	6	25.00
6 – 10	10	41.67
11 – 15	0	0.00
16 - 20	4	16.66
21 – 25	3	12.50
26 – 30	0	0.00
31 – 35	1	4.16
($\bar{x}$ = 12.25 ,S.D.= 8.34)		

Table 2

Mean Score of Knowledge Test (N=24)

Knowledge	n	x̄	S.D.	t	df	p-value
before intervention	24	14.08	2.47	-3.80	23	0.001
after intervention	24	16.71	2.01			

Table 3

Mean score of blood glucose (N=24)

Blood glucose level	n	x̄	S.D.	t	df	p-value
before intervention	24	135.17	41.24	-0.78	23	0.44
after intervention	24	143.62	39.42			

Discussion

After administered the intervention, a dietary education through Korat Song, the knowledge score at posttest of participants significantly higher than pretest ($p < .01$), mean score at pretest was 14.08 and posttest was 16.71. As the results of the study, mean score of duration of the disease was 12.25 years, which was long time for gaining enough information of a dietary self care. Moreover, it related to Learning Theory (Gagne, 1977), teaching with media would stimuli the learner's interesting (Kaochareon, Nimpanich, Wongtrakul, Thongdee, and Cherngyuth, 2009). Like the Korat song, it stimuli Type II diabetes patients learning about how to eat.

When compared the blood glucose level (Dextrostix: DTX), there was not significantly difference before and after received a dietary education through Korat Song ($p > .05$). The mean score of the blood glucose level at pretest was 135.17 mg/dL, and at posttest was 143.62 mg/dL. This result would be explained by the characteristic of participants, elderly people in the majority. As we known, the elderly people was decreased the functioning of organ including endocrine gland. Moreover, the majority of samples were merchants which work in the rigid time, no time to taking care themselves. These reasons would effect to the blood glucose level. Beside the knowledge of the dietary, there are other factors influencing the blood glucose level such as eating behavior, exercise, medication or insulin injection (Darnkul, Thongpenyai, & Suwichachucherd, 2009)

Recommendations

1. Nurses should implement this program, the dietary education through Korat Song for Diabetes patients for controlling blood glucose level. It would be effective if nurses plan to educate those in continuing period of time.
2. In the future, should study the associated factors for controlling blood sugar level beside a dietary education.

3. Apply Korat song for health education in other chronic patients such as hypertension heart disease etc.
4. Next research should have a control group for comparing the result.

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**Fatigue Relief among Cervical Cancer Patients in Thailand:
Praying and Meditation**

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Abstract

Purpose: Fatigue remains a significant health problem among cervical cancer survivors who have receiving concurrent radio-chemotherapy. Buddhism practice plays an important role in both physical and mental health problems. However, little is known about its effects on fatigue management. This observational study was conducted to describe the patterns and effects of praying and meditation on relieving fatigue in Thai Buddhists with IIB and IIIB Stage cervical cancer survivors.

Methods: Thirty cervical cancer survivors were recruited when they were prescribed radio-chemotherpay over 18 years of age (Mean=50 years, SD=7), good physical fitness with ECOG ≤2, and healthy renal function (BUN <20mg/dl, creatinine serum <1mg/dl). The subjects were given weekly follow-ups while undergoing concurrent radio-chemotherapy for six weeks. The subjects also received weekly assessments for fatigue by using the revised Piper Fatigue Scale (PFS) and fatigue management was assessed with the Symptom Management Strategies and Outcomes Questionnaires (SMSOQ) at Week 6.

Results: Six patterns of fatigue were classified by severity as follows: mild, moderate and extremely severe. Fatigue changed over time. During the first three weeks, fatigue patterns became mild, the increased in moderation over the next two weeks and became extremely severe at Week 6. The mean fatigue scores from Week 1 to Week 6 were 0.6 (*SD=1*), 2 (*SD=1*), 3 (*SD=1*), 4 (*SD=2*), 6 (*SD=1*), 7 (*SD=1*), respectively. Fatigue management strategies were frequently used such as sleep (97%), no movement (93%), drinking beverages (67%), praying and meditation (37%) and deep breathing (30%). However, prayer and meditation were the only strategies that absolutely relieved severe fatigue (17%). Therefore, prayer and meditation may be effective management strategies for severe fatigue.

Conclusion: Prayer and meditation could be complementary alternative therapy for fatigue management that is effective for mild to severe fatigue. Therefore, nurses and care givers could promote cancer survivors in performing prayer and meditation regularly during concurrent radio-chemotherapy.

Keywords: Fatigue, Cervical Cancer, Concurrent radio-chemotherapy, Prayer and Meditation

Fatigue Relief among Cervical Cancer Patients in Thailand:
Praying and Meditation

Introduction

Cervical cancer is a cancer in women with escalating incidence and a mortality rate as high as 22.5 people per population of 100,000 people (Ferley et al., 2013), which includes Thailand. The symptoms of the disease grow in severity as the disease enters the advanced stages, thereby reducing patients' quality of life. With current advances in medical science, popular treatments include concurrent radio-chemotherapy with the objectives of increasing patient survival rates (Ardizzoni et al., 2007), reducing distant metastasis, helping with local tumor control, nearby organ function preservation and increasing radiotherapy efficiency (Srichai Krusan, 2010). Treating cervical cancer patients takes a long time because patients require radiotherapy at 180-200 cGy per day for 5 days per week or 28 – 30 times with cisplatin at 40 mg/m² per week once a week for six weeks. During Weeks 4 – 6 (Chumworathayi et al., 2005), patients received three doses of brachytherapy. This method of treatment is highly effective but also has numerous side-effects, especially fatigue, which occurs at 100% as a result of undergoing concurrent radio-chemotherapy (Manci et al., 2011).

Fatigue causes cancer patients to feel weak, exhausted, depleted and uncomfortable (Aistars, 1987). Thus, patients do not have full function and capacity to perform daily activities and this changes daily lives (Olson, 2007) and causes psychological impacts such as anxiety, depression and fear of death (Ferrell et al., 1996) with social impacts. Thus, patients have to change jobs or stop working, thereby losing income to support their families (Curt et al., 2000). Receiving ongoing treatment over a long period of time caused fatigue to grow in severity, which may cause some patients to stop or change treatment plans and result in impacts on treatment effectiveness (Ardizzoni, et al., 2007).

Relieving suffering from the side-effects of treatment by promoting spiritual happiness and comfort by various methods is important in distracting attention and triggering the secretion of substances causing happiness to help strengthen the body and enable adaptation in the face of illness from cancer while easing pain and promoting sleep (Safavi, Sabuhi & Mahmoudi, 2007). According to studies, meditation has been found to involve training the body, words, mind and intellect to remain in a calm and self-aware state. Both methods are important for healthy and sick people. Previous studies were found to not cover fatigue models and fatigue management by prayer and meditation in cervical cancer patients undergoing concurrent radio-chemotherapy.

This study was aimed at studying fatigue management models and the effects of activities used by cervical cancer patients undergoing concurrent radio-chemotherapy in relieving fatigue to provide data for nurses, patients and care givers to use as guidelines in providing recommendations concerning proper practice while undergoing treatment.

Objectives

To study fatigue management models and the effects of prayer/meditation on fatigue relief in cervical cancer patients undergoing concurrent radio-chemotherapy.

Methodology

This study comprised prospective descriptive research. The population was composed of new cervical cancer patients treated by concurrent radio-chemotherapy at three state hospitals (Ramathibodi Hospital, Rajavidhi Hospital and Phramongkutklao Hospital). Because this study had six repetitive measurements concerning the sample group, the effect size was at r = .5; power of the test was at .8 and level of significance was at .05. After opening Cohen's table (Cohen, 1988), this study obtained a sample group of 28 subjects. The researcher increased the sample group by 20% to prevent sample attrition, thereby raising the total number of subjects to 34 people. However, due to changes in treatment plans, only 30 subjects remained. The following inclusion criteria was used to recruit the potential participants: 1) age of eighteen years and up; 2) new diagnosis with cervical cancer and undergoing treatment for the first time; 3) ECOG score of ≤ 2 (0 means equal ability to perform various activities like before illness without limitations; 1 means inability to perform labor-intensive activities with ability to perform daily activities such as housework and office work; 2 means patients are able to walk and help themselves but are unable to perform daily activities while remaining in bed for less than 50% of time awake); 4) BUN < 20 mg/dl and Cr < 1 mg/dl, 5) completely conscious, able to communicate in Thai and record data and 6) willingness to participate in this study.

The measure was composed of a 3-part questionnaire containing the following: 1) the personal data and sickness record form composed of 17 questions; 2) the Thai fatigue evaluation form of Piyawan Prisanapanurangsee translated and modified from the Revised Piper Fatigue Scale (PFS) composed of 22 questionnaires and used to evaluate the following 4 dimensions: 6 questions on the behavior/severity dimension; 5 questions on the affective dimension; 5 questions on the sensory dimension and 6 questions on the cognitive/mood dimension. The numeric rating scale (NRS) questionnaire was a 10-point scale ranging from 0 to 10 points (0-point scale means no feelings about a statement and 10-point scale means the maximum level of feelings toward a statement). In this study, the reliability was with Cronbach's Alpha Coefficient of 0.97 – 0.98. Fatigue scores was dividing into minor fatigue (0.01 – 3.99 points), moderate fatigue (4.00 – 6.99 points) and high fatigue (7.00 – 10.00) and 3) the questionnaire on fatigue management methods and management efficiency created by the researcher from the literature review contained 23 questions on the following two issues: 1) Did the sample group use symptom management methods? This question had a "yes or no" answer and 2) If the sample group used symptom management methods, how effective were the methods? The responses were rated on a 5-level Likert scale from 0 to 4 whereby 0 points meant no improvement in symptoms and 4 points meant no symptoms remaining at all. Three qualified experts examined this

questionnaire and Content Validity Index was 0.82. The test-retest reliability was obtained with Cronbach's Alpha Coefficient of 0.86.

Data was collected by interviewing with instruments to obtain personal information and history of illnesses at the first day meeting with the subjects came for treatment. The Revised Piper Fatigue Scale (PFS) and numeric rating scale (NRS) for the fatigue evaluation were collected on the third day after undergoing chemotherapy each week over a period of 6 weeks by spending approximately 20 minutes per interview. The questionnaire on management methods and management efficiency were collected at the last week of treatment and it took approximately 10 minutes.

Data Analysis

The researcher used a SPSS software program to analyze the data. Personal information and history of illness were analyzed using frequency distribution, percentage, median and standard deviation. The fatigue was analyzed with mean values and standard deviation and methods for managing symptoms and management efficiency were analyzed by frequency distribution and percentage.

Research Ethical Measures (In Cases Involving Research in Human Subjects)

This study obtained the approval of the human research ethics committees of three state hospitals, namely, Ramathibodi Hospital (No. 2555/539), Rajavidhi Hospital (Document No. 196/2555) and Phramongkutklao Hospital (No. IRBRTA265/2556).

Findings

The subjects were aged 39 – 65 years and had elementary educational attainments (57%). Most of the subjects were married (90%). All of the subjects were Buddhists. Half of the subjects were self-employed. A few of subjects (37%) had incomes of 5,000 – 10,000 baht per month, but 73% was sufficient with no savings. Concerning treatment entitlements, the subjects (60%) were under the Universal Healthcare Coverage Program. The subjects used transportation by taxi (40%) and only 33% of the subjects had caregivers during treatment. The caregivers consisted of children, husbands and older sisters. They were receiving care and support in traveling to hospitals (60%).

Most of the subjects (40%) were in Stage IIB and Stage IIIB of the disease. All of the subjects had good physical capacity, which the Eastern Co-operative Oncology Group (ECOG) Performance Status equals to 0. The subjects (53 – 90%) had mean hemoglobin of less than 12 g/dl after undergoing treatment every week. The subjects (20%) received blood infusions with pack red cells.

Fatigue Patterns

When categorized by level of fatigue, 6 patterns were obtained. After undergoing concurrent radio-chemotherapy, the sample group (30%) had minor fatigue during the first 3 weeks. This increased to moderate fatigue at Weeks 4 and 5 and increased to severe fatigue at Week 6 as shown in Table 1.

The subjects had overall fatigue after receiving treatment as follows: minor fatigue at Weeks 1 to 3 with a mean value of 0.6($SD=1$), 2($SD=1$) and 3($SD=1$), respectively. The subjects had moderate fatigue during the next 2 weeks with mean values of 4($SD=2$) and 6($SD=1$), respectively. Lastly, the subjects had high fatigue at the last week with a mean value of 7($SD=1$) as shown in Table 2.

For the fatigue management, the subjects reported that they used sleeping (97%), taking time off work and activities (93%), using supplemental beverages/foods (67%), prayer/meditating (37%) and breathing fresh air (30%). For the severe fatigue, prayer/meditating was the single most effective method for managing symptoms and easing fatigue until no trace of fatigue remained (17%).

Table 1
Pattern Fatigue in cervical cancer patient receiving concurrent radio-chemotherapy (n = 30)

week	n	%	week 1		week 2		week 3		week 4		week 5		week 6	
pattern			$\bar{X}$	level	$\bar{X}$	level	$\bar{X}$	level	$\bar{X}$	level	$\bar{X}$	level	$\bar{X}$	level
pattern 1	1	3	0	no	0	no	0	no	0.6	minor	1.2	minor	2	minor
pattern 2	2	7	0	no	0	no	1	minor	2.3	minor	4	minor	6.8	moderate
pattern 3	8	26	0	no	0.8	minor	1.9	minor	3.7	minor	5	moderate	7	high
pattern 4	5	17	0.6	minor	1.6	minor	2.5	minor	3.6	minor	5	moderate	6.2	moderate
pattern 5	9	30	0.7	minor	2	minor	3.3	minor	5.1	moderate	6.4	moderate	8	high
pattern 6	5	17	2	minor	3.5	minor	5	moderate	6.4	moderate	7.4	high	8.3	high

Table 2
Mean, Standard Daviation and Level of fatigue in cervical cancer patient (n = 30)

week	week 1			week 2			week 3			week 4			week 5			week 6		
Fatigue Symptom	$\bar{x}$	S.D.	level	$\bar{x}$	S.D.	level	$\bar{x}$	S.D.	level	$\bar{x}$	S.D.	level	$\bar{x}$	S.D.	level	$\bar{x}$	S.D.	level
Total fatigue	0.6	1	minor	2	1	minor	3	1	minor	4	2	moderate	6	1	moderate	7	1	high

Discussion of the Findings

The subjects for this study was aged between 39 and 65 years in accordant with the study of Bualuang Sumdaengrit (2008) and the statistics of the National Cancer Institute of 2012 for Thailand, which stated that most cervical cancer patients are aged 45 – 65 years, thereby indicating that women aged over 40 years are at greater risk for cervical cancer than women aged less than 40 years due to greater age causing vaginal mucosa cells to be fewer, thinner and less flexible which makes these women susceptible to cervical irritation and wounds. Furthermore, due to alkaline conditions in the vagina, infections can occur easily (Nattapong Itsarangkoon-Na-Ayudhaya, 2007, Schaffer & Fantl, 1996). With regard to educational attainment, most of the subjects were found to have graduated from elementary school, which may have caused the subjects to have limited understanding of diseases and self-protection from diseases, including the ability to observe symptoms after having cervical cancer, causing symptoms of the disease to grow in severity, thereby leading to more fatigue once patients had undergone treatment by concurrent radio-chemotherapy.

When laboratory test results were considered, the mean hemoglobin levels were less than 12 g/dl after undergoing treatment every week. This finding was consistent with studies in cervical cancer patients undergoing concurrent radio-chemotherapy compared to carboplatin which 84% patients had hemoglobin levels less than 12 g/dl (Noumtong, 2007), thereby underlining the fact that continuous and long-term concurrent radio-chemotherapy suppresses patients' bone marrow function and lessens the number of oxygenating red blood cells supplying various cells. Then, cells and muscles become oxygen deficiency resulting in fatigue.

The subjects' overall fatigue and fatigue patterns were similar beginning with minor fatigue during the first 3 weeks, which increased to moderate fatigue at Weeks 4-5 and escalated to severe fatigue at Week 6 as a result of the treatments received by cervical cancer patients. The patients underwent radiotherapy at 180-200 cGy for 5 days per week (28-30 times) with cisplatin at 40 mg/m^2 per week once a week for 6 weeks. At Weeks 4-6 of treatment plans, the patients underwent brachytherapy 3 times (Chumworathayi et al., 2005). Moreover, the subjects had many adverse reactions such as nausea, vomiting, loss of appetite and diarrhea, etc. The symptoms of nausea and vomiting in the subjects increased fatigue, which concurred with the Piyawan Pritsanapanurungsie's study (2000) that nausea and vomiting was positively correlated with fatigue. Loss of appetite caused the body to receive insufficient nutrients for daily activities. Hence, body dissolved glycogen, protein and fat for energy, thereby resulting in energy depletion and fatigue (Piper, 1991).

The type of fatigue management most frequently employed by the subjects was sleeping. This finding concurred with studies involving patients with cervical cancer (Sumdaengrit, 2008), gynecologic cancer (Graydon et al., 1995), breast cancer (Pritsanapanurungsie, 2008) and head and neck cancer (Saejew, 2001) in which sleep was the most frequently employed because sleeping and resting maintain balance and conserve

physical energy. Regarding fatigue management outcomes, prayer/meditation was the single most effective method to capable of relieving fatigue until no trace of the symptoms remained. The subjects responded, "My aunt has prayed since she was young. She's 50 years old, so she has used the prayer, called "*itti-piso*", for one time more than her age, which is 51 times. Whenever she comes for treatment at the hospital, she goes to pray/ meditate at the hospital's praying field. Prayer helps her calm and focus her mind. She gets to stay alone, and speaking with her friends who have cancer is to share their experiences. This makes her more comfortable". This finding concurs with studies in ovarian cancer patients undergoing chemotherapy in which prayer improved the patients' quality of sleep, reduced the use of sedatives and allowed the patients better endurance in performing activities (Chuhong Deesamer, 2010). Therefore, prayer can be an important strategy in improving the mental health of persons with cancer. Moreover, prayer is improving the patients' spiritual (Meraviglia, 2002). Meditation is another method of calming the mind and self-awareness, and it is leading to less fatigue when the subjects used both methods together (Safavi, Sabuhi & Mahmoudi, 2007).

Research Limitations

This study of fatigue patterns in patients who treated by radiotherapy with cisplatin chemotherapy is on a weekly basis. Small sample size may limit generalization of the findings, and our findings could be applicable only to patients with similar characteristics.

Fatigue level in this study was self-assessment; it might have errors from personal bias. Nurses and medical personnel should consider evaluating by observation and assessing fatigue closely.

Conclusion and Recommendations

Prayer helps patient calm and better focuses on the minds, which promotes quality of sleep and reduce fatigue. Hence, nurses and health professions should promote and motivate cervical cancer patients to pray continually in order to relieve symptoms.

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Disclosure of Conflicts of Interest (Conflicts of Interest/No Conflicts of Interest)

The researcher has no conflicts of interest with this research.

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The Lifted Curtain (掀帘）Agenda Setting of UGC of Social Media in China

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Abstract

In the age of social media, it can monitor everyone and everything. Using this, there are lots of study of mining data. But this paper focuses the lifted curtain agenda setting of UGC of social media in china. Goode (2009: 1295) argues that the democratizing force of citizen journalism lies within its potential to bring citizens into the agenda-setting process. The emergence of new interactive media challenges the term "gatekeeper" itself, as audiences are most often "publicizing rather than controlling information under conditions of information abundance in contrast to the scarcity of the pre-digital age" Such a user practice could also have potential implications on the agenda- setting process, which has traditionally been a task performed by the mass media. In the same vein, Domingo (2010: 2) argues that "in certain spheres, alternative agenda- setting actors do exist, and they are producing news themselves", although he admits that the mass media still dominate the public space as agenda-setters. Still, the effects of user generated content on news-making and its impact on the formation of public opinion remain an understudied area. In 1849, Karl Marx put forward that the media should became those who defend public be power tireless Revealer, be eye in everywhere, be panacea of mouthpiece of mating people's spirit of own freedom (Chen Lidan, 2008: 320). But in china, only in the age of the social media, the eye in everywhere becomes reality. Because the poster and gatekeeper of social media both are diverse interests public group, and cross-regional supervision avoid the power controlling. The term of lifting curtain is broader and more objectives fit the age of UGC than opinion supervision. This paper focuses on the agenda setting of lifting the curtain by the UGC of social media in china.

Keyword: Agenda setting, User Generated Content, Social media, China

The Lifted Curtain (掀帘）Agenda Setting of UGC
of Social Media in China

The Agenda Setting of UGC of Social Media

In Beijing, Shanghai, Taiwan, Macao, five international conferences, XI YUNFENG published papers successively on the theory of the agenda setting of UGC on empirical studies of three popular social media (Facebook, twitter and microblog), putting forward the hypothesis of using users' generated content (UGC) to study agenda setting on social media. The UGC agenda setting of the social media should be completed by two phases: first, the information releasing from any publisher; second, the dissemination and interaction of the public such as many times (N times) forwarding (like), comments and share. The significance of the agenda setting will be showed through N times public dissemination interactive (forward or comment). It is the public agenda setting of which the mechanism is entirely decided by the public (Xi Yunfeng 2013).

According to the paper, "The Agenda-Setting Function of Mass Media", jointly published by McCombs and Shaw in 1972, the salience affect of the mass media which can influence the cognition and eventually change the mind of the audience, is now regarded as the "Agenda Setting Function". The power of the mass media can be focus and caught the attention on (of) the world. Traditional newspaper has never ceased to influence the general public by means of headline location and the length of a news report. Furthermore, "Agenda Setting Function" is capable to empower a chosen topic in the mind of the general public. In other words, "Function of media Agenda Setting refers to a kind of ability, and through repeated reports, strengthening the effect of the topic in the mind of the public."

Although social media network is the third platform which is UGC (user generated content) and it isn't basically the gate-keeper (media), the obvious dependence of agenda setting still exists. Because the public communicators set with the audience, the process of the propagation is realized in many (N) times of forwarding and comments. So the function of social media agenda-setting is completed by the initiators post stage and the second stages of the public forwarding and comments. Forwarding and comments are key elements of the communication and the form of significant agenda-setting function. The theory of two stages achieved by the first post audience and by the mass decided. Its significant was realized through numbers of forwarding or comments.

In social media, people pay certain attention to some issues, mainly from these topics were reported in the frequency and strength. Network information can quickly spread and propagation, it easily increase on certain events reported frequency and intensity (Gaofang, Meng Hongling, 2009). "Repeated action" is power in micro-blog platform, it only needs to appear repeatedly from different sources continue to enter the audience

sight this actual effect will reflect the micro-blog issues of frequency and intensity which significant shows. Such as the Beijing storm event, Guo Meimei, Wenzhou train accident, have a similar feeling which the public Waterfall wash screen（刷屏）the same issues significant peak type experience on micro-blog. It is hard to imagine the success of those shocking news could even appear in the eyes of the general public without the Wash-screen Effect（刷屏）– a large scale of keen and speedy replication of postings like waterfall in the Micro-blogging world of China. The key significant factors which formed the actual effect are forwarding (like) or comment which is the public spread behavior. It is no worry about that people cannot read good news, because anyone good news always be everywhere forwarding to be seen.

As micro blogging agenda setting measure indicators, forward and comment shown the amount on each post, is also social media significance hint form. Network transmission of fermentation and crystallization of mood (network society encourages behavior), in the network transmission, everyone is no longer relatively independent individual as in traditional media environment. Reading information, people can be affected of hints of forwarding rank or comments rank, etc. These ranks will influence of dispersed and hidden netizens aggregated and externalization to form a powerful collective voice. Although the collective voice is not equal to public opinion, but it can bring psychological impact place one among individual. Social psychologists, Robert Zajone believes that the presenting others can form a kind the of society calling, promote the advantages reaction. The result is to facilitate simple, and weaken complex behaviors; namely "society encourages behavior" (Peng Lan 2009). The "Internet society encourages behavior" will no doubt affect the audience to accept and spread information.

There are two sets of numbers attached to each message published in Sina Micro Blog (SMB) which is the total number of being forwarded by users and the total number of being user comments. They are a part of the agenda setting function of Sina Micro Blogging system and they generate the salience effect silently. As Sina micro-blog agenda setting measure forwarding number and comments number display in each micro-blog as the social media significant form hint. Facebook also have comments or forwarded (like, share) number hint, but Facebook put forwarded directly called as "like", showed that resonate forwarding. On Twitter, every tweet also have forwarded number display, another is called a collection.

In communication field, Micro-blog communication effect concept has a double meaning. First, it refers to persuade motivation and communication behaviors in the recipients body caused by psychological, attitude, behavior change; and second refers to the dissemination activities especially newspapers, radio, television and other mass media activity all the effects of outcomes of total of the spread affect the society.

[# micro-blog field overflow threshold #] Institute of Public Opinion of Renmin University of China has recently published a summary study about the micro-blog public events which is based on the observation of the past 2 years: If an event which has been forwarded in Sina micro-blog for more than ten thousand times; or has been commented more than three thousand times; or satisfied both conditions or one of them, then the mass media would report the event and "move" the discussion from the arena of social network media to the arena of the mass media. (30)

In 2012 07-08ld 19:16 from Professor Yu Guoming Institute of Public Opinion of Renmin University of China in Sina micro-blog

From another view, the results of this study shows that social media agenda setting does exist and influence the tradition media agenda setting. It also proves that the direction of the research which put forwarding and comments as a social media agenda setting significant indicators is correct.

The communication scholar Wilbur Schramm also said: Agenda setting (tradition media) is based on two points: 1) All kind of media are absolutely necessary gatekeeper to report the news worldwide; 2) people *need the gatekeepers to select event and problem that exceed their limited experience, which are worthy of concern and attention (1987).* In mass media, agenda setting is mainly completed by media gatekeepers. For particular information, based on the social network information transmission, is based on each node, information dissemination is along the path to spread in the network. Each node is the "check" role. Each choice of every node, directly affects the scope and effect of information dissemination. These choices both may be based on the judgment of information value, and can also be based on the influence of relationships or identity factors such as strong relationship nodes. But no matter what kind of choice, right in the hands of the public Internet users. For weak relationship nodes, forwarding is only based on the judgment of information itself, without relationship factors play a role [1]. As a result, the spread of this level is an effective test for the public value of information, its mechanism of the formation is a key role for becoming public hot spots topics from the information ocean.

German scientist, Hawking in 1971 the first time mentions the concept of "synergetic" (协同. Synergetic is the study of the system of the synergy in each subsystem concerning on how to make the system transition from disorderly to orderly. The future of web applications will bring more diversified "self-organization", based on the network of "self-organization" social collaboration will also play a more important role in society. They experience the fun of cooperation and create on the one hand, on the other hand also to experience their sense of social belonging. (Zhou Yong, Huang Yalan. 2012)

Interpersonal network has no "gatekeeper" of traditional mass communication agencies, however, it also exists an intrinsic "check". Whether has the public value of news and information, rely on all users "vote" of the platform. People choose what to send or not, or what comment on or not, is, a kind of, based on the mouse and keyboard to vote. This vote is not only directly reflect the evaluation of the public value of information, also directly affects the breadth and depth of information dissemination. Therefore, social media for information of the personalized services provides another way of thinking: people's

social relations as a filter, to meet the individual needs of information filtering. In such times, of course, be able to provide news and information in the media of public value, still has an important value. They will play a more important role in social integration. (Peng LAN, 2010).

In a word, the new context of gatekeeper still exists and does not disappear, just transform into public collective decision mechanism. Some Chinese scholars also say: first post, the second be checked by public information filed is the mechanism of social media (Liuligang, 2013: 253, Hewei, 2011: 21). Through the community or the organization integration on the agenda, the agenda of fragmentation by group gathering current image according to the internal mechanism as motivation to different directions, to form multiple mainstream agenda.

Lifted Curtain Agenda Setting in China

The lifted curtain agenda setting of UGC of social media is the application of the panoptic on theory in China

1. Two kinds of lifted curtain breakthrough agenda

Information Breakthrough

Just like the scandal between the former U.S. President Bill Clinton and Lewinsky that failed to be reported by the mainstream traditional media and turned to social media for the black curtain lifted for exposure of the inside story, the communication empowerment of the bottom-up public opinion generated from social media and low regulatory threshold make it possible to succeed in information breakthrough frequently and assume the historic mission of political curtain lifting. While the Chinese mainstream traditional media is rarely involved in the report of unexpected social group events at first time, such as the events happened in Wukan of Guangdong, Shifang of Sichuan, Shaxi of Guangdong and Qidong of Jiangsu, etc, in contrast, that social media has become the main battlefield of communication and reporting is an indisputable fact. The research data indicates the obvious media characteristics of social media, many unexpected events first appeared on social media within two to three hours of the occurrence. A number of studies also pointed out that the microblogging has become the first public opinion field in china.

Perspective Breakthrough

Microblogging political curtain lifted also reflected in the very different perspective of social media regarding some major events that are concerned by the mainstream traditional media at the same time, in the 7.21 Beijing storm event (2012), by means of the mobile terminal facilitation, the citizens in the rainstorm became the reporters. Among the 50 reports on the rainstorm by the citizens forwarded by over 10 thousand people, there is information on the accident scene, airport subway transportation hub points, as well as on the flooded buses and hotels and even on concerts. The reports of rescue appeared in

the form of continuous scrolling form and multiple reports were live broadcast, combined with historical rainfall data news background and comments. The extensiveness of reports from various points and information richness far exceeded the reports made by professional media reporters deployed at various points, the scene liveliness and timeliness accompanied with photographs also surpassed the professional media. What social media differs from the traditional media lies in the agenda setting of independent stance to reflect criticism presented from a unique bottom-up perspective.

Zheng Yuanjie

Last night it rained heavily in Beijing, my house was flooded into a lot of water, I stood in the water and beat the drum, asking the Beijing municipal government a few questions: 1. Did relevant departments send mass warning message to citizens after the Beijing Meteorological Observatory issued accurate early warning of heavy rain? 2. Did the government have the stringent instruction to ensure no one death to the departments before the storm? 3. Was every overpass guarded by specially designated person to remind the car owners to bypass it? 4. Were there any measures taken by the airport to give advance notice to travelers about postponing to the airport?

07-22 10:33 from the iPhone client (Comments: 3549, forwarded: 13255)

Xue Manzi

In the efforts against floods all night last night, Beijing people fully demonstrated the care and affection between humans, private companies also did their best to provide the accommodation, but we have not seen the government has opened stadiums and other public facilities to tens of thousands of stranded passengers, nor the public transport used to evacuate the stranded passengers. This should be the international practice commonly seen on the event of natural disasters, which cannot help but saying regrettable, worth of reflecting

07-22 08:24 from iPad client (9024, 35514)

[Beijing, could it show more humanity?] A storm made people see two completely different Beijing: kind-hearted people spontaneously involved in the rescue, the rescue team composed of countless people providing shelters; no official government building is open, the toll stations still busy in charging fees, traffic management staff ticketing the flooded vehicles. The major hazard in urban construction cannot be remedied in the short term; can't the management be a little more humane? Beijing, it is really speechless!

07-22 10:55 from iPad client (1928, 13050)

2. Multiple sources of curtain-lifting agenda

Journalist citizens and the concerned information source microblogging joined into curtain lifting, such as the outlaw hunted down in Chongqing, and the activists sailing for Diaoyu Islands, netizens participated in almost the whole process and questioned every aspect just like that of Beijing 7.21 storm event, for instance, questioning the police number

on the uniform, the policeman who shot dead was different and the dead outlaw wearing different glasses, etc. certainly these particular events should be attributed to microblogging reporter citizens, such as details of death toll initially evaded to be announced at the Beijing conference were live broadcast by the reporters attended the conference reporter by micro blogging. Undoubtedly, it is also an important link of curtain lifting as the citizen journalism when these professional reporters publish on the micro-blog outside the working hours. In addition to the members at NPC and CPPCC sessions and the athletes at the Olympics as the concerned information source of micro blogging, the reporters' microblogging also contributed a lot.

The shift of stance and frame when the information transferred from the mainstream media or the hotspot event picked by the web portals transported to microblogging social media is the third kind of curtain lifting action, such as the motor vehicles handling suggestion announced by the Chinese government and the vote made by the Chinese government in the United Nations to support Syrian government, transferring from the mainstream media to the social media, causing the strong bounce of Internet users and leading to the shift of the agenda frame.

Just as China CCTV reporter Zhang Quanling participated in the reporting of two sessions in 2012, the netizens paid attention to all details about the members on microblogging from their boarding and lodging and traveling, to the motion and proposal made (such as members wearing luxury brand clothes, ridiculous proposal made by members, even questioning the woman members of Zhejiang wearing cheongsam), she was feeling deeply about the coming era of the social media for curtain lifting on her microblog.

> @ Zhang Quanling: the royal court and grassroots have long been separated by a layer of curtain, people in the royal court thought something was right and proper, while grassroots exclaimed "such can be done!" for instance, several years ago, the director of a bureau smoked the whopping priced cigarette smoke, Maotai liquor bought by the state-owned enterprises selling oil, and the members wearing cheongsam, which were in peace when separated by a curtain, but now the curtain has been lifted by microblogging.

Microblogging address: http://t.sina.com.cn/1671342103/y8mrSiKnX

Indeed the lifted curtain of the microblogging social media agenda setting made the "media civil society" in China take shape and gradually deepened. From the junket tour, sex diary, group sex pornograph, sleeping at the meetings, whopping priced cigarettes and wines, luxury brand watches and clothing, to the accountability for the procedures of major events, all these were exposed and placed under the supervision of social netizens. By searching the cloud photographs about two sessions, the representative members attending the government work reports in the Great Hall can be found by any netizen in the cloud photographs. This technology also makes curtain lifting of social media pull the government actions concerned by netizens into the sight view of the netizens outside the

royal door, receiving supervision, increasing transparency. In this regard, the media civil society plays a positive role in driving it along the fair and square track. In the earthquake occurred on April 2013 in Ya'an, Sichuan, the local officials who accompanied Prime Minister Li Keqiang to view the situation of the disaster picked off his watch, but the mark of the watch left on his wrist gave rise to the human flesh search by netizens of the reported photos that he wore all kinds of watches in the past. Undoubtedly the arrival of the era of citizen to lift the curtain makes the unrestrained space of officials get smaller and smaller.

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Improving Community Life through Public Relations

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Abstract

Recently, local governments' public relations started to use Social Network for interactive communication with citizens. Takeo city, Saga prefecture initiated its PR program by creating a Facebook page, and soon after, other local governments in Japan followed. However, Takeo city's PR focused only on their Facebook page whereas other cities tends to own their website in addition to a Facebook page. In this study, the case of the uniquely used "Fb" page of the city of Takeo and the use of a general "Fb" page by the city of Otaru will be put to comparison to expose their differences and to verify the effectivity of the employment of announcements via "Fb" by administration bodies.

The survey used for this research was conducted with the support of Otaru city office. The result is as below. The percentage of citizens who visited the Facebook page of Otaru only accounts for 9.2 %, and only 3.0% of the respondents actually pushed the "Like Button". The Facebook page of Otaru seems to be hardly used in Otaru. The main PR tools in Otaru are mass media, PR magazines, and word of mouth communications.

With the assumption that a Facebook page can enhance civic power and improves the governance of local community, it is crucial for the city of Otaru to be open to new strategies. Moreover, it is believed that media governance model that values civic pride and civic power can be more effective in Japan's civil society rather than the governance model that values social capital which was proposed by Putnam.

Keywords: Social network, Public relations, Otaru

Improving Community Life through Public Relations

Background of the study

Ever since the administration of the city of Takeo in the Japanese Saga prefecture started to make announcements via its official Facebook (in the following "Fb") page, regional administrations across the country followed the example and allowed Kikuchi and Shouji (2013) to confirm 466 accounts of 159 administrational bodies throughout Japan. The reasons for this high activity are "the exceeding speed, easiness, distributional power" and "financial insignificance as well as the low work intensity" (Ministry of Public Management, Home Affairs, Post and Telecommunication, 2013, p. 52). With Fb as an example, the properties of social media include a mutuality of its users, which lead to high expectations of a mutual communication between administration and citizens that were not possible with the means by which past announcements had been made. However, "citizens sharing information, stimulation of the citizens as well as the collection of opinions" and "the promotion of plans" actually had been made an objective by less than 30 % of the administration bodies (Ministry of Public Management, Home Affairs, Post and Telecommunication, 2013, p. 52). This theory is being supported by the research conducted by Soga(2013, p. 51) that acknowledged "a strong tendency of the administration bodies to provide information but interactions with citizens are limited". Thus, administration announcements via Fb fall into the premises of their predecessors and leave the expectations of fostering a mutual exchange between administration bodies and citizens unanswered.

However, in terms of the media effects that administration bodies experience through Fb, previous research is limited to Noguchi and Ito (2013) and Ito (2013)[1] study on the case of the city of Takeo. As the city of Takeo has been already the proto-example of an administration body utilizing social media and enjoyed as a result the advantage of receiving great attention for doing so, a comparative research of a different administration body is required. Therefore the city of Otaru in Hokkaido, which uses a general Fb account for administrational announcements, has been chosen as research object.

Research Objective

In this study, the case of the uniquely used Fb page of the city of Takeo and the use of a general Fb page by the city of Otaru will be put to comparison to expose their differences and to verify the effectivity of the use of announcements via Fb by administration bodies. In addition, by focusing on the Fb pages of local administration bodies, this study will investigate how social capital, civic power, civic pride and the attitude and opinion of citizens are shaped. This will uncover the efficiency and influence of administration bodies` work and will point out better ways of administration than the Media / Governance model.

Review of the Study on the Fb Use by Local Administrations

The use of social media by local administration bodies, including the use of Facebook pages, has been discussed many times before. An investigation and analysis named "Investigational Study on the Current State of the Regional Use of ICT" has been carried out by the Ministry of Public Management, Home Affairs, Post and Telecommunication (2013), in order to determine the use of electronic administration and social media by local administration bodies. The objective of this research was to understand "The Provision of Information directed at Citizens and Companies within the Region (88.5 %), "The Provision of Information Directed at Recipients outside the Region (72.7 %) and the use of social media as "A Means of Providing Emergency Information (58.0 %) as main interests of local administrations' communication with citizens and companies.

The analysis of contents provided via Fb conducted by Ueno and Iijima (2012), pointed out the importance of photos to content contributions and, echoing to Soga (2013) on what kind of administration bodies are using FB and the results of the analysis of the reason of this circumstance, reached the conclusion that cities with a high population, a high popularity among tourists and cities without financial freedom are the primary users of Fb. Shouji (2013) divided and compared A) the way in which administration's announcements, B) regional announcements and C) mixed announcements have been made on local administrations` Fb pages and the evaluations and number of "Likes" each page received.

As shown above, there are a great number of previous studies available, but those do not exceed the question of how Fb pages are being used and thus leave the efficiency of the media's topic insufficiently discussed.

What Kind of Citizens does create a Good Local Government?

Until now, research regarding the efficiency of local governments has been limited to Noguchi and Ito (2013) as well as Ito (2013). Those are focused on the outcomes of social capital, civic power and local government's performance in the case of the city of Takeo.

Social Capital

Putnam (1993) describes the performance of regional Italian administrations (in the following "Governance P") through the distance between administration and citizens. This Governance P shows a strong relation between citizens and their connection to the region. Putnam calls this (Putnam, 1993, p. 167) "social capital" which refers to features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit. In 2003, 2005 and 2007, the Japanese Cabinet Office and the Japan Research institute carried out a nationwide study to analyze the three factors of social capital as defined by Putnam. Namely those factors and their accumulation called network are "Trust", the mutual trust and cooperation, "Interaction and Exchange", the interaction between neighbors and social exchange, and "Social Participation", the participation in activities aimed at the greater society.

Civic Power

Following Putnam, Knack (2002) also investigated on social capital and the efficiency of governments, revealing a connection between social capital and Governance P. However, they both left the details of their results unclear, Sakamoto (2010) was looking for an explanation of their causes and effects and brought forth a supporting variable between social capital and Governance P within the society. As "an appropriate support, criticism, demand and surveillance function for government elites" he named it civic power. Especially Governance P held validity not for regular citizens, but for activists.

Civic Pride

The Civic pride discussed in this paper concerns city promotion rather than political science. According to Ito (2008), "Civic pride is the pride or attachment to the own city. In this concept, they have the awareness of being part of community, and want to make it a better place." Similarly, the idea of "Place attachment" can be found in other works. Suzuki and Fujii (2008) defined it as; "Place attachment can draw a participative attitude towards their Region from the citizens. That has an important role on community management". This kind of citizen awareness is, with the citizens as important stakeholders, a major factor in what keeps local management going.

Investigation of the Relation of the Respective Indexes

Starting with Putnam (1993), Rice (2001) and Knack (2002) have been stressing the relationship between social capital and Governance P. In Japan, The Governance P and social capital relationship to local governments has been researched by Inoguchi (2002), Kim (2005), Sakamoto (2010) and Ito (2013). From Inoguchi (2002) and Kim (2005), there have been no results that indicated an influence of social capital on Governance P. Then Sakamoto (2010) and Ito (2013) concluded that Just Civic Power can make effect on Governance P, using the framework of Boix and Posner (1998). Both research show that social capital doesn't make effect on Governance P directly in Japanese Society.

Suzuki and Fujii (2008) pointed out that place attachment are highly active and dedicated to neighborhood committees and similar city design activities, are trusting the authorities and are connected to the majority of the region through a sense of responsibility. Similarly, Ishimori (2004) found that people with a high devotion to their region also feel very close to the latter and tended to be actively engaged in activities related to the region. Those researches are confirmed by Putnam`s (1993) network and the Cabinet Office`s (2003) "Social Participation" composition variable. This concept is not being directly proven to represent a cause and effect relation for the efficiency of government efficiency, or in other words Governance P. However, it can be believed to be a concept that is supported by previous research that utilized social capital as a supporting variable.

If the relation of the indexes above could be solidified, the following thesis can be presented.

Figure1 Media Governance model
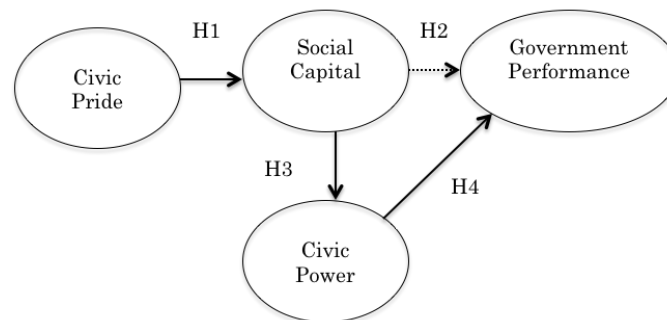
In this model, Civic Pride can enhance the Social capital (H1). However, social capital is, in disagreement with Putnam (1993) and other similar research, not directly effecting Governance P (H2), when applied to the Japanese society. It is an element that increases the value of Governance P by supporting a critical awareness of civic power (H3, H4). In this research, with the application of a public relations approach, this model will be put to comparison with the Media / Governance model including media effects and the governance model in the cities of Takeo and Otaru.

Facebook page of the city of Otaru as general type of local government

As mentioned before, the Fb page of the city of Takeo as proto example completely changed by the framework set by Soga (2013). For this study, the city of Otaru, Hokkaido, has been chosen as an example for an administration type that is general using Fb.

There are 4 reasons for this choice. Firstly, it is in agreement with framework of Soga (2013). Secondly, the city is maintaining an official website parallel to its general use of Fb. Thirdly, the page of Otaru contained information for citizens. Fourth and finally, the ability to handle the variable of attention received in the Fb page of the city of Takeo along with the task of evaluating the page.

Survey Outline

In cooperation with the city halls of Takeo and Otaru, questionnaire survey has been carried out.

Object	Takeo citizens	Otaru citizens
Survey method	Direct approach of citizens in Takeo`s 9th district. In order to reach a number of samples that relates to the population of the 9th district,some survey sheets have been collected at a later point.	

In order to allow a one by one analysis of the questioned factors that influence the citizens` awareness, the degree of use of each communication tool, the degree of the social capital, Governance P, civic pride and civic power, have been harmonized and put in comparison for both cities.

Composing Factors of Each Index

In terms of the social capital, the questions in this study have been adjusted to meet the example of the Cabinet Office (2003). Regarding civic power, two questions have been asked in the survey made for this research. Those are "Do you think that the city of Takeo (Otaru) is fulfilling its responsibility of providing information?" and "Do you have a strong interest in matters of personal information?" (Six choices from 1. strongly disagree to 6. strongly agree)

Questions about civic pride followed Ito (2008) definition. The question asked were "Do you have a strong interest in the city of Takeo (Otaru)?", "Would you like to contribute to the city of Takeo (Otaru)?" and "Are you satisfied with the life in the city of Takeo (Otaru)?" (six choices from 1. strongly disagree to strongly agree).The answers were used to outline the composition and creation of the civic pride and the citizens` feelings towards the region.

Survey Results

Differences between the Respective Indexes

First, a look at the results of citizenship and government efficiency for both targets areas, the cities of Takeo and Otrau.

Table 2: Mean and standard deviation as well as t Test for Takeo and Otaru, divided by city

	M	SD	M	SD		
Trust index	5.10	1.45	4.82	1.28	−2.44	*
Interaction index	3.28	0.49	2.80	0.44	−12.54	**
Social participation index	1.40	0.40	1.22	0.34	−5.84	**
SC integration index	3.26	0.62	2.95	0.55	−6.33	**
Civic Power	3.31	1.04	3.24	1.12	−0.74	
Civic Pride	3.67	1.17	3.68	1.24	0.98	
Government Performance	3.49	1.14	3.28	1.26	−2.05	*

As Table2 shows, following the t Test results that in comparison the values for the respective SC indexes as well as Governance P in Takeo are higher than in Otaru. Accordingly, in Takeo the citizens feel a strong connection to each other and the government is working efficiently, which mirrors the results of Putnam (1993) claimed that the SC

indexes and Governance P are in relation to each other. On the other hand, in terms of civic power and civic pride the t Test did not produce any meaningful result.

Differences in the Media Use

Now the differences in the media use should be taken into consideration for deepening the relation between the media and the respective indexes. In this study, besides Fb pages, mass media (TV, newspapers, radio, PR magazines etc.), public relations magazines and events (seminars, symposiums etc.) are considered. Further, citizens of both Takeo and Otaru have been asked the following question. "To which degree are you using the information channels of the city of Takeo (Otaru) listed below?" Possible answers included six closed options, ranging from "1. Don`t use" to "6. Use". Table 3 shows the results of this question.

Table 3 Divided by city: The citizen awareness indexes` and standard deviation, as well as t Test for Takeo and Otaru

	M	SD	M	SD		
Mass media	3.58	1.68	3.80	1.64	1.63	
PR magazine	3.56	1.79	3.45	1.92	−0.69	
Event	2.00	1.42	2.07	1.42	0.60	
Facebook	1.72	1.44	1.42	1.13	−2.75	†

From Table 3, little difference was found between two cities in the sense of media use. However, the score of the Fb page for Takeo City was slightly higher than that of Otaru City and showed marginally significant with a t-value of -2.75. This is due to Takeo City being the first to operate Fb page. Moreover, the Fb page operated by Otaru City has never been advertised neither via PR magazines nor mass media unlike Takeo City. This might be also the reason for such a result.

Proposal for Media / Governance Model

Covariance structure analysis was applied for the analysis by setting "the degree of PR tools used as a media" as an independent variance, "social capital index", "civic power index", and "civic pride index" as a parameter, and "governance P" as a dependent variance. The results are shown in Figure 2 and Figure 3.

The structure of the relationship among three indexes was the same for both Otaru City and Takeo City. Different from the hypothesis aforementioned, civic pride was more effective towards civic power that contains critical awareness than social capital for both cities, was found in hypothesis model H1. Civic pride also showed a slight effect towards governance P. As for H2, social capital did not show a significant effect directly towards

governance P for both cities. This result was also shown in a research by Sakamoto (2010) and Ito (2013). As seen in the previous work, a casual relationship from social capital to civic power was found from H3 in both cities; however, the score is low compared to civic pride. As for H4, civic power showed a strong casual relationship towards governance P. Therefore critical awareness of citizen is the most effective aspect to improve governance P.

Figure2 Media Governance model of Takeo City
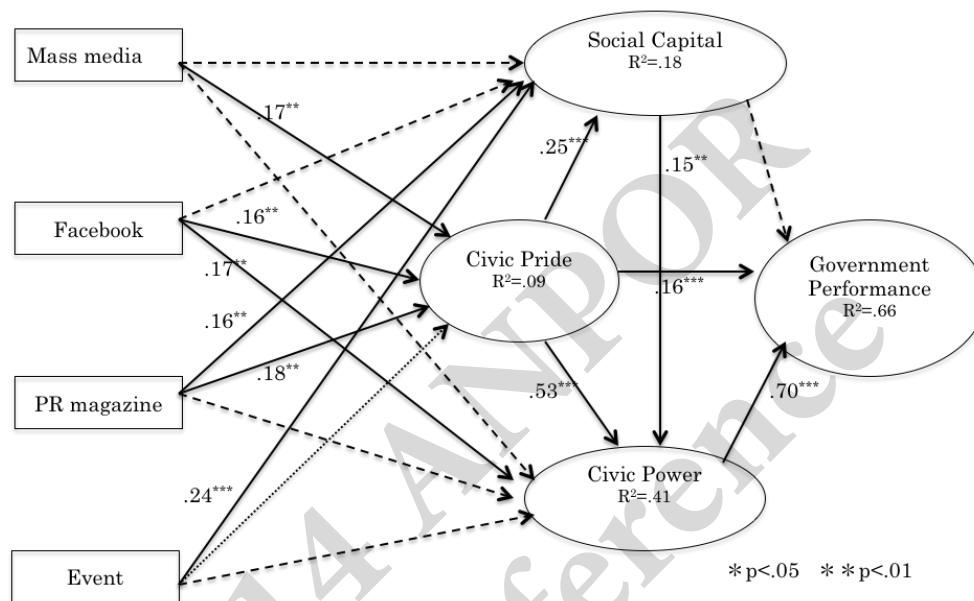
Figure3 Media Governance model of Otaru City
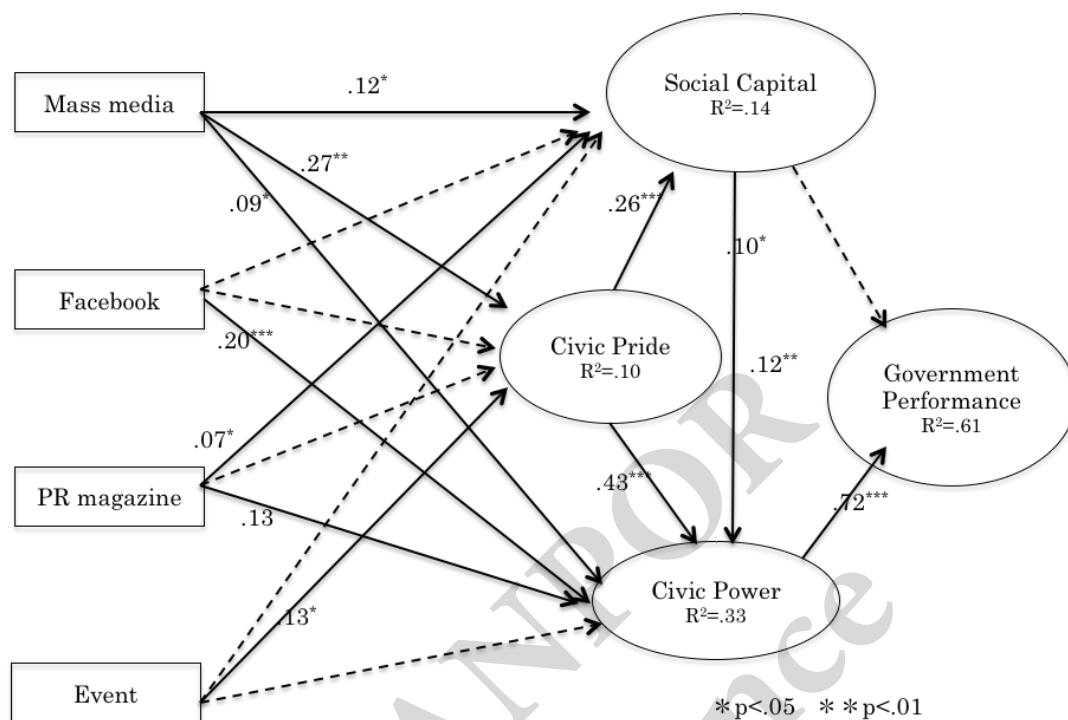
The same structure model was found in both cities. However, a difference was found in the way of how each media was effective to indexes. Although Fb page of Takeo City showed significance towards civic pride and civic power, it did not improve social capital. On the other hand, Fb page of Otaru City showed significance towards civic power solely. From this result, Fb page has a possibility to increase critical awareness among the citizens. Especially for Takeo City, by shifting and focusing on sharing information via Fb page solely, Fb page turned out to be the only media that improves civic power which is extremely important to increase governance P. Also, when examining the media effect for both cities, mass media turned out to be a massive influence among citizen of Otaru and showed the effectiveness towards all indexes. However, only civic pride was significant for Takeo City. As for PR magazine, a regular influence was examined from the result of standardizing coefficient showing β=.16** for social capital, β = .18** for civic pride in Takeo City. It also showed significance towards social capital and civic power in Otaru City with the score of β=.07*, β = .13* which is relatively small. Finally, Otaru City and Takeo City can be concluded as a "mass media type" and "PR magazine + Fb type", respectively.

The Media Effects of Administration Bodies` Fb Pages

Other than the considerations on both cities in Figure 2 and 3, what are the effects of a general Fb page? One aspect is civic power through the possibility for citizens to state their critical opinions to the administration, which leads to an increase in Governance P. This might be something that both sample cities have in common, such as the impact of the Fb pages.

If the media effects of Fb pages do not show interactivity, what caused this states? In neither of the two cities interactivity could be observed.

Compared to previous means of making announcements, Fb pages do not require any special skills for making updates and indeed are easy to put into a newer version. Therefore, daily information, such as the weather or events in the region that commonly are not updated in the mass media can easily be transmitted multiple times a day via the web page. On the other hand, monthly issued PR magazines, for example, are already limited in their contents due to their low distributional speed. It could be expected that the frequent and appropriately timed reception of information from administration construct close communication between administration and citizens. As a result of this, citizen's critical observation against their administration is developed.

The Role That Administrative Information Plays in Governance

This study showed not only the possibility of providing administrative information to citizens, but the administrative information approach, due to the effectivity of administrative information media, via civic pride and civic power, can lead to higher government efficiency by influencing the awareness of the citizens. Beyond that, the media that has been mainly focused on in this study, which is Fb, is the center of current considerations in terms of its reach and recognition rate, but might be an effective media towards Governance P.

Relating to administrative announcements, what can be the ideal kind of communication between the administration and the citizens? It is not simple information provision. For one, isn`t it to develop place attachment among the citizens, that raise communication that based on the critical surveillance by the citizens? Also, with a rise in regulations for local administrations and decline in budgets in recent years, the cooperation becomes a greatly desired asset. It may be this kind of supportive movement that is being expected from administrative information. While making place attachment, the critical awareness of the citizens, maybe on top of mixed thoughts on cooperation, improve the performance of local administrations` management, connecting to more efficient governance. It would be a great honor if this study could make a small contribution.

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Bridging the Gap between the Governmental Public-opinion Field and the Civilian: The Case of the People's Daily Micro-blog

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Abstract

In this study, we conducted a content analysis of People's Weibo, the microblogging services launched by People's Daily. The results show that it combines characteristics of both governmental public-opinion field and civil public-opinion field. It builds up its own distinctive microblogging discourse system, which bridges the governmental public-opinion field and civil public-opinion field. This is not only meaningful for mainstream media to make a step forward in media convergence but also plays a significant role in promoting the ecosystem of online public opinion.

Keywords: *Public opinion field; Bridging; the ecosystem of public opinion; Discourse system*

Bridging the Gap between the Governmental Public-opinion Field and the Civilian: The Case of the People's Daily Micro-blog

The concept of "public-opinion field" was first introduced by Zhengzhong Nan, the editor-in-chief of Xinhua News Agency. He believes that there are two public-opinion fields in the daily life: one is the "verbal public-opinion field" among citizens; the other one is the public-opinion field set up by news media outlets. Professor Bing Tong from Fudan University suggests that "public-opinion field is a certain time and space environment with several interactive factors that facilitates common views among people"[1]. In more detail, Hong Liao, the chairman of People's Daily Online defined the "governmental public-opinion field" as the public-opinion field within the official system, including official newspapers, television stations and online news platforms; while civil public-opinion field was composed by verbal public-opinion field, online self-media and others[2]. Since 2007, online self-media has been grown rapidly in China, such as Weibo. The number of online self-media reached 1.3 billion by November in 2013. It is China's biggest online public opinion space currently.

Compared with "governmental public-opinion field", the "civil public-opinion field", made up by all kinds of online self-media, is very different. First, in terms of the information production, mainstream media are usually subject to stringent gate-keepers and have formal information sources. They are very professional; and mainly about politics and economics. But the information update speed is relatively slow. However, self-media has a variety of information sources, rich in content; but it is lack of information control, which results in a lot of false and negative information online. The second aspect is about agenda setting. Most agendas within "governmental public-opinion field" are mainly macro and rational regarding national policy. The viewpoints are consistent; the language is accurate and profound; background knowledge is usually necessary for understanding them well. However, these agendas within the "civil public-opinion field" are mainly deal with personal life, entertainment, ongoing news and so on. With interesting languages and rich sentiment, it bears a variety of perspectives, but comes with the phenomenon of group polarization. The third aspect reflects in the dimension of function. The major function of "governmental public-opinion field" lies on propaganda and public opinion guidance; while the "civil public-opinion field" is mainly used for expressing opinions and network supervision. Once a certain social issue is raised online, criticism from netizens will spread quickly on the Internet and generate strong public opinion.

Due to the political nature of media in China, the government maintains a prudent stance towards media's change. Up to seven years, the mainstream media's responses towards emergencies and sensitive issues in politics, economics, justice, and culture, have tended to be ignored, slow and haughty. It hardly met readers' information demand. Meanwhile, its power and influence declined gradually. However, the power and influence of the "civil public-opinion field" was heightened, which helped it gain more weight in the discourse battleground.

After staying in the wait-and-see position up to five years, mainstream media outlets have started to register Weibo accounts since 2012. There are up to 37,000 media accounts on Sina Weibo and Tecent's Weibo. The advantages of user-generated content and creative reporting forms make them surpass the traditional media. It plays a significant role in China's microblogging sphere and has yielded positive effect in improving the whole ecosystem of online public opinion[3].

In this study, we collected 7,191 posts on People's Weibo from July 22, 2012 (its launch date) to March 17, 2013, when the annual National People's Congress (NPC) finished. For each of the retrieved post, we looked into basic information including post-release time, content form, interval time, the number of re-posts and the number of comments. Since the number of re-posts and the number of comments calculated automatically by the microblogging platform are not Weibo publishers' behaviors but objective effects of information production, this study mainly investigates the following questions: (1) People's Weibo's content agendas, content forms, and the post-release time control; (2) selecting the top three posts with greatest number of re-posts and the number of comments, then analyzing their narrative style and discourse features; (3) comparing and analyzing coverage's on the same incident from the printed *People's Daily* and People's Weibo, to explore how People's Weibo function in bridging "governmental public-opinion field" and "civil public-opinion field".

1. People's Weibo's Characteristics in Information Production

1.1 Mainstream Agendas and Social Sentiment Focus

To conduct the analysis, we first randomly sampled 1,200 posts from 7,191 posts. According to our classification scheme, then categorized them into 13 categories based on the content and agenda of each post, including politics; government and suggestion; emotion and philosophy; construction, transportation and environment; recreation and sports; finance and enterprise; disaster and emergency; science; welfare and medical; legislation; interaction; education and employment; commodity and quality. Every category also has many sub-categories. The category distribution of these 1,200 posts is summed in Figure 1
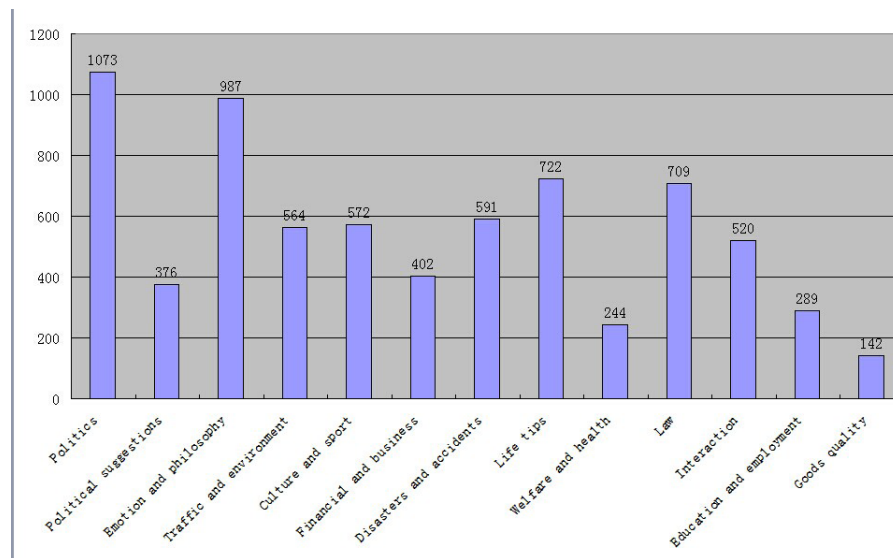
According to Figure 1, most posts fall into agenda categories: politics, emotion and philosophy, science, and legislation. The following ones are recreation and sports, construction, transportation and environment, disaster and emergency, interaction, and finance and enterprise. When adding the two categories "politics" and "government and suggestion" together, there are up to 1,400 posts in total, which takes 93 percent and become a solid majority. The number of posts in the category of "emotion and philosophy" reaches 987 (65.8%), which tackles many agendas like the relationship between cadres and the masses as well as suggestions on national reform. Meanwhile, there are 709 (47%) posts in the category of legislation. Due to the subject specificity of legislation, most posts in this category are political related, for instance, officials' law and discipline violation issues, governments' new policy release and so on. The category of interaction agenda, which has 520 (35%) posts, includes comments, feedbacks and interaction on public opinion. Many of them are discussion on topics such as relationship between government and GDP as well as government cash flow.

The analysis revealed that most People's Weibo's agendas were coming from *People's Daily*. On one hand, it maintains the overtly political nature of official media. However, people's Weibo didn't ignore social mainstream discourses (which is worthy of much attention) because of intentional emphasis on discourse diversity. On the other hand, People's Weibo participated and responded to the discussion and interaction of political, economic, environmental, educational, scientific agendas within "civil public-opinion field", which strengthened the guidance of public opinion. With discussion and interaction on the emotion and philosophy category, People's Weibo paid more attention to how to deal with people's psychological confusion in their daily life.

1.2 Faster Information Production and 24 Hours Information Update

Based on each post's release time, we did further examination on interval time, time elapsed since last post, which was defined with four distributions (30 mins, 30 mins-

1hour, 1hour-2 hour, 2 hour-12 hour). The statistic results show that more than half of these posts were released with about a one hour time elapsed. This fact indicates People's Weibo updates its information swiftly, which is one of new media's features. At the same time, the post-release time distributes around 24 hours. Post-release time is no longer restricted within traditional work time and changes the one-day-one-paper practice of printed *People's Daily*.

1.3 Multimedia and More Diverse Content Forms
In the environment of Internet, the content form of People's Weibo goes beyond traditional media's content forms including text and still images. Weibo employs a combination of text, images, video, Wei-survey, links, @key person, emoticon, long weibo images, Wei-topic, online polls, etc. Taking the content form of image as an example, 4163 out of 7191 posts are news photos, which also include other content forms like video, links and so on. It changes printed *People's Daily's* traditional communication forms, which is mainly text-only or a combination of text and images. Thus, the information diversity and information richness is greatly enhanced.

1.4 More Wide Range of Information Sources
Most content in People's Weibo is original news and exclusive commentaries from *People's Daily* and the original content rate is over 50 percent. A very large proportion of People's Weibo is utilized to disseminate *People's Daily's* content. By cooperating with different departments within the newspaper, a series of featured news digest programs were set up on Weibo. For instance, "People's Weiping" program is the cooperation with Commentary Department within *People's Daily*. In addition, Xinhua News Agency, Life Times Weibo, Health Times Weibo, Weibo of Ministry of Public Security and others are also listed as information sources for People's Weibo.

2. The discourse construction of People's Weibo

Every news discourse is a demonstration of balance of power behind it. The system of civil public-opinion field presents an intense prospect where netizens do as they please, laughing merrily or cursing angrily in this field. In this case, People's Daily thereafter creates a new type of discourse.

2.1 Skillfully made political issues which advance mainstream values
People's Daily adds in provoking expressions in relevant political issues that covered by emotional and philosophical weibo posts. This method had established an information communication mode of "track social facts closely and emphasize the value interpretation actively". Statistics had shown that the most popular weibo posts, which attract the most extensive attentions, are largely and tightly intertwined with politics. This phenomenon clearly shows weibo's leading force of public opinion and its managing power of setting the core words for its society.

2.2 Opening up the information evaluation system in order to strengthen interactions

The weibos of People's Daily attract the participation of tremendous amount of people. The average frequency of re-posts and comments of the 7191 posts (weibos) of People's Daily are respectively 1342 times and 434 times. This frequency is ranking the first comparing to its peer media institutions. People's Daily also initiates more than 520 posts (7% of the total amount) of "weibo votes" "thanks to and @ users" so as to encourage users' interactive participation.

2.3 Explaining complex issues by using the plain and day to day words

People's Daily weibo has changed the People's Daily's rigid and concise style of writing, largely adopting colloquial language. For instance, "So terrible! The subsidence of Guangzhou subway construction site", "Beware of pickpockets, Chinese new year is coming soon." "How would you spend your New year's eve?" Apparently, those weibo posts are largely adapted to the language style of civil public opinion field. In addition, weibo of People's Daily employs several emerging popular modes of information communication, which cater for the skimming habit of ordinary people. For instance, "A flowchart telling you the generating process of state government leaders." "A picture showing you the heads of different ministries and commissions of state council."

2.4 Understanding the social psychology and promote the emotional adjustment

Based on the statistics, political and emotional, philosophical weibo posts have attracted the most participation, and the amount of comments on emotional and philosophical posts is way beyond other kinds of weibo posts. This phenomenon proves People's Daily's reflective thoughts on public at the time period of economic and social transformation. For example, "Father, I won't leave you alone when attending school.", "Almost make people cry! A truly touching love letter dawned by a ninety-year-old", "A cripple superman who campaigning for raising money for the leukemia." All those weibo posts have focused on promoting positive guidance and optimistic education for the public.

3 Bridge the two civil and official public opinion fields by weibos of People's Daily

Weibo of People's Daily successfully combine the contents of paper media and the information communication advantages of new media, therefore sets up social core topics and creates populist discourse. This article use the comparison of paper media of People's Daily and its weibo media when reporting the news of "Fangjie case"[4] on March 17th, 2013 in order to analyze weibo's bridging function for the civil and official public opinion field.

3.1 Weibo's advantages on superstructure

According to Teun A. Van Dijk (2003), "Theoretically, we account in-discourse schemata in terms of so-called superstructures. The necessary link with other discourse structures is established through semantic macrostructures (topics). In order to assign a

global form or schema to a text, we have to relate it to a global meaning that can fill this form or schema. Each superstructure category is associated with a macroprosition (topic) from the semantic macrostructure. This category assigns a specific discourse function to the macroproposition and consequently to the sequence of sentences or propositions summarized by that macroproposition." Most of the news has only one theme; superstructure should be defined as a comprehensive structure, which connects different news themes. While People's Daily paper news only have 11 posts related to " Fangjie case", People's weibo have 39 posts related to it, therefore, we could infer the weibo superstructure as follows:
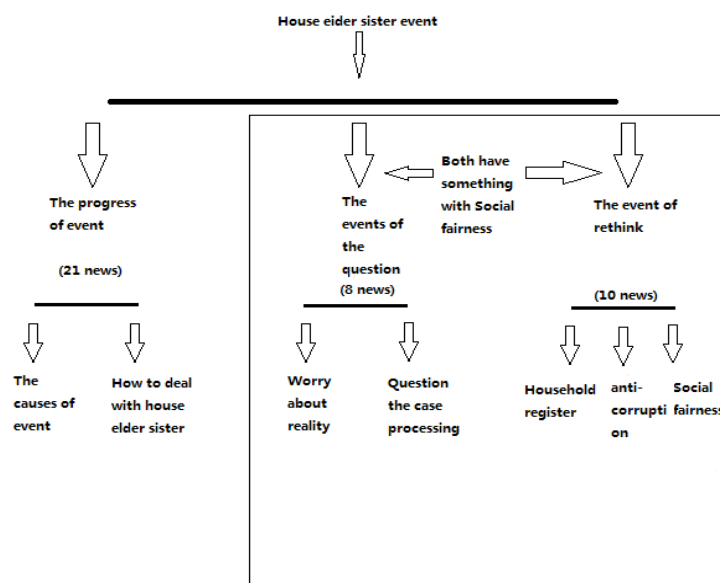
As is shown in the chart, compared to its parent media, weibo gives broader concern on "Funjie case". Firstly, weibo releases more news posts than paper media. Secondly, weibo shows more ponders over Funjie case. Such comments as "The aftermath by Cancellation of Funjie's fake ID should not be neglected", "If you do not lie, please reveal the truth" serve to respond to the social facts, get to the bottom of certain matter, and lead the public opinion.

3.2 An interaction between the official and civil public opinion field has been established by weibo

Seen from the superstructure chart, the parent media of People's Daily mainly comments on "Hukou"(permanent residence card). For example, news on Jan 27, 2013 discussed the topic of "why did Funjie hold so many residence cards?" However, this paper media discussion only invited experts' comments on legal and social power issues, lack of interactive effects and information feedbacks, also short of participation of citizens. In contrast, People's Weibo posts triggered heated discussion among citizens. Citizens not only comment on the residence card issues but also extend this discussion to social fairness

and social justice issues. Citizens not only unleash their discomforts and grievances through the posts, but also obtained the chance to directly speak and appeal to the official media. This interaction between citizens and official media helps to stimulate the resonance, raise the sympathy between the civil and official public opinion field. As a result, through the communication function of People's weibo, Media institutions have been strengthening the communication and exchange between civil public opinion field and official public opinion field, advancing the understanding and consensus of the whole society.

Conclusion

Weibo of People's Daily worked as a beneficial extension and supplement to its parent paper media. While succeeding the authority, influence and credibility of its parent paper media, weibo also forms a new type of social media discourse system. By attaching great importance to the overall reflection on the social reality, By being skeptical about and supervising the public power, and by being highly responsive to public discontent, Weibo of People's Daily has set up a bridge, which connects the official and civil public opinion field. Therefore, Weibo is a paradigm of the integration of official media and social media and it could positively affect the internet public opinion environment improvement.

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Public opinion on the reliance of Thai Government:
Case Study of High school student in Thailand during 2014

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Abstract

The objectives of this research are (1) to study the opinions and prospective of high-school Student in Thailand toward the reliance of Thai government, and (2) to study whether the social background of high-school students have an effect on their reliance of Thai government. The study is based on sample group of 600 high-school students, gather by conducting questionnaire. The statistical tests, such as frequency density, average, standard deviation, t-Test, F-test, one-way ANOVA, are later used to find accuracy with 95 percent confident interval.

The result shows characteristics of most participants are female, elder child, study in math-science fraction, average GPA score of 3.01 to 4.00, or average money received from parents is 2,501 to 5,000 baht per month.

When analyzing further on student social background, majority of sampling are having one more sibling from the same parents. Most of their parents have education level below bachelor degree, and work as an employee.

Furthermore, the attitude of students on reliance of their government is in low level. Subject that has the highest average score, 'There are a lot of government officers who work for the country and citizen, so we should trust them,' has a medium level of trusting. On the other hand, the subject that has the lowest average score, 'I afraid that there are government corruption in various project,' has a very low level of trusting.

By comparing their opinion and attitude on the reliance of government, found that gender, sequence of child, number of sibling, number of female sibling with the same parents, the literacy and occupation of father, do not lead to a significant find out. However, the segment of student, average education result, average monthly money received from parents, number of male

Sibling with the same parents, the literacy and occupation of mother, show a significant result on the reliance on Thai government of high-school student with the 95 percent confident interval.

Keywords: *reliance of Thai Government/ student social background*

Public opinion on the reliance of Thai Government:
Case Study of High school student in Thailand during 2014

Introduction

In the democratic world, the reliance was one priority that one government should receive from the people. It showed that the citizen accept, believe, trust and positive with their administration. This was fundamental and totally crucial. In some countries where the people's reliance to the government became vulnerable, it showed people become contradicting and lacking of trust to the management. People might start to question about the efficiency of government activities, and could lead up to people movement against their administration. Normally, the issues that people mostly concerned were finance, security, and private interest, which all could be sum up as 'corruption'.

Government could gain public reliance easily by follow the rules of good governance, such as public interests concern, clean and clear budgeting, and check and balance system. When there was a transparency, the government could have a more efficient future projection and planning which would create sustainability to the country. However, the reliance from people was the care factor to success. Even though, the reliance and trust to the government were intangible, but it was totally important that the people in the country must know their existence. (Warakorn Samkoset, 2013)

The reliance was considered as a social asset. When there was a trust in one society, every group found others reliance, then the total social development would be created and moved forward efficiently. (Supanni Chaiaumporn, 2007)

This research was focused on high-school students who were the beginning young adults. This age group, they already had developed mental thinking, and were able to evaluate as well as differentiated right from wrong. More important, this young people were the future assets of Thailand, and they would have a right to vote (18 years old) in a few years time. This was a reason why high-school student opinions and thoughts on government activities, politicians as well as bureaucrats were crucial, and needed to be aware of. In addition, this paper also studied those factors that possibly had effects on student's opinion, for example, social background.

Objectives

(1) To study the opinions and prospective of high-school Student in Thailand toward the reliance of Thai government.

(2) To study whether the social background of high-school students have an effect on their reliance of Thai government.

Research Methodology

This research paper was based on the quantitative research methodology, to study the opinions and viewpoints of high-school students in Thailand and their reliance toward the government as well as the student's social background which could have an effect on their opinion. As already mention, the sampling group was the high-school students in Thailand, and the Multi-Stage Sampling was used. In the beginning of sampling selection, simple random sampling was employed by drawing the school name, then within each school, four random classrooms was chosen randomly by the same method. Students from each classroom could be classified from their learning focuses, i.e. Science-Math, Art-Math, Art-Language, and Art-Social. There were totally 600 samplings used in this research.

Tools for research

The main tools used for this study was Questionnaires, and the questions were divided to two main parts:

Part 1: Questions were about the demographic of sampling such as gender, age, number to sibling, learning focus, highest education levels and occupations of father and mother as well as monthly money received from parents. The sampling group answered these questions through checklist.

Part 2: This set of Questionnaires called, 'Me and Government', were concentrated on the student's reliance to the government. There was 15 questions in this set. Students would answers by scaling, follow the Summated Rating Scales by Likert Scale. The boundary was from 1 to 6, where 1 was 'not true at all' and 6 was 'absolutely true'.

The government reliance of high-school students, then had been translated following the Beat's standard (Beat, 1981: 179-187, Siriwan Serirat, 1998: 67) and determined the range of scoring as follow:

Average score from 5.20 to 6.00 : Highest
Average score from 4.36 to 5.19 : High
Average score from 3.52 to 4.35 : Medium
Average score from 2.68 to 3.51 : Low
Average score from 1.84 to 2.67 : Very Low
Average score from 1.00 to 1.83 : Lowest

Data Collection

The researchers decided to collect information from sampling group of high-school students in Thailand, with the quantity of 600, using questionnaires. During pre-research session, 40 samplings had been chosen randomly to answer this set of questionnaires. Then, the results were used to test for reliability of these questions, follow the Cronbach Alpha testing. The result was 0.828, showing this set of data collection was highly reliable. This set of question was then used to collect data from all samplings. After all data was collected with accuracy check, the statistical analysis was applied.

Data analysis

The process of data analyzing for this paper was following:

1. A Descriptive Statistics Analysis - by determine frequency density, percentage, max, min and standard deviation, to have a basis analyzing of sample.

2. A Hypothesis Testing – using statistical probability

2.1. Testing the different of samplings from their demographic information with two groups, by using t-test with significant level of 0.05.

2.2. Testing the different of samplings between three or more groups using One-way ANOVA test with significant level of 0.05.

Result

Part 1: Result from demographic and social background of high-school students. Information to be asked in this section were gender, learning focus, age, average education result, monthly money received from parents, sequence of children in the family, number of sibling from the same parents, highest education of father, occupation of father, highest education of mother, and occupation of mother.

Table 1
Number of students and percentage of sample group demographics

Particulars		**Number**	**Percentage**
Gender	Male	203	33.8
(N = 600)	Female	397	66.2
Sequence of children in the family	1st Child	286	53.4
	2nd Child	201	37.5
(N = 536)	3rd Child	49	9.1
	Science-Math	177	29.5
Learning Focus	Art-Math	162	27.0
(N = 599)	Art-Language	168	28.0
	Art-Social	92	15.4
Average Education Result	1.01 – 2.00	16	2.8
	2.01 – 3.00	233	40.5
(N = 575, $\bar{X}$ = 3.03, SD = 0.488)	3.01 – 4.00	326	56.7
Monthly money received from parents	0 – 2,500	185	31.3
	2,501 – 5,000	327	55.2
(N = 592, $\bar{X}$ = 3,440, SD = 1549)	5,001 – 7,500	80	13.5

From 600 samplings, the result showed that majority of sample group was female with 66.2%. Students were mostly study in Science-Math focus, 38.1%, followed by Art-Math, 27.5%, Art-Language, 33.7, and Art-Social, 0.7%, respectively. The average education results fell mostly in 3.01- 4.00 boundary, with 56.7%, followed by 2.01 – 3.00, 40.5%, and the least was 1.01 – 2.00 boundary, with 2.8 %. Also, it had a population mean of 3.03

and standard deviation of 0.488. For monthly money received from parents, 55.2 % of student get 2,501 – 5,000 per month, followed by 31.3% of student get 0 – 2,500, and the least proportion was those who receive higher pocket money of 5,000 – 7,500 had only 13.4% of the population sample. Hence, the average monthly money received for all sample was 3,440 with standard deviation of 1,549

Table 2

Number and percentage family background

Particulars		Number	Percentage
Number of sibling from the same parents (N = 473)	1	224	47.4
	2	183	38.7
	3	46	9.7
	4	16	3.4
	5	4	0.8
Number of male sibling from the same parents (N = 316)	1	252	79.7
	2	50	15.8
	3	14	4.4
Number of female sibling from the same parents (N = 290)	1	199	68.6
	2	74	25.5
	3	17	5.9
Highest Education level of father (N = 585)	Below Bachelor	331	56.6
	Bachelor	201	34.4
	Master	53	9.1
Highest Education of Mother (N = 593)	Below Bachelor	346	58.3
	Bachelor	218	36.8
	Master	29	4.9
Occupation of father (N = 542)	Employee	234	43.2
	Public Servant	100	18.5
	Private Company Employee	91	16.8
	Business Owner	117	21.6
Occupation of mother (N = 559)	Employee	293	52.4
	Public Servant	62	11.1
	Private Company Employee	65	11.6
	Business Owner	139	24.9

A further research had been done on the high-school students' family background. From all samplings, most of the students had another one sibling from the same parents, 47.4%, and with two more sibling was 38.7%. The least answer was with five siblings, 0.8%. The question further asked about the gender of their sibling. Result was most student have male sibling. Among, 79.7% of students had one brother, then 2 and 3 with 15.8% and 4.4% respectively. Again, most students who had only one sister, with 68.6%, then 2 (25.5%) and 3 (5.9%) respectively. For literacy level of father, students 56.6% had father with education level below bachelor, followed by bachelor degree, 34.4%, and master degree, 9.1%. Whereas for mother, most students also had mother who did not own bachelor degree, with 58.3%, follow by with bachelor, 36.8%, then master was only 4.9%. For occupation, most fathers were employees, 43.2%, followed by business owners, public servants, and private company employees, with a result, 21.6%, 18.5%, and 16.8% respectively. There was slightly different for mother. Most of them were employees, 52.4%, followed by business owner (24.9%), private company employees (11.6%), and public servants (11.1%).

Table 3

Average, standard deviation and degree of reliance high-school students in Thailand have toward the government.

Question	Average Score	Standard Deviation	Degree
I trust the government to responsible for infrastructure projects such as metro, water supply, telephone and electricity.	3.76	1.143	Low
I feel that many government projects will be dominated by private sector.	2.71	0.987	Low
I afraid that there will be a corruption by the government in many projects.	1.91	0.976	Very Low
I think government should not be the one who responsible in constructions of the convenient to public project, such as metro and express way.	3.43	1.264	Low
I think the construction projects that government has started did not do for the country benefit.	3.20	1.259	Low
Policies on mega project constructions are what the politicians conceived for self-benefit.	2.55	1.064	Very Low
I do not totally believe that government has ability to take care of the process and construction on mega projects.	2.92	1.123	Low
If government is one who takes care of nuclear power station, I think it is more likely to have explosion than one with private.	2.85	1.188	Low
Despite any projects, there will be corruption during construction if they are under government control.	2.16	0.982	Very Low
It is likely that projects proceed by the government may not be established because of highly corruption.	2.54	0.982	Very Low
I feel secure if government is taking care of the mega projects constructions.	3.34	1.143	Low
I trust in the security system in various projects under the control of the government.	3.42	1.104	Low
I trust in the ability of government to protect against corruption from the future mega project construction.	3.02	1.206	Low
Government gives confident in looking after the security of people more than anyone else.	3.34	1.166	Low
There are still many public servants work for the benefit of country and people, so we should trust in their works.	4.13	1.160	Medium
Total	**3.02**	**0.624**	**Low**

From the research on the opinions of high-school students on their reliance toward the government, found that the government received low degree of reliance from the young ($\bar{X}$ = 3.02, SD = 0.624). The question that had most positive response at medium degree was 'There are still many public servants work for the benefit of country and people, so we should trust in their works' ($\bar{X}$ = 4.13, SD = 1.160). The question that received a lower degree of reliance was 'I trust the government to responsible for infrastructure projects such as metro, water supply, telephone and electricity' with $\bar{X}$ = 3.76 and SD = 1.143. For the least degree of trust that high-school students had toward the government was 'I afraid that there will be a corruption by the government in many projects' with $\bar{X}$ = 1.91 and SD = 0.976.

Part 2: Hypothesis Testing

Table 4
Statistical comparisons on the opinion of high-school students in Thailand on their reliance of the government.

Demographic and Social Background	Significant level	P-Value	Interpretation	Significantly Difference		P-Value
				Unit i	Unit j	
Gender	1.217	0.224	No significantly difference			
Sequence of children in the family	2.072	0.127	No significantly difference			
Learning focus	2.962*	0.033	Significantly difference	Art-Math	Art-Language	0.039
Education Result	3.655*	0.026	Significantly difference	2.01 - 3.-00	3.01 - 4.00	0.027
Monthly money receive from parents	4.698*	0.01	Significantly difference	2,501- 5,000	5,001- 7,500	0.015
Number of sibling from the same parents	1.303	0.303	No significantly difference			
Number of male sibling from the same parents	9.325*	0.001	Significantly difference	1 person	3 person	0.001
Number of female sibling from the same parents	1.462	0.234	No significantly difference			
Highest education level of father	2.262	0.105	No significantly difference			
Highest education level of mother	7.421*	0.001	Significantly difference	Below bachelor	Master	0.001
				Bachelor	Master	0.005
Occupation of father	1.317	0.268	No significantly difference			
Occupation of mother	5.713*	0.001	Significantly difference	Employee	Business owner	0.006

*0.05 significant level

After conduct the statistical testing and set hypothesis, found that demographic particulars such as gender, sequence of children in the family, number of sibling from the same parents, number of female sibling from the same parents, highest education and occupation of father, do not have a significantly difference. However, the learning focus, average education result, number of male sibling from the same parents, highest education and occupation of mother showed significantly difference result, and further statistical tests were conducted for these groups. Within them, there was a contrast in student opinion between different subgroups with 5% significant level, for example,

- Learning focus – Art-Math vs. Art-Language
- Education result – 2.01-3.00 vs. 3.01-4.00
- Monthly money receive from parents – 2,501-5,000 vs. 5,001-7,500
- Number male sibling with same parents – 1 person vs. 3 person
- Highest education of mother – below bachelor and bachelor vs. master
- Occupation of mother – employee vs. business owner

Evaluation

The research on reliance of the government reflected that high school had a certain degree of trust to their government, even though results gravitated toward low reliance. There were still numbers of students who think there were still good bureaucrats who truly work for people and country (as shown on table 3, question 15).

At 5% significant level, basis students' demographics background had shown a significant relating with their reliance and opinion toward government. This substantial information includes learning focus, education result, and family income, number of sibling as well as education level and occupation of mother. The researcher tried to provide explanation as follow.

First, a difference degree of reliance between Math and language major, where students with Math focus gave lower reliance toward their government than ones with language focus. It was possible that students with math focus had thinking skill that was more logical, systematic and rational, while those with language focus could base their thinking on feeling and emotional. Thus, when those with math focus had a thought on their past experiences, services received from public sector as well as the news depicted corruptions of politicians and bureaucrats, students in this group then had lower reliance toward the government.

Second, the result also showed that students who had good education result had lower reliance toward their government. Reasons could be they were more aware and pay attention on what happening around them, and opened for knowledge empowerment. With knowledge and direct experiences that them or their family may have, alone with public information and analytical thinking, they able to distinguish a good from bad action, and may cause them to have lower reliance degree on the government.

Thirdly, monthly money received from their parents could reflect the family's financial status. Those students who received lower pocket money may show that their families had lower income. These groups tended to have greater reliance on government than those with higher income, as they may need to depend on government welfares more than others. Any changes in government policies had a greater impact on their living. Hence, when they were the direct beneficially, they had hope and highly depending on government which are similarly to families that had many children. Government welfare, such as 12-years free education for children, helped to reduce the cost of living for these families.

Lastly, the education level of mother had an effect on student reliance toward the government, while the result for father's education level did not show a significant. In Thai society, a leader of the family was still the main income generator for the family. Children would have a closer relationship to mother than father, as she was the one who feed and took care of her children. Hence, mother thinking had more impact, and children tended to absorb and think in similar way. Together with most mothers did not have high education and did not earn high income, they may rely on and had more trust in the government, so were their children.

Recommendations

Recommendation received from this research:
1. Thai curriculum should insert content about history, political administration, laws, human right, moral and ethics, into basic studies.
2. Main problems in Thailand are still an economic inequality. Government should help to reduce this gap. Education is one way to minimize inequality and provide greater opportunity for youth in society. Children in Thailand should have a good quality education countrywide to improve their quality of living.

Recommendation for further study
1. A further research could also be made by having an in depth interview on students from widely different groups which their ideas and opinions maybe helpful for country development.
2. An involvement of students and their reliance toward the government also an interesting further research development.

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Stress and Mental Health of Baccalaureate Nursing Students From the Five Southern Border Provinces of Thailand

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Abstract

The unrest in Southern Thailand has caused a troubling shortage of nursing staffs in the region. Students from the five Southern border provinces were recruited to attend a nursing program with the intention on becoming a local registered nurse. This survey study aims to explore the influencing factors and coping behaviors on stress and mental health, and to determine the relationship between personal factors and stress and mental health of nursing students from the five Southern border provinces of Thailand. Participants were first-year baccalaureate nursing students. The Thai Mental Health Indicator and Stress Test questionnaires were used to interview 191 participants. The Cronbach's alpha coefficients of those two questionnaires were .81 and .86, respectively. Data was obtained in 2007. Descriptive statistics and Chi-square test were used for data analysis. The majority of participants were single Islamic females, aged 21-25 years old from the middle socio-economic level. Most participants came from Pattani province. The average score of mental health was in the normal to higher than normal level. The average score of stress was in the normal to mild stress level. Changing jobs/schools and local unrest in Southern Thailand were the major influencing factors on mental health. Study, adaptation, and social/ environment were the major influencing factors on stress. Accepting the unrest, consulting an advisor, and taking minor tranquillizers were significantly related to their mental health (p < .05). Students used mechanisms like crying, damaging things to release tension, and hurting themselves as coping behaviors which significantly related to stress (p < .05).

The findings suggest that the numbers of students in one large class should be divided into smaller class sizes. The counseling service should have a schedule that suits the needs of the students. Continuous monitoring of the stress levels and general mental health of the students form the five southern border provinces needs to be done annually until graduation. Providing increased levels of support to nurture the relationship between the nursing students and their families. Using many different kinds of school activities and projects between the nursing school and their family members will help to increase their mental health and reduce their stress level.

Keywords: stress, mental, health, nursing, student

Stress and Mental Health of Baccalaureate Nursing Students
From the Five Southern Border Provinces of Thailand

In Thailand, Registered nurses and midwifery personnel comprise 70% of all the health personnel in the health care system (Srisuphan, Senaratana, Kunaviktikul, Tonmukayakul, Charoenyuth, & Sirikanokwilai, 1998). According to the survey of health manpower requirements for allied health professionals in 2006, healthcare service units of the Ministry of Public Health of Thailand within regional hospital, general hospital and community hospital still required allied health professionals, especially registered nurse (Nursing Research Committee of Thailand Nursing and Midwifery Council, 2006). The results of this study also indicated that the registered nurse was accountable for the most requirements for the healthcare service units of Ministry of Public Health and local administrative organization. Based on the Thai Nursing database, there were approximately 97,942 nurses in the active age group (under 60 years) registered in Thailand in December 2005. Of these, approximately 88, 440 (90.3%) participate in the nursing workforce. Although total nurse numbers have been relatively constant during the period 2000-2001, between 2000 and 2004 there was a substantial decrease in the net additions to the nursing work force of 35.29 percent (from 6,086 to 3,938) because of the decrease in the production of nurses and the increase in the loss rate, from 2.35 percent in 2000 to 4.15 percent in 2005 (Nursing Research Committee of Thailand Nursing and Midwifery Council, 2006; Sutheesasarn & Wannarat, 2000). The estimated requirement using Health Demand Analysis, Health Service Development, and Nurse Population ratio indicated that the requirements of professional nurses in 2015 lies between 137,997 - 142,365 (Srisuphan, et al., 1998). The nursing shortage occurring in the health system is bringing in its wake a serious crisis in terms of their duration of adverse impacts on the health and well-being of the population. This situation poses unprecedented challenges for policy makers and planners to take effective action in developing and sustaining an appropriately, equitably deployed, well-motivated and well-supported nursing workforce. According to the unrest in the five southern border provinces of Thailand including Yala, Pattani, Narathiwat, Songkhla, and Satun provinces, shortages of nursing personnel occur continually. Several projects to increase the production capacity for professional nurses by the Ministry of Public Health of Thailand were proposed and approved by the cabinet in 2007. In response to these shortages, Praboromarajchanok Institute of Health Workforce Development, Ministry of Public Health of Thailand set the target of the 3,000 registered nurse supply in regional hospital, general hospital and community hospital by the end of 2010 (Praboromarajchanok Institute for Health Workforce Development, 2006). Students including male and female students from high school located in those five southern border provinces were recruited to attend a nursing program with the intention of becoming a local registered nurse. It has been well documented that nursing students across the world experience stress throughout their education and training (Tully, 2004). Issues that contribute to their stress include academic challenges, clinical challenges, financial concerns, interpersonal difficulties,

family problems, physical and mental health issues, inadequate support, and poor coping skills. Additional stressors for non-local nursing students include cultural adjustments, language issues, social isolation, and discrimination. Furthermore, during the initial clinical training experience, nursing students report increases in their level of stress (Admi, 1997; Mahat, 1998; Sharif & Masoumi, 2005). Several studies have been performed to understand the mental health of nursing students (Ross, Zeller, Srisaeng, Yimmee, Somchid & Sawatphanit, 2005). However, no recent studies have been conducted specifically on stress and mental health of nursing students from the five southern border provinces of Thailand. More research is needed to understand the mental health and stress of nursing students to help with their retention in college, professional development, and longevity in the profession. To reach this need, the present study attempted to fill the gap of the research on nursing students' stress and mental health. Specifically, this study investigates the influencing factors that impact stress and mental health among nursing students from the five southern border provinces of Thailand. With a better understanding of their stress and mental health issues, recommendation could be provided to help improve their stress and mental health.

Method

Design and Participants

This cross-sectional descriptive study was conducted with first-year baccalaureate nursing students at Boromarajonani Nursing College, Nakhonratchasima, Thailand. The purposive sampling technique was used to recruit participants who were studying in first-year of the second semester in the academic year of 2007. The 198 participants were invited to voluntarily participate in the study. Using the determining sample size for research activities by Krejcie & Morgan (1970), the sample size of this study was 132 participants. Without any incentive, there were 191 participants who completed the anonymous survey. The response rate was 96.46 %.

Procedures and Instruments

Once the nursing college's institutional review board approval was obtained, the 198 first-year nursing students from the five southern border provinces of Thailand were asked to participate in this study. Participants for this study were all adult volunteer nursing students. After the volunteer participants signed the informed consent forms, all participants completed the surveys consisting of brief demographic information, influencing factor and coping behavior, self-assessment stress questionnaire and Thai Mental Health Indicator-15 questionnaire.

The self-assessment stress questionnaire developed by the Mental Health Department was used to assess participants' level of stress in the past 2 months. The self-assessment stress questionnaire contains 20 items using a 4 – point Likert scale (0 = never, 3 = very often). A higher score indicates a higher level of stress. The internal consistency (Cronbach's alpha coefficient) of the self-assessment stress questionnaires for the current sample was 0.86.

The Thai Mental Health Indicator-15 questionnaire developed by Mongkol, et al., (2004) was used to assess participants' level of mental health in the past month. The Thai Mental Health Indicator-15 questionnaire contains 15 items using a 4 – point Likert scale (0 = not at all, 3 = very much so). A higher score indicates a higher level of mental health. The internal consistency (Cronbach's alpha coefficient) of the Thai Mental Health Indicator-15 questionnaire for the current sample was .81. The data were collected in February 2007. Descriptive statistics and Chi-square test were used for data analysis.

Results

1. Sample characteristics

The majority of participants were single Islamic females, aged 21-25 years old from the middle socio-economic level whose monthly income was lower than 5,000 baht. Most participants came from Pattani province where their families own the lands and houses. The average number of family members was between 3 and 5. The average relationship among their family members was in warm relationship level (see Table 1).

Table 1
Sample demographics (N = 191)

Variables	n	Percentage
Gender		
Male	40	20.9
Female	150	78.5
No response	1	0.5
Age (yrs)		
17-20	65	34.3
21-25	83	43.5
26-30	34	17.8
> 30	9	4.7
Religious		
Buddha	69	36.1
Muslim	122	63.9
Marital status		
Single	167	87.4
Married	22	11.5
Divorced	2	1.0

Monthly income (Bath)		
< 5,000	70	36.6
5,000-10,000	50	26.2
10,001-20,000	27	14.4
20,001-30,000	10	5.2
>30,000	16	8.3
N0 response	28	14.7
Hometown Province		
Yala	30	15.7
Pattani	64	33.5
Narathiwat	58	30.4
Songkhla	20	10.5
Satun	9	4.7
Trang	1	0.5
No response	9	4.7
Families own the lands and houses		
Yes	151	79.1
No	39	20.4
No response	1	0.5
Number of family members		
< 2	4	2.1
3-5	92	48.2
6-8	79	41.4
>8	15	7.9
No response	1	0.5
Relationship among family members		
Warm	186	97.4
Not warm	4	2.1
No response	1	0.5

2. Mental health and stress levels

The average mental health level in the past month of participants was in normal to higher than normal level compared to the average Thai mental health indicator ($\overline{X}$ = 33.73, S.D = 4.32). The average stress level of participants in the past 2 months was in normal to mild stress level compared to the average Thai stress level ($\overline{X}$ = 16.70, S.D = 7.22) (see Table 2).

Table 2
Mental Health and Stress Levels (N = 191)

Variables	n (%)	M (SD)
Mental Health Level (Score) in the past month		33.73(4.32)
Higher than normal (35-40)	82 (42.9)	
Normal (28-34)	93 (48.7)	
Lesser than normal (0-27)	16 (8.4)	
Stress Level (Score) in the past 2 months		16.70 (7.22)
Lesser than normal (0-5)	6 (3.1)	
Normal (6-17)	105 (55)	
Mild stress (18-25)	53(27.7)	
Moderate stress (26-29)	16 (8.4)	
Severe stress (> 30)	11(5.8)	

3. Influencing factors on mental, stress and coping behaviors

Changing job and/or changing school, the unrest in southern border provinces Thailand, sickness and death of family members, loan or indebt, family support and warm relationship among family members were their major influencing factors on mental health (see Table 3).

Study, adaptation, social/environment, and friends were major influencing factors on stress level. The feelings of being unable to focus, very easily to get upset, exciting with unfamiliar situations, unable to sleep because of worry and/or anxiety, and migraine symptoms were reported as stress symptoms.

Doing hobbies such as watching TV, reading a book, or listening to music, accepting the unrest in their hometown and calling and talking to their family members and friends, praying and using meditation, crying, damaging stuffs, using minor tranquiller, and hurting themselves were their common coping behaviors.

Table 3
Influencing Factors on Mental Health, Stress, and Coping Behaviors (N = 191)

Variables	n (%)
Influencing factor	
Mental health	
Changing job and/or school	95 (49.7)
Serious situations in Southern Thailand	84 (44.0)
Sickness and death of family members	82 (42.9)
Loan or in debt	52 (27.2)
Family problem	37 (19.4)

Variables	n (%)
Stress	
Study	142 (74.3)
Adaptation	89 (46.6)
Social/environment	84 (44.0)
Class-mate	83 (43.5)
School-mate	78 (40.8)
Financial	64 (33.5)
Coping behavior	
Doing hobbies	185 (96.9)
Accepting unrest situations	183 (95.8)
Calling and talking with family members	179 (93.7)
Talking to close friend	178 (93.2)
Praying and meditation	162 (84.8)
Crying	104 (54.5)

4. The relationship among personal factors and mental health

The results of Chi-square test at the significant level of .05 showed that mental health in the past month was significantly related to family relationship, relationship level with their mother and father, and the sense of belonging for their lands and houses, accepting what had happened, consulting advisor, and using minor tranquilizer (see Table 4).

Table 4
Personal Factors and Mental Health Relationship

Personal Factors	Mental health	
	χ^2	P- value
Family relationship	6.89	.019 *
Relationship with their mother	17.87	.001*
Relationship with their father	27.14	.001*
Sense of belonging for lands	7.83	.02*
Sense of belonging for houses	14.08	.001*
Accepting what had happened	8.34	.012*
Consulting advisor	6.09	.047*
Using minor tranquilizer	9.21	.025*

*$P < .05$

5. The relationship among coping behavior and stress level

The results of Chi-square test at the significant level of .05 showed that students used mechanisms like crying, damaging things to release tension, and hurting themselves as coping behavior which significantly related to stress (p < .05).

Table 5
Coping Behavior and Stress Relationship

Coping behavior	Stress	
	$\chi 2$	P- value
Crying	.53	.01*
Damaging things to release tension	.63	.001*
Hurting themselves	.76	.0001*

*$P < .05$

Discussion and Conclusion

Although a high prevalence of stress was found among nursing students in Thailand, the results of this study indicated the mild stress and normal mental health of nursing students from the five southern border provinces. This present study, however, was the first to investigate the stress and mental health among nursing students from the five southern border provinces of Thailand. High stress and an increase in mental health problems in nursing students often affects their academic ability and ability to perform clinical duties, their enjoyable learning experience, their relationship with the patients and colleagues, and their attitude toward the nursing profession. Ross et al. (2005) reported that nursing students who experience high stress tend to be depressed. If nursing students experience problems with concentration and problem solving, not only will they have a hard time getting through school, but also they will not be performing their nursing duties at optimum levels, which will affect the quality of patient care.

Implications

Several implications can be drawn from the results of this study. Firstly, it is very important for nursing educators, administrators, and clinical instructors to help nursing students to manage their stress and to provide more support and resources in order to prevent additional problems. This will help nursing students to do well academically as well as psychologically in order to prepare them for challenges of the nursing profession. Stress in one of the most common mental health problems that nursing students face. Similar to other nursing students, nursing students from the five southern border provinces of Thailand also face an extra degree of stress that must be addressed. Nursing educators and clinical instructors need to identify their emotional issues early and establish a working

partnership with school mental health professionals to facilitate referrals for timely intervention. Early diagnosis and treatment are keys to helping with nursing students' retention and graduation.

Secondly, mental health is the most important variable that has been shown to be positively associated with personal factors of nursing students in this study. Given these findings, by improving their mental health and increasing their social support, the resulting decrease in stress could be expected. Specific ways to increase social support for nursing students from the five southern border provinces of Thailand include identifying individuals by whom one feels supported and finding ways to increase contact with them; identifying activities that one enjoys doing with others and find ways to encourage others to join in these activities; spending more time talking with trusted individuals and not isolating oneself (Paul Ratanasiripong, personal communication, February, 2007).

Lastly, stress is the second most important variable among nursing students from the five southern border provinces of Thailand. Many forms of stress are normal and function in assisting students to accomplish tasks, for example, the stress that students feel when examinations and clinical training are approaching. But if the stress level is too high, it could turn into anxiety and depression. There are many ways for nursing students to manage stress, including regularly using relaxation techniques such as a deep breathing exercise or meditation, maintaining a positive attitude, learning to set appropriate boundaries, and getting enough exercise and sleep. The better the nursing students can manage their stress and maintain their mental health, the more successful they can be in their academic and clinical training. Ultimately, the more psychologically healthy the nursing students are, the more likely they will flourish and graduate in a timely manner to become productive and contributing members of the nursing profession, and to persist longer in the nursing profession (Paul Ratanasiripong, personal communication, February, 2007).

Recommendations

The numbers of nursing students in one large class should be divided into two or three smaller classes. The counseling service should have a schedule that suits the needs of the students. Continuous monitoring of the stress levels and general mental health of the students form the five southern provinces needs to be done annually until graduation. Providing increased levels of support to nurture the relationship between the nursing student and their families. Using many different kinds of school activities and projects between the nursing school and their family members will help to increase their mental health and reduce their stress level.

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Factors Related to Health Promoting Behavior of Type 2 Diabetes Mellitus Patients in Nongkrathum Sub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Province

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Abstract

The objective of this research is 1) to evaluate the level of social support, benefit perception and health promoting behavior of Type 2 Diabetic mellitus patients and 2) to study the relationships between socialsupport andbenefit perceptionwith health promoting behaviors among Type 2 Diabetic mellitus patients. The Pender's Health Promoting Model (2006) and Cobb accompanied with Schaefer's Social Support were applied as conceptual framework. The 142 simple random sampling and stratified sampleswere Type 2 Diabetic mellitus patients registered at Nongkrathum Sub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Province. Data was collected using questionnaires divided into 4 parts including Part I: Questionnaire on Personal Data, Part II: Questionnaire on Social Support of Diabetic mellitus Patients (reliability=0.88), Part III: Questionnaire on Benefit Perception of Health Behavior (reliability=0.81), and Part IV: Questionnaire on Health Promoting Behavior of Diabetic mellitus Patients (reliability=0.93). The Cronbach's Alpha Coefficient was applied for reliability test and the data was analyzed applying Descriptive Statistics and the correlation was tested applying Pearson's Product Moment Correlation Coefficient.

The finding of the research result indicated high-level ofsocial support and benefit perception ($\bar{X}$ = 4.51, 4.59 respectively), and very good level ofhealth promoting behavior ($\bar{X}$ = 3.41). Social support and benefit perception were positively and statistically significant correlated with Health promoting behaviors at .05 level (P< .05, r= .69 and .77, respectively). The result of this research was basic data for health personnel in promoting program development to Diabetic mellitus persons to have proper health promoting behavior under the consideration on social support and benefit perception as the motivations of proper health promoting behavior occurrence.

Keywords: Health Promoting Behavior, Type 2 Diabetes mellitus

Factors Related to Health Promoting Behavior of Type 2 Diabetes Mellitus Patients inNongkrathum Sub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Province

Rationale

Today's changing world social order condition has turned people's life styles such as hasty daily way of life behavior causing lesser exercise time and unnecessary food consumption behavior according to their wants causing diseases. Diabetic mellitus is one of the chronic diseases derived from heredity and outcome from such behavior. It has been the crucial problem of world public health, considerably affecting economic development. From 2012 Global Health Statistics Report of World Health Organization, the finding indicated that 1 of 10 of the adulthood people were diseased for Diabetic mellitus and World Health Organization has also anticipated that Diabetic mellitus patients in Thailand will increase for approximately 1,923,000 people in 2025. According to 2011 Assessment on Quality of Care among Patients Diagnosed with Type 2 Diabetes and Hypertension Visiting Hospitals of Ministry of Public Health and Bangkok Metropolitan Administration in Thailand, the finding indicated that the statistics of Diabetic mellitus patients in Thailand were 28,941 people[3]with number of dead populations by Diabetic mellitusfor 7,749 people increasing from last year for

124 people. Nakhon Ratchasima Province consisted of number of dead populations by Diabetic mellitusfor 179 people. Nakhon Ratchasima Province is a province in northeast and Diabetic mellitushas been discovered to be the disease found as one of the top five ranked diseases and found that the number of Diabetic mellitus patients in Inpatient Division from Health Facilitiesof Ratcha Sima Province in 2007-2009were 9,490, 12,227 amd11, 600 people, respectively, and those in Nongkrathum Sub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Provincein 2013 were 222 people. Even though, Diabetic mellitus has been the incurable disease but it has been the disease that can control blood sugar level not to incur the complications, possibly leading to the loss of life. Thus, if the factors related to health promoting behavior of Diabetic mellitus patients are known, it will bring about the understanding of medical care provider on self-care behavior of Diabetic mellitus patients and it will be applied to be the guideline of improvement on healthcare promotion of the patient in order to reduce complication incidence and have better health condition. The researcher then has desired to adopt the research result for self-care behavior promotion of Diabetic mellitus patient's ability to control blood sugar level, resulting in free-complications and being health service guideline.

Objective

1. To study the levels of social support, benefit perception and health promoting behavior of Diabetic mellitus patients entering to be treated at Nongkrathum Sub-district Health Promoting Hospital.
2. To study the correlations of social support and benefit perception with health promoting behavior of Diabetic mellitus patients entering to be treated at Nongkrathum Sub-district Health Promoting Hospital.

Research Conceptual Framework

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┌─────────────────────────────────┐       ┌─────────────────────────────────┐
│  Social Support                 │       │  Health Promoting Behavior      │
│                                 │       │                                 │
│   - Emotional Support           │       │    - Health Responsibility      │
│                                 │       │                                 │
│   - Esteem and Recognition      │       │    - Physical Activity and      │
│     Support                     │──────▶│      Exercise                   │
│                                 │       │                                 │
│   -  Social  Belonging  and     │       │    - Nutrition                  │
│      Participatory              │       │                                 │
│                                 │       │    - Interpersonal Relation     │
│      Support                    │       │                                 │
└─────────────────────────────────┘       │    -Spiritual Development        │
                                           │                                 │
┌─────────────────────────────────┐       │    -Stress Management            │
│   BenefitPerception             │       │                                 │
│                                 │──────▶│                                 │
│   -Internal Benefit Perception  │       │                                 │
│                                 │       │                                 │
│   - External Benefit Perception │       │                                 │
└─────────────────────────────────┘       └─────────────────────────────────┘
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Research Method

This research was an Exploratory Research to study the factors related to health promoting behavior of Type 2 Diabetic mellitus patients in Nongkrathum Sub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Province.

The populations and samples used in this research were the patients diagnosed from doctors that they were diseased for Type 2 Diabetic mellitus and registered for treatment at Nongkrathum Sub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Province, with their residences in Nongkrathum Sub-district comprising

9 villages such as Moo 1 Ban Nong Ya Ngam, Moo 2 Ban Nong Pho, Moo 3 Ban Phra, Moo 4 Ban Fai, Moo 5 Ban Chong Lom, Moo 6 Ban Khok Wua, Moo 7 Ban Nongkrathum, Moo 8 Ban Som Poi and Moo 9 Ban Na Tom for total of 220 people. The list of Diabetic mellitus patients who passed the selection criteria according to the qualificationsthrough Stratified Random Sampling and Simple Random Sampling methods by drawing in order to acquire total of 142 samples.

The instrument used in the research was the questionnaire comprising 4 parts as follows.

Part I Questionnaire on Personal Factor of Diabetic mellitus Patients. It included the data of sex, age, marital status, occupancy, caregiver during illness, income/month, education, duration known for Diabetic mellitus morbidity (years), complications from Diabetic mellitus, ability of routine practice, and cooking for eating for 11 queries.

Part II Questionnaire on Social Support of Diabetic mellitus Patients. It included 20 queries divided into 5 aspects consisting of emotional support, esteem and recognition support, social belonging andparticipatory support, and resource support and news information support. The response of query on social support was the rating scale divided into 5 scales including highest, high, moderate, low and least (with reliability=.88).

Part III Questionnaire on Benefit Perception of Health Promoting Behavior of Diabetic mellitus Patients. It included 22 queries divided into 2 aspects consisting of external benefit perception and internal benefit perception. The response of questionnaire for benefit perception of health promoting behavior of Diabetic mellitus patients was rating scale divided into 5 scales including highest, high, moderate, low, and least (with reliability= .81).

Part IV Questionnaire on Health Promoting Behavior of Diabetic mellitus Patients. It included 48 queries divided into 4 aspects consisting of health responsibility, activity doing and exercise, food consumption, interpersonal relation, spiritual development and stress management. The questionnaire on health promoting behavior of Diabetic mellitus patients comprised of positive queries and negative queries. The response was rating scale divided into 4 scales consisting of not behave, occasionally behave, frequently behave and regularly behave, and reliability value was .93.

Instrument Quality Check

The researcher applied the instrument to measure the reliability again at Mareaung Sub-District and Ban Phra Sub-district Health Promoting Hospitals, Meaung District, Nakhon Ratchasima Province, for 30 people. It was used to inquire the samples with characteristic similar to the samples having their residences in semi-urban community areas. The questionnaire was analyzed by the researcher to check the instrument quality using the formula of Cronbach's Alpha Coefficient and SPSS for Windows.

Data Analysis

1. The data was analyzed by computer applying SPSS package and the significance levelat 0.05 was determined. The quality of questionnaire was checked through content validity method and measure reliability value of the questionnaire by calculating Cronbach's Alpha Coefficient.

2. The basic statistical values of personal factors including sex, age, marital status, occupancy, caregiver during illness, income/month, education, duration known for Diabetic mellitus morbidity (years), complications from Diabetic mellitus, ability of routine practice, and cooking for eating were taken for frequency distribution, and measurement of percentage and score of social support, benefit perception of health promoting behavior and health promoting behavior of Diabetic mellitus patients, and measurement of mean and standard deviation.

3. The analysis was conducted to measure bivariate correlation of the variables for social support and benefit perception of health promoting behavior with health promoting behavior of Diabetic mellitus patients applying Pearson Product Moment Correlation.

Research Ethics

The researcher protected the right of the samples in this research by issuing the letter to clarify project research doing, objective and data collection procedure as well as the request for cooperation in research doing. The researcher prepared the letter of consent to participate as the research samples to be rendered to 142 samples for consent signatures without any coercion. The sample data was kept as secret and the data was presented in overview of research result only.

Conclusion of Research Result

1.The personal factors of Diabetic mellitus in Nongkrathum Sub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Province comprised the data of sex, age, marital status, educational level, income, and illness duration. The characteristics of the samples were mostly females more than males (74.6and 25.4 percent, respectively) with ages from 60-69 years old (30.3 percent); married marital status (61.3 percent) and secondarily, widow, single and divorced/separated marital status (24.6, 7.7and6.3 percent, respectively); current living with their spouses (52.8 percent); son as caregiver in illness time (34.5 percent); monthly income from 10,001 Baht and over (26 percent); educational level in elementary education (85.9 percent); Diabetic mellitus illness duration in 1-5 years (38.0 percent); complications found in hypertension (37.3 percent); ability of self-routine practice for all things (94.4 percent),and self-doing for some parts found in the minority (5.6 percent); self-cooking for eating by the samples as usual when at homes (72.5 percent) and secondarily, cooking by others such as husband/wife, child, relative/brothers and sisters and purchase for eating when at home (23.9 and 3.5 percent, respectively).

2.The level of social support of Diabetic mellitus patients in Nongkrathum Sub-district Health Promoting Hospital, Meaung District, Nakhon Ratchasima Province in overview was in highest level ($\bar{X}$=4.51, S.D. = .88). It was found that the level of social support separated into individual aspects and sorted from high to low means was classified into 5 aspects including highest level of news information support ($\bar{X}$ = 4.59, S.D. = .73), highest level of emotional support ($\bar{X}$=4.55, S.D. = .85), highest level of financial, labor, stuff and service support ($\bar{X}$= 4.53, S.D. = .91), high level of esteem and recognition support ($\bar{X}$ = 4.48, S.D. =. 87), and high level of social belonging and participatory support ($\bar{X}$ = 4.40, S.D. = 1.00).

3.The level of benefit perception of Diabetic mellitus patients in Nongkrathum Sub-district Health Promoting Hospital, Meaung District, Nakhon Ratchasima Province in overview was at highest level ($\bar{X}$= 4.59, S.D. = .85) and it was found that the level of benefit perception separated into individual aspects and sorted from high to low means was classified into 2 aspects including internal benefit perception ($\bar{X}$=4.66, S.D. =.74) and secondarily, external benefit perception ($\bar{X}$ = 4.50, S.D. = .95).

4.The level of health promoting behavior of Diabetic mellitus patients in Nongkrathum Sub-district Health Promoting Hospital, Meaung District, Nakhon Ratchasima Province in overview was at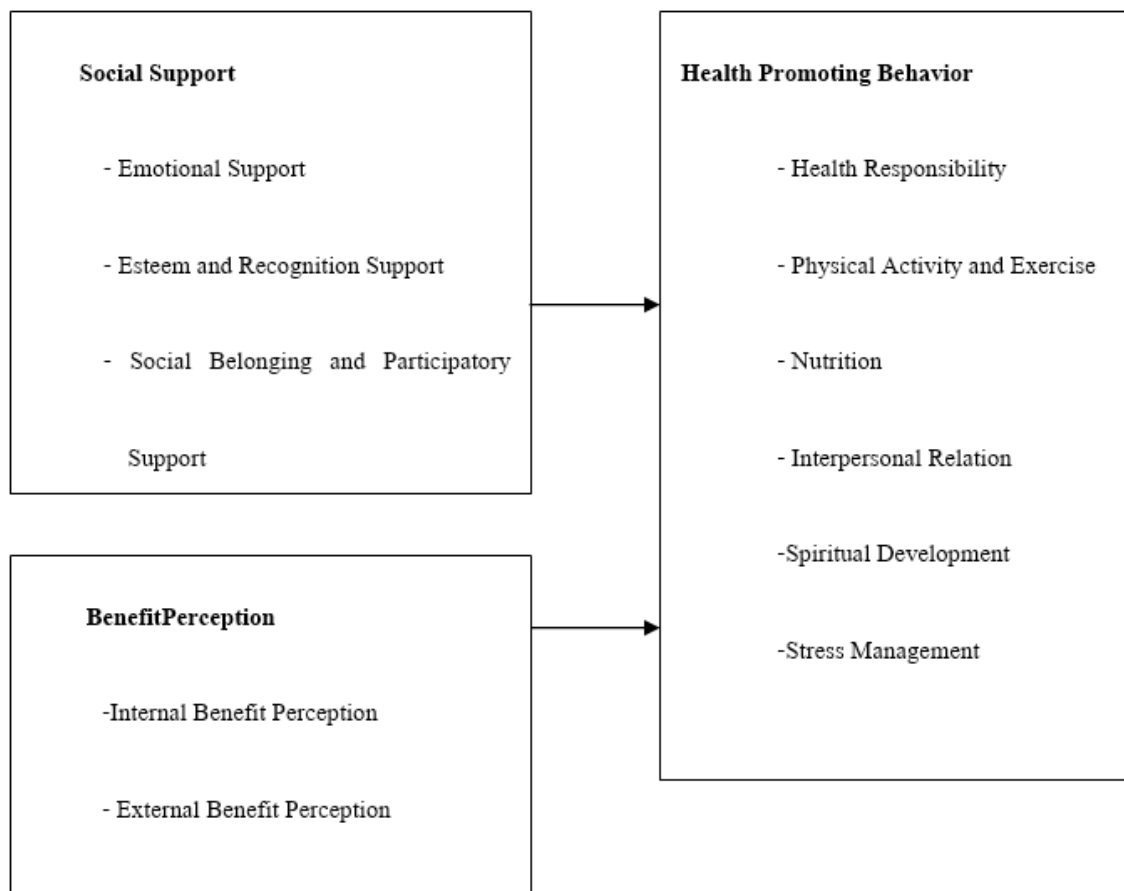 very good level ($\bar{X}$= 3.41, S.D. = .93). It was found that the level of health promoting behavior separated into individual aspects and sorted for high to low means was classified into 6 aspects including health responsibility ($\bar{X}$=3.56, S.D.= .78), interpersonal relation ($\bar{X}$ = 3.52, S.D. = .88), spiritual development ($\bar{X}$= 3.36, S.D. = .97), stress management ($\bar{X}$= 3.35, S.D. = .99), food consumption ($\bar{X}$= 3.34, S.D. = .87), and activity doing and exercise ($\bar{X}$= 3.07, S.D. = 1.18).

5.Social support was positively related to health promoting behavior of Diabetic mellitus patients in Nongkrathum Sub-district Health Promoting Hospital, Meaung District, Nakhon Ratchasima Province at statistically significance level of .01 (r = .69).

6. Benefit perception was positively related to health promoting behavior of Diabetic mellitus patients in Health Nongkrathum Sub-district Promoting Behavior, Meuang District, Nakhon Ratchasima Province at statistically significance level of .01 (r= .77).

Discussion of Research Results

In discussion of the results for this research, the researcher discussed on three points as follows.

1. According to the research result, the finding indicated that Diabetic mellitus patients entering to be treated in Nongkrathum Sub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Province, had highest level of social support and benefit perception, and very good level of health promoting behavior. This was consistent with the study of Choomsima, K.[1]that studied the factors affecting health promoting behaviors of Diabetic mellitus patients in Si Sa Ket Province and revealed good level of benefit perception of health promoting behavior of Diabetic mellitus patients in Si Sa Ket Province and very good level of health promoting behavior. This was consistent with the

study of Siriwattanapornkul, T., Oba, N. and Intharakamhaeng N.[4] that studied the factors related to blood sugar level of Type 2 Diabetic mellitus patients in Kao Liao Hospital, Lamphun Provinceand discovered high level of family support entirely obtained by the patients and very good level of benefit perception, indicating high to highest level of social care and support on Diabetic mellitus patients from family people and society in Thai society context; and good to highest level of benefit perception in self-care, affecting very good level of health promoting behavior of Diabetic mellitus patients. According to the research result, the finding indicated high level of health promoting behavior, indicating very good level of health promoting behavior in behaving for health usefulness and highest mean score of health responsibility by Diabetic mellitus patients entering to be treated in Nongkrathum Sub-district Health Promoting Hospital. This was consistent with the study of Khamloifha, K.[3] that studied self-health care behavior of Diabetic mellitus patients in Diabetic mellitus clinic of Kaeng Sanam Nang Hospital, Kaeng Sanam Nang District, Nakhon Ratchasima Province and discovered high level of self-health care behavior of Diabetic mellitus patients in overview.

    2. Hypothesis 1 stated the positive relationship between social support and health promoting behavior. The finding of the research result indicated the positive relationship between social support and health promoting behavior at statistically significance of 0.01 (r= .69). This research result then supported Hypothesis 1. From the study of Cobb, it said that social support meant the way that the individual gained the assistance, resulting in data recognition showing him to believe that he still had the beloved persons and the persons who cared, admired and recognized him, and he felt to belong to the society and had the attachment and generosity with each other in the society. The social support was the factor that might have direct impact on the occurrence of health promoting behavior. The research result was consistent with the study of Longchamong, K.[2] that studied the correlation among personal factors, social support and benefit perception of health promoting behavior with health promoting behavior of Diabetic mellitus patients of Tha Uthen Hospital, Nakhon Panom Province and found positive relationship between social support and health promoting behavior of Diabetic mellitus patients at statistically significance level of .01 (r= .43).

    3. Hypothesis 2 stated the positive relationship between benefit perception and health promoting behavior. The finding of the research result indicated the positive relationship between benefit perception and health promoting behavior at statistically significance level of 0.01 (r= .77). The result of this research then supported Hypothesis 2 which was consistent with the study of Longchamnong, K.[3] that studied the levels of social support, benefit perception of health promoting behavior and health promoting behavior and studied to measure the correlations among personal factors, social support and benefit perception came to be treated at Diabetic mellitus clinic in Tha Uthen Hospital, Nakhon Phanom Province. The finding of the research result revealed that benefit perception of health promoting behavior was related to health promoting behavior at statistically significance level of .01 (r= .42).

Benefits

The results of this research included the following.

1. To acquire basic data for the levels of social support, benefit perception and health promoting behavior at very good to highest level of Diabetic mellitus patients entering to be treated in NongkrathumSub-district Health Promoting Hospital, Meuang District, Nakhon Ratchasima Province, helping public health officer who performs the care to apply those data as the methods for support on various aspects, promotion on education to patients and important persons, and promotion on better and good continuous self-care of patients.

2. To acquire the data of factors related to social support and benefit perception with health promoting behavior of Diabetic mellitus patients. The research result can be applied to support the family and the individuals in Diabetic mellitus patient's society such as public health officer to be participatory in social supports on five aspects including emotion; recognition and esteem; participation and social belonging; finance, stuff, labor and healthcare; and news information since these various factors entirely caused the availability of good self-health promoting behavior of the patients, affecting the ability of the patients to live with illness state in good well-being.

Research Suggestion

The public health officers should prepare the patients, their families and the patients' relatives to be educated in right demeanor, should further study social support and benefit perception with health promotion of Diabetic mellitus patients in other communities, and should inclusively develop instruction program, educate and advise patients and their relatives on social support.

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Gain or Loss?
Modeling the Relationship among Differentiated Social Media Functions, Perceived Social Capital and Psychological Wellbeing

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Abstract

With the growing popularity of social media, scholars have critically discussed its social and psychological consequences. Despite previous studies argued that users experiencing low life satisfaction and loneliness might gain benefits from using social media, improper or excessive use might negatively affect psychological wellbeing. Using online national survey data (*N*=1003) collected in Mainland China, this paper investigated how differentiated social media functions (the social-informational function and the entertaining recreational function) influenced psychological wellbeing. We also examined the impact of individuals' perceived offline and online social capital in the associations. Structural equation modeling was performed, and results showed good model fit: offline social capital model, $X^2(6)$=20.431, *p*-value=.002, X^2/df=3.41, CFI=.993, RMSEA=.049 (90% Confidence Interval=.027-.073); online social capital model, $X^2(6)$=25.505, *p*-value=.000, X^2/df=4.25, CFI=.991, RMSEA=.057 (90% Confidence Interval=.035-.081). Our results first support the notion that effects of social media use on psychological wellbeing will vary according to different social media functions. We found that the social-informational use of social media would increase life satisfaction and decrease loneliness, whereas the entertaining-recreational use would contribute to life satisfaction but cause loneliness. More essentially, both bridging and bonding social capital were found influencing the aforementioned associations. However, the mediation effects of social capital were much greater in the online context, suggesting people perceived a more prominent role of their relationships in virtual communities. Of the two types of social capital, bridging social capital was a stronger mediator, indicating the weak ties had stronger impact on the relationship between social media use and psychological wellbeing.

Keywords: *social media functions, perceived social capital, psychological wellbeing*

Gain or Loss?

Modeling the Relationship among Differentiated Social Media Functions, Perceived Social Capital and Psychological Wellbeing

Introduction

How the use of Internet-based communication technologies influences individuals' social involvement, social capital and psychological wellbeing gradually becomes a prevalent theme in social science research. Especially in recent years, as the advent of social media, the aforementioned question attracts wide attention.

One pioneer effort done by Ellison (2007) indicates a favorable relationship among individuals' daily use of social network sites, social capital and subjective psychological wellbeing. This influential study has implied a beneficial outcome for individuals with low self-esteem and low life satisfaction. It suggests that Facebook use has a significant effect in creating bridging social capital, which could help individuals experiencing low psychological wellbeing to overcome barriers in life.

Inspirations are drawn from previous studies and have greatly promoted following research (Ellison et al., 2007; Kraut et al., 1998; Vergeer & Pelzer, 2009). However, knowledge on how social media use impacts individuals' social and personal life is still limited. For instance, as noted by researchers, early studies on media effect showed a preference of taking media as an external stimulus without questioning the nature of effect and how it happens (Guo, Li, & Ito, 2014b).

From the perspective of psychology, human body is a complex adaptive system which was composed within biochemical, cellular, physiological, psychological, and social systems (T. Wilson, Holt, & Greenhalgh, 2001). Human behaviors are shaped by the combined interactions of internal set of rules molded from past experience and adaptive adjustment responding to the challenges from new environment. Therefore, behaviors of media users may vary according to individuals' intrinsic characteristics and specific environment they are involved. Also, given the functional differences of media use, we cannot approach to the relationship between media use and psychological wellbeing by examining the simple linear causality.

To further understand how differentiated functions of social media use affect psychological wellbeing, this study was developed from previous findings and firstly structured the relationships among social media functions, social capital and psychological wellbeing in a compound model.

Literature Review

The Concept of Psychological Wellbeing

Over the past few decades, there has been extensive discussion on the concept of psychological wellbeing that tried to delineate the characteristics of positive psychological functioning (Diener, Suh, Lucas, & Smith, 1999; Dodge, Daly, Huyton, & Sanders, 2012; Ryff & Singer, 1996). Psychological wellbeing is a multidimensional term (Dodge et al., 2012) constructing with a wide range of phenomena such as emotional responses, domain satisfaction, and life satisfaction (Diener et al., 1999). In general, it refers to people's subjective evaluation of their life. From such perspective, previous empirical studies focused on the positive and negative outcomes and related psychological wellbeing to an individual's perceived degree of happiness (W. R. Wilson, 1967), life satisfaction (Diener, Oishi, & Lucas, 2009; Sauer, Warland, Mangen, & Peterson, 1982), and depression (Taylor & Brown, 1988). This approach is generally called the *hedonism* tradition, emphasizing wellbeing is constructed by positive affects and low negative affects (Cameron, Holmes, & Vorauer, 2009).

Bradburn's (1969) work concentrated on people's psychological mechanism in coping with life difficulties. Meanwhile, he also correlated his definition with Aristotle's statements about the goal of human conduct and suggested happiness as one of the essential measurement of wellbeing. The exposition on the structure of psychological wellbeing provided a theoretical basis for the following examination on its components, and made the evaluation of affective balance and perceived life satisfaction two essential elements of subjective wellbeing (Cameron et al., 2009).

The second perspective is called *eudaimonia,* which highlights the self-fulfillment and humans' psychological growth (Diener et al., 2009; Ryan, Huta, & Deci, 2008). It is a Greek word means "the state of having a good indwelling spirit, a good genius" (Duignan, 2010, p. 110). Originally used by Greek philosopher Aristotle, eudaimonia described the highest good of human life and was frequently translated as happiness. Eudemonism suggested that humans' psychological wellbeing should be explained with the consideration of whole life and be treated as a process of positive and good life (Ryan et al., 2008) rather than the absence of illness and negative affects (Ryff & Singer, 1996).

More recently, work conducted by Dodge et al. (2012, p. 222) drew insights from previous studies and argued the definition of psychological wellbeing should "center on a state of equilibrium or balance that can be affected by life events or challenges".

To sum up, psychological wellbeing is a dynamic and undeniably complicated term. Regardless of different approaches, it is agreed that psychological wellbeing refers to a person's psychological condition in dealing with life difficulties and subjective evolution of life quality.

The Measurement of Psychological Wellbeing

Due to different definitions of psychological wellbeing, its measurement is also varied. Previous study identified two aspects as essential indicators of psychological situation: *affective balance* and *perceived life satisfaction* (Carmelo Vazquez, 2009; Diener et al., 1999). Affective balance represents individuals' evaluation of moods and emotions in dealing with life events, and it roughly reflects a construction by initially distinguishing positive and negative affects (Bradburn, 1969; Diener et al., 1999). In addition, considering the limitation that only took these affects as predictors, psychologists proposed that it was necessary to combine the measures of both affective reactions and perceived life satisfaction together (Diener, Smith, & Fujita, 1995). Researchers believed individuals' pleasant affect, unpleasant affect and life satisfaction were correlated but separated (Andrews & Withey, 1976; Diener et al., 2009; Diener et al., 1995). Life satisfaction presents "a cognitive judgmental process" (Diener, Emmons, Larsen, & Griffin, 1985, p. 71) to evaluate the quality of whole life. Compared with the indictors of affective reactions, perceived life satisfaction is a more popular indictor reflecting cognition of life quality and a worldwide criteria of judgment on life (Carmelo Vazquez, 2009, p. 17).

Dissimilar from the two distinguished aspects of psychological wellbeing, Ryff (1996) identified six aspects of psychological wellbeing which were labeled self-acceptance, positive relations with others, autonomy, environmental mastery, purpose in life and personal growth. He provided a more comprehensive framework to evaluate the long-term wellbeing. However, indicated by researchers, the long-term affective dimension is less controversial (Diener et al., 1999), which makes the application of the scale more complicated.

In the field of computer-mediated communication (CMC), following the heroic traditions, positive affect, negative affect and life satisfaction become the prominent indictors for examining psychological situation. For example, Sum, Mathews, Pourghasem, and Hughes (2008) investigated the potential psychological consequences resulting from Internet use and took personal and national life satisfaction as a measure. Kraut et al. (1998) discussed the same questions and adopted perceived life quality and loneliness as indictors of psychological wellbeing. Furthermore, self-esteem, depression, stress and social support were also widely used indicators (Ellison et al., 2007; Vergeer & Pelzer, 2009).

Effects of Social Media Use on Psychological Wellbeing

Regarding the effects of media use on personal wellbeing, previous studies always related the psychological consequences to changes of individuals' social connections. Noted by Kraut et al. (1998), social engagement is associated with individuals' perceived level of life quality, and will affect people's physical and mental health. Therefore, CMC researchers often focus on the cognitive influences from both social and psychological perspectives.

In the context of social media, researchers noted that SNSs are able to increase the possibility of activating potential relationships (Johnson, 2007). According to numerous empirical studies, the increase of social relationships and expansion of social network size may yield positive outcomes. Researchers found that people using SNSs were more likely to experience connectedness and feel happier (Valkenburg, Peter, & Schouten, 2006). For instance, Valenzuela et al (2009) found positive relationships between SNSs use and life satisfaction. Apaolaza, Hartmann, Medina, Barrutia, and Echebarria (2013) adopted self-esteem and loneliness as predictors to examine the psychological consequences of SNSs use among Spanish adolescents, and confirmed social media use was positively associated with young people's perceived psychological wellbeing.

However, some researchers who are cyber-pessimistic have questioned the positive outcomes of online activities. In early years, Kraut et al. (1998) argued online activities may lead to harmful outcomes on psychological wellbeing such as making them feel more lonely. Kim et al. (2009) examined loneliness as both cause and effect of problematic Internet use. Results showed that, instead of relieving loneliness, individuals who were lonely could generate strong compulsive Internet use behaviors which leads to more serious negative life outcomes.

Sherry Turkle (2012) asserts in her newly published book *Alone Together* that the increasing number of friends on Facebook does not mean you own more friends in reality. Actually, social media is making an illusion of relationship, making us mistakenly believe that we are surrounded by people. Also, if we do not use social media rationally, it will not bring us more social support, but will make us lonelier than before. Therefore, the psychological effect of SNSs is still a hot issue in debate.

Given the literatures, this study aims at answering two research questions:

RQ1: Will individuals' psychological wellbeing vary according to differentiated social media functions?

RQ2: What is the role of social capital in the relationship between social media use and psychological wellbeing?

Methodology

Data Collection

To answer the research questions, a research institute in Japan conducted an online survey in six areas of Mainland China (including East China, Northeast China, North China, South Central China, Northwest China, and the South West China) during September 2013. A total of 1003 respondents (male = 493; average age = 34) were targeted with a response rate of 8.58%. Participants reported an average of 29 hours per week for using the Internet.

Measurement

Social Media Functions

Adopted from Guo et al.'s (2014a) measurement, five items were used to represent social media's social and informational function (SIF), and five items were used to represent the entertainment and recreational function (ERF).

Perceived Social Capital

Perceived social capital was measured by Williams's (2006) Internet Social Capital Scale (ISCS) which includes seven items representing bridging social capital (7 items, α = .93) and six items representing bonding social capital (6 items, α = .87). As exploratory in nature, this study used scales of both online and offline context.

Psychological Wellbeing

Regarding psychological wellbeing, five items adopted from Satisfaction with Life Scale (SWLS) (Abdallah, 1998; Pavot & Diener, 1993) were used to measure individuals' perceived life satisfaction, and seven items adopted from the UCLA Loneliness Scale (Russell, 1996) were used to measure individuals' perceived loneliness.

All items were rated on a 7-point Likert scale (1=*strongly disagree* and 7=*strongly agree*).

Results

Demonstrated in Figure 1 and Figure 2, structure equation modeling (SEM) was performed by using AMOS 18.0. Parameter estimation indicated satisfactory model fit: offline social capital model, $X^2(6)$=20.431, *p*-value=.002, X^2/df=3.41<5, CFI=.993, RMSEA=.049 (90% Confidence Interval=.027-.073); online social capital model, $X^2(6)$=25.505, *p*-value=.000, X^2/df=4.25<5, CFI=.991, RMSEA=.057 (90% Confidence Interval=.035-.081).
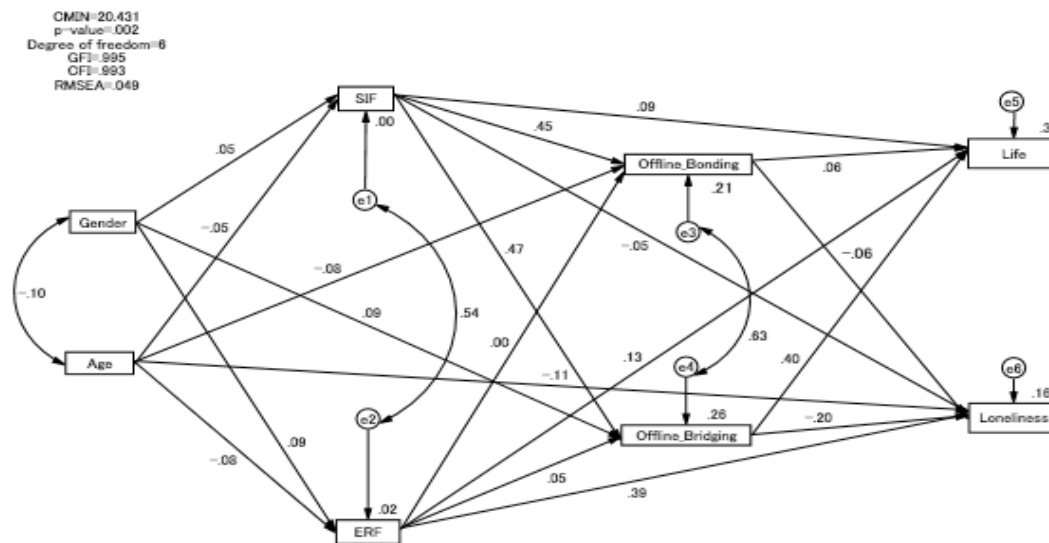
Figure 1
Resulting model explains associations among social media use,
perceived offline social capital, and psychological wellbeing.
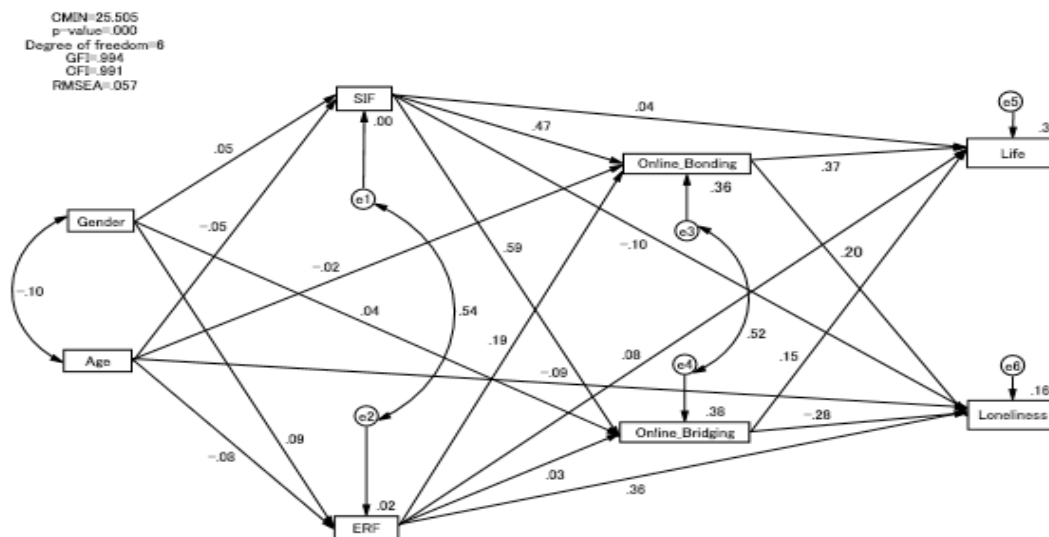
Figure 2
Resulting model explains associations among social media use,
perceived online social capital, and psychological wellbeing.

Discussion

With the aim of exploring social media's psychological influence on personal wellbeing, the current study used data collected from an online national survey to structure the causal relationships among differentiated social media functions, social capital, life satisfaction and loneliness. It is worth noting that there are rare empirical studies that examine the mediating role of social capital. Therefore, this study is expected to shed light on further exploration of relationship between social media use and psychological status.

Findings of the current study first supported the assumption that single indictor of using does not determine psychological wellbeing; instead, the psychological outcome depends on differentiated social media functions. Consistent with findings of pervious examination in an intercultural context (Guo, Li, & Ito, 2014a), our results confirmed social media use for social and informational purpose has significant impact on increasing life satisfaction and decreasing loneliness. The favorable effect is not surprising. A considerable amount of literatures note that social media use will help people to be connected (Ellison, Steinfield, & Lampe, 2011) and engaged in online communities (Gonzalez-bailon, Kaltenbrunner, & Banchs, 2010; Y. Kim, Hsu, & Zuniga, 2013), which is considered having positive effect on social support (Shaw & Gant, 2002). Individuals who mainly use the social media to get information and socialize with familiar people seem to have a more positive life attitude to stay connected with the outside. Given this, compare with face-to-face communication, the online interaction is a lower cost of time and money. It is also an easier way to keep in touch with people by greatly facilitating the long-distance communication. Users with social and informational desire may use social media more for functional purposes, and such using experience may reduce their feelings of loneliness due to the connecting effects.

In contrast, results regarding to the entertainment and recreational use are more complex and interesting, which suggest using social media for entertainment purposes will raise life satisfaction but simultaneously generate more loneliness. The results showed it is hard to define the influence of social media use for entertainment and recreation as either positive or negative. One of the explanations is that social media users with recreational needs may relatively have less aspiration for socializing in reality. Thus, they are more likely to treat social media as alternatives for excitement and joy in cyberspace to compensate the lack of satisfaction offline. Nevertheless, this ritualized use may lead to a sense of isolation and dependence on social media. Therefore, although the online recreational experience temporarily compensated the missing life satisfaction, the addictive and ritualized use could not reduce loneliness. Actually, our results as well partially confirmed Morahan-Martin and Schumacher's (2003) findings related to Internet use and loneliness, which stressed the difference between lonely and less lonely Internet users. To be specific, lonely Internet users are more tend to use the Internet as a tool to seek companionship and expect the increased life satisfaction. Unfortunately, the dependency on online activities could not fundamentally solve problems but cause disturbance in daily functioning.

With respect to social capital's influence in the aforementioned relationship, its mediating role was addressed in the current study. Kraut et al. (1998) summarized pervious findings on social and psychological influence of the Internet. According to their study, it has been widely agreed that individuals' life satisfaction and mental health is tightly related to the quantity and quality of their social relations. Living with a network of varied social relationships will buffer people's stress and help them to engage in experiencing higher quality of life. In our model, results indicated strong mediation effects of social capital in the relationship between social media use and psychological wellbeing. Particularly, perceived bridging social capital was demonstrated as a strong mediator, suggesting weak ties among people is a key factor to influence their mental health and life quality. In addition, by comparing the online and offline contexts, we also found the mediation effects of social capital were much greater in the online context than in the offline context. It suggests that social media users' life quality and wellbeing depend more on their perception of social ties online. From this point of view, it indicates that Chinese social media users unconsciously associate their offline life with social support online and have a preference of online socialization, which exacerbates our concerns about the quality of relations. Our findings imply that socialization turns to be instant, impatient, and superficial. The increasing popularity of social media applications exactly reflects the reality of this social transfiguration.

In summary, this study is an attempt to modeling the relationships among social media use, social capital and psychological wellbeing. Social media users' psychological wellbeing was found to depend on different ways of social media use, the impact of which could be mediated by perceived social relations online. Meanwhile, a tendency of reliance on relationships online was also implied, which encourages future research on negative influence of social media.

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Client Satisfaction of Academic Service focusing on Health Education Provided by Nursing Instructors and Nursing Students from Boromarajonani College of Nursing, Nakhonratchasima

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Abstract

Client satisfaction is a good predictor of performance of health care service. The purpose of this descriptive study is to evaluate the level of client satisfaction of academic service focusing on health education by nursing instructors and students from Boromarajonani College of Nursing, Nakhonratchasima. The total participants were 650 patients and the relatives who admitted at the surgical and orthopedic department of Maharat Nakhonratchasima Hospital. Data were collected by using questionnaire from January to April, 2013. Content validity of this questionnaire was approved by 3 experts. The reliability was using Cronbach's alpha coefficient = .72. Data were analysed using descriptive statistics and content analysis.

The report of participants' of satisfaction of academic service show extremely satisfied ($\bar{x}$ = 4.64, S.D. = .70). It also reported extremely satisfied in the quality of service. ($\bar{x}$ = 4.58, S.D. = .98). The levels of client satisfaction on health care providers, facilities, and health care process were in high level ($\bar{x}$ = 4.52, S.D. = .60; $\bar{x}$ = 4.45, S.D. = 1.03; $\bar{x}$ = 4.28, S.D. = .69) respectively. The main finding of the study showed that this project should be continuously conducted because it may assist in enhancing client capabilities on self-care.

The results of this study could be used for the next effective academic service which meets the client's needs especially in the surgical and orthopaedic department.

Keywords: academic service, client satisfaction, integrative teaching and learning

Client Satisfaction of Academic Service focusing on Health Education Provided by Nursing Instructors and Nursing Students from Boromarajonani College of Nursing, Nakhonratchasima

Background

All information which provided to clients and their relatives is very importance. Due to the information will help clients to understand more in their current health status and signs and symptoms of their disease. Additionally, understanding the information and health situation is able to help them to obtain appropriate support cover in all physical, psychological, emotional and spirituality from their family that may help them gained more spirit to live long with their disease. According to study of Rungnapha, et al. (2013) which study on information need of relatives of client who are admitted in Intensive Care Unit (ICU) in Phrapokklao hospital. The study found that client's relative needs is high level of need in all points of information that conform to Patchanee, et al.(n.d.) survey clients' information need in Nakhonpranom hospital for 170 participants. The results show that most of clients need to obtain health knowledge and nursing care information and the third level of clients require to obtain information are how to conduct themselves with their disease, guidance for health maintenance to prevent recurrent disease, details of their disease and how to self-care when they are in hospital respectively. While, Patcharin, et al.(2008) study to compare information need in relative of critical client in ICU in regional hospital of east part of Thailand had present information need and information obtained are different in many aspects of need are statistic significant at .05. Furthermore, The family members require amount of basic information whereas the hospital staffs did not provide information meet and sufficient to their demand. The study support to Pensri, et al. (2003) that study on satisfactions of mentor and client to nursing practice in community filed of nursing students of **Bachelor of Nursing Science (Continuing Program)** in Boromarajonani College of Nursing, Nakhonratchasima shows that nursing students' advice which not meet to need of client, therefore cause them moderate satisfied.

As can be seen from the studies, clients who are admitted in hospital may have complicated health problems which are difficult for them and their relative understanding, hence information provided is very importance to them. They expect to obtain answers for all their questions. The answers and information which provided cover all their questions may affect highest satisfaction level of clients and their relatives (Nongyao, et al., 2004). Researchers in the role of nursing instructor, who are obligation to improve knowledge and practical nursing skills in student to help public to solve their health problems, develop and integrate health knowledge and transfer health knowledge to community and social aims to maintain sustainable of health development. Therefore, integration of academic service on nursing course was conducted. First of all, by nurse instructors survey clients information need then, divide nursing students into small group to search and compile health knowledge after that produce pamphlets and poster. Next prepare students' knowledge

to understand disease and health nursing care. Finally, nurse instructors and student collaboration work to provide health education to client in general surgery in-patient department and orthopaedic surgery in-patient department in Maharaj hospital, Nakhonratchasima. As the results, clients and their relatives are improved and gain more understanding in their disease, treatment plan and self-care and satisfied with the service. Moreover, they will be able to apply health knowledge into their daily life.

Therefore, researchers will conduct this research to study about satisfaction of client of academic service in health of nurse instructors and nursing students of Boromarajonani College of Nursing, Nakhonratchasima. The aim is to use this study results to improve further quality of academic service to public.

Research question

What levels of client's satisfaction to nurse instructor and nursing students are about academic service?

Study's purpose

The study aims to study clients' satisfy level of academic service by nurse instructors and students of Boromarajonani College of Nursing, Nakhonratchasima.

Research method

Population and sampling

In this study, population are 650 patients and their relative who are admitted in general surgery in-patient department no. 5-left side, female general surgery in-patient department No.1, female general surgery in-patient department No.2, male orthopaedic surgery in-patient department No.1, male orthopaedic surgery in-patient department No.4 and female and child orthopaedic surgery in-patient department of Maharaj hospital, Nakhonratchasima between January and April 2013.

Variable are satisfaction of client to academic health service of nurse instructors and student nurses of Boromarajonani College of Nursing, Nakhonratchasima in four aspects; services' process and step, staffs, facilities and quality of service.

Definition on this Research

Theoretical definition of Satisfaction is feeling of love, like and contentment

Operational definition of Satisfaction is feeling of love, like and contentment of client to academic health service of nurse instructor and nursing student of Boromarajonani College of Nursing, Nakhonratchasima with questionnaire survey.

Study instrument is a questionnaire that conducts on this research to survey satisfaction of client on academic health service by nurse instructor and nursing student of Boromarajonani College of Nursing, Nakhonratchasima. There are 2 parts of the questionnaire;

Part 1 : General information of client

Part 2 : satisfaction of client on academic health service by nurse instructor and nursing student of Boromarajonani College of Nursing, Nakhonratchasima in four aspects; services' process and step, staffs, facilities and quality of service. The questionnaire provided 9 questions and 5 levels of rating scale which applied from Likert Scale that are classify as following;

    5 indicate Extremely satisfied
    4 indicate Very satisfied
    3 indicate Moderate satisfied
    2 indicate slightly satisfied
    1 indicate minimal satisfied

Interpret the level of opinion calculate from average score as the level below (Praklong cite in Kanittha, et al., 2007: p.138).

Average score between 1.00 – 1.49 indicate Minimal satisfied
Average score between 1.50 – 2.49 indicate Slightly satisfied
Average score between 2.50 – 3.49 indicate Moderate satisfaction
Average score between 3.50 – 4.49 indicate Very satisfied
Average score between 4.50 – 5.00 indicate Extremely satisfied

Assessment of research tool:

1. Content validity by 3 special experts to consider index of item-objective congruence.
2. Reliability; try out with valid questionnaire to 30 participants then analyse with statistic method; Cronbach Alpha Coefficient with reliability at .72

Data collection

1. Request for official permission from head of department to carry out this study by send official letter to director of Maharat hospital, nursing sector and head of surgery department respectively.
2. After data collection nurse instructors and nursing students will inform participants about the data and will be analysed with statistic to evaluate for the research project.

Data Analysis: analyse with computer program package to present;

1. Frequency distribution and percentage
2. Average, standard deviation (S.D.) of satisfaction scores of clients' satisfy to academic health service of nurse instructor and nursing student of Boromarajonani College of Nursing, Nakhonratchasima

Research ethic: researchers concern on all ethic process are as following;

1. Oral inform consent before participate on this study.
2. Participants are able to refuse threaten questions and refuse or quite to participate in this study anytime.
3. Questionnaire was used for data collection and participants who are able to read will write answers on their own whereas who are unable to read the nursing students will interview and write the data in questionnaire instead.
4. This project sponsored by Boromarajonani College of Nursing, Nakhonratchasima and approved by ethic committee of Boromarajonani College of Nursing, Nakhonratchasima

Results

1. Personal data

Most of participant; are female; 64.9%, married 64.9%, native habitant in Nakhonratchasima 77.9%, primary school is highest educated is 58.7%, agriculture; 41.3% and male general surgery in-patient department 28.5%.

2. Level of satisfy to academic health service of nurse instructor and nursing student of Boromarajonani College of Nursing, Nakhonratchasima are as following;

Overall satisfy level to academic health service of nurse instructor and nursing student of Boromarajonani College of Nursing, Nakhonratchasima is extremely satisfied ($\bar{x}$ = 4.64, S.D.= .70). Most satisfy is on quality of service aspect ($\bar{x}$ = 4.52, S.D.= .61) is indicated on extremely satisfied level, then staff satisfy ($\bar{x}$ = 4.52, S.D.= .61) that also indicated on extremely satisfied level, while process and step of service is last of satisfaction level ($\bar{x}$ = 4.28, S.D.= .69), however it still indicates very satisfied (see table 1).

Table 1

Satisfy level to academic health service of nurse instructor and nursing student of Boromarajonani College of Nursing, Nakhonratchasima

List of opinion	$\bar{x}$	S.D.	Level of satisfaction
Satisfy in process/steps of service			
-Style and kind of activity in academic service are interesting	4.28	.69	Very
Satisfaction in staffs			
-Nursing student nurse/nurse instructors' hospitality and provide service, health knowledge and willingness to advice	4.52	.61	Extremely
Satisfaction on facility			
- Appropriate of place of service	4.24	.86	Very
- Clearly present and easily to understand on poster and pamphlets	4.65	1.21	Extremely
Satisfaction to service			
-Satisfy to obtained service	4.57	.73	Extremely
-Knowledge obtained from poster in exhibition	4.55	1.17	Extremely
-Knowledge obtained from pamphlets	4.67	1.37	Extremely
-Obtained knowledge to apply in self-care	4.53	.67	Extremely
Satisfaction to overall service	4.64	.70	Extremely

Discussion

As can be seen from the study, overall satisfy level of client to academic health service of nurse instructor and nursing student of Boromarajonani College of Nursing, Nakhonratchasima is most satisfaction (Median = 4.64, S.D. = .70) that conform to study of Arpornthip & Wunnee (2011) which study on opinion of client in practice area of student nurses health promoting practice field, school of nursing, Prince Songkla university. The study's samplings are 299 students and teachers in practice field of nursing student of the university and elderly who are member of health promotion and rehabilitation for aging and governess in nursery, school of nursing, Prince Songkla University. Random sampling is specific random sampling from students, elderlies, teacher and governess who take part in health promotion program's activities with the nursing student. Data collection was collected by questionnaires reliability at 0.93, statistical analysis with percentage, average ($\bar{x}$), standard deviation and analyse to device groups of content. The study found that most of clients have opinion to nursing practice in health promotion course for student nurses in overall ($\bar{x}$ = 4.58, S.D.= .98). In terms of the study, it can be explained that before the project start, project manager conducts a survey on client and their relative about their knowledge needs and style of knowledge service activity for example, small group,

individual or instruction media to learn on their own. On this service provided, before service, nurse instructors and students will survey about disease, health problem and treatment of the sample departments, then set point of problem aim to confirm client about style of service. Not only provide health educational to group but also in term of bed ridden, nurses deliver health education to their bed as individual contribute clients and their relative comfortable to ask some questions to nurse that consequence clients and their relative extremely satisfied to quality of service which conform to Nongyao, et al., (2004) found that factors which effect on clients' most satisfaction to health service is advice to help them are able to self-care when they are home and prevent re-hospital admitted or recurrent of disease. This is because the service is expectation of clients to health service centre. Due to clients extremely satisfy to nurse instructors and students that teach, advice and listen to their individual problem cause of extremely satisfy result. Conversely, process and step of service obtained least satisfy ($\bar{x}$ = 4.28, S.D. = .69). However satisfaction level still on high level of satisfaction. During this service, the researchers will provide service at the corridor where in front of in-patient departments that it tile space, insufficient seat and swarm there caused the lower result of satisfy in processes and facilities, hence they suggested and required a wider area and more comfortable environment.

Suggestion

As the results, it inspires researchers to obtained new ideas to share with public and further research as following:

1. Academic learning aspect

According to the results of data analysis found that this project is a very good project to help clients and their relatives to improve their knowledge and hopefully graduated nursing students will be remaining their characteristics, as they are a student. Hence, researchers will deliver some ideas of these results to improve module of Nursing care for personal Health problem1 that should be arrange some activities to stimulate students to improve searching skill, prepare media for health education and practice on health advice to gain more confidence to provide health education for client in further. Moreover, other modules should be integrated module with academic service to improve nursing skills.

2. Further research

This research project conducted a survey on only clients' opinion; therefore, mentors, nurse instructors and nursing students could also be surveyed to extend the results.

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Research Report

The Study Relationship Between Drinking Coffee and Doing exercise with Bone Mineral Density of Women working in Boromarajonani College of Nursing, Nakhon Ratchasima

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Abstract

The objective of this exploratory research is to study the relationship between drinking coffee and doing exercise with bone mineral density of women who work in Boromarajonani College of Nursing, NakhonRatchasima such as women who worked in year 2012. The sample groups are 80 women the instruments used are data recording on risky factors and bone mineral density measurement for lumbar spine and femoral neck with DEXA of Nuclear Medicine Department, Maharat NakhonRatchasima Hospital. The data is analyzed using chi-square descriptive statistic.

According to the research result, it is found that

1. 18 percent drink coffee and do exercise. 5 percent drink coffee but do not do exercise. 46 percent do not drink coffee but do exercise. 31 percent do not drink coffee and do not do exercise. 75.6 percent have normal lumbar spine bone mineral density. 24.4 percent have thin lumbar spine bone mineral density. 74.4 percent have femoral neck bone mineral density. 25.6 percent have thin femoral neck bone mineral density.
2. Drinking coffee and doing exercise have relationships with lumbar spine bone mineral density and femoral neck bone mineral density with no significant level of 0.05.

The research result shows that drinking coffee and doing exercise do not have any relationships with lumbar spine bone mineral density and femoral neck bone mineral density in the sample groups. However, the sample group that drinks coffee and regularly does exercise has thin bone mineral with 18 percent, which is lower than other sample groups. So, this group should receive beneficial information to realize on regular and serious exercise to prevent from thin bone density as they may face bone breakage in the future and they could be burdens for family and society.

<center>**Research Report**</center>

<center>**The Study Relationship Between Drinking Coffee and Doing exercise with**
Bone Mineral Density of Women working in Boromarajonani College of Nursing,
Nakhon Ratchasima</center>

Background problem and the significance of the Study

Osteoporosis is a major health problem in Thailand. It has been a leading cause of death and morbidity, especially in old age population. It was estimated that 12 years from now on, Thailand will have old age population about 15.2 percent (Sittikon kulprasertet. al) In United state, 44 million people have suffered from osteoporosis or about 55 percent of the population who age more than 50 years old (National Osteoporosis Foundation, 2011). The prevalence of Osteoporosis in Thailand is much higher in the elderly. In population 50-59 years old, 60-69 years old and above 70 years old, the prevalence is 19.2, 25.0 and 34.6 respectively

Osteoporosis is more common in woman than in man, especially in menopausal woman. Osteoporosis can cause compression fracture leading to kyphosis. The compression of the upper thorax can increase risk of pneumonia with upper respiratory tract infection. The restriction of Abdomen can cause stomachache and constipation. Patient with body deformity can also loss of self-confidence. In case of hip fracture, Patient will also increase mortality rate and morbidity. They will suffer from this fracture even after the surgery. Hence, Osteoporosis is the problem that effected with quality of life and also affected family, economy and social (Nimit Thechagrichana, 2005)

The risk factor of osteoporosis in woman are lack of exercise, drinking too much coffee, eat low-calcium food etc. Thai osteoporosis foundation (year 2010) recommended people to change their life style to prevent osteoporosis, including smoking cessation, limited salt diet, reduce alcohol drinking, reduce coffee/caffeine beverage drinking, do weight- bearing exercise, controlled of the underlying disease, avoid using drug affected bone density, prevent risk of falling by using walking aids.

In the study of Wawta Raso (year 2009) the study show that menopausal woman who aged more than 45 years old have osteopenia and also increase risk of osteoporosis. It's because those women lack of estrogen, decrease physical activity, and decrease Vitamin D and calcium, lack of concern about health problem. If that menopausal woman has a better understanding of osteoporosis, they will reduce the risk of osteoporosis and also have a good quality of life.

Boromarajonani College of Nursing, Nakhon Ratchasima is the institution under the Ministry of Health. We held the responsibility for production and development of health personnel by teaching students. Then they will go on careers as registered nurses in the province of Nakhon Ratchasima and the nearby provinces. In 2555, we have a total staff of 124 people, mainly in the context of serving as a professor of nursing education. The staff will teach students both theory and practice in the classroom, in the hospitals and in the community. Because of the very tight timetable, the staff usually has a large amount of workload. That affects their lives and health. They may be at risk of developing osteopenia and osteoporosis because they lack of exercise time, drinking coffee in large quantities and have food that not properly selected.

The study of bone density at lumbar spine and femoral neck will indicate the severity of osteoporosis. It can indicate osteopenia and osteoporosis among women working in Boromarajonani College of Nursing whether it unlike women in other work field or not. Coffee drinking habits and physical activities associated with bone mineral density or not. The study will be useful to improve the lives and the well being of personnel, who is a major priority for the education of nursing students and a leading public health. The risk assessment and screening of bone mineral density will indicate the abnormality and the risk factors. For those whose detected abnormalities or risk factors will be properly taken care of. The findings will be the basis for planning, management, and promotion of health care personnel to have better quality of life and work effectively.

Research questions

1. How does the bone mineral density of the lumbar spine and femoral neck of the women who work in Boromarajonani College of Nursing?
2. Does the bone mineral density of the lumbar spine and femoral neck of the women who work in Boromarajonani College of Nursing is associated with coffee drinking habits and exercise?

Objective

1. 1.To determine the bone mineral density of the lumbar spine and femoral neck of women who work in Boromarajonani College of Nursing, with the habit of drinking coffee and exercise.
2. To study the relationship between coffee drinking and exercise with density of the lumbar spine and femoral neck of the women who work in Boromarajonani College of Nursing, Nakhon Ratchasima.

Hypothesis

Coffee drinking and exercise habits correlated with the density of the lumbar spine and femoral neck of the women who work in Boromarajonani College of Nursing, Nakhon Ratchasima.

Methods

This research is an explorative research. It's to study the relationship between coffee drinking and exercise on the density of the lumbar spine and femoral neck of the women who work in Boromarajonani College of Nursing, Nakhon Ratchasima.

Population & sampling

The population is women who work in Boromarajonani College of Nursing, Nakhon Ratchasima Those government officials and employees who directly pay by the Ministry of Finance in year 2555. A total population is 80 people.

The sample was simple random sampling of women who work in Boromarajonani College of Nursing, voluntary audits BMD values outside of office hours. The result was a total of 78 people.

Instruments used in research

Characteristics used in this study include demographic data of drinking coffee and exercise of women who work in Boromarajonani College of Nursing, Nakhon Ratchasima. Then evaluate Bone mineral Density (BMD) by DEXA.

Monitoring the quality of Instruments used in this research using following qualities: 3 qualified people to look for content validity and assessment of bone mineral density check The validity and reliability of content.

Collecting data.

1. Researcher invites women who work in Boromarajonani **College of Nursing**. Those employees who are paid by the Ministry of Finance, Aged 35 years or more can participants on voluntary basis.
2. Researcher made a contact with the nuclear medicine division. We look for cooperation in the Scan for the Bone mineral Density in 2 positions with a Dual Energy X-ray Absorptiometry (DEXA) at the lumbar spine and femoral neck.
3. Then, sending women to detect BMD values, 2 person/day for 39 days.

Analysis

The data were analyzed by using the software package SPSS / Pc +.

1. Calculated the frequency and percentage of women drinking coffee and doing exercise.
2. TheT-score distributions of BMD of the lumbar spine and femoral neck were compared with the standard normal BMD, Osteopenia, &Osteoporosis.
3. Find out the relationship between coffee drinking and exercise with the bone mineral density of the lumbar spine and femoral neck by using descriptive statistics Chi -Square (χ2).

Result

1.Women who work in Boromarajonani College of Nursing, Nakhon Ratchasima, 2555, totally 80 people. It's appeared that 78 people join in the assessment of bone mineral density Of Nuclear Medicine's, representing 97.5 percent of all the staff. The result is staff who usually have habit of not drinking coffee and exercise were 36 person, representing 46 percent. A minority group of 4 people have a habit of drinking coffee and no exercise, representing 5 percent (tables. 1)

Table 1
coffee drinking habits and physical activity of women who work in Boromarajonani College of Nursing, Nakhon Ratchasima

Behavioral data	Number	Percent
Coffee drinking habits and exercise	14	18
Coffee drinking habits and lack of exercise.	4	5
Do not drink coffee and exercise habits.	36	46
Do not drink coffee habits and lack of exercise	24	31
Total	78	100

2.Women who work in the Boromarajonani College of Nursing, Nakhon Ratchasima, mostly have normal bone mineral density at the lumbar spine. The total number were 59 person, representing 75.6 percent of all the staff. However, there are women with low bone mineral density 19 person, representing 24.4 percent. Women with normal bone mineral density at femoral neck 58 people, represent 74.4 percent. On the other hand, there are women with low bone mineral density a t femoral neck 20 person, representing 25.6 percent (Table 2).

Table 2

The bone mineral density of the lumbar spine and femoral neck of the women who work in Boromarajonani College of Nursing, Nakhon Ratchasima.

	Normal BMD		Osteopenia &Osteoporosis		Total	
	Number	%	Number	%	Number	%
Lumbar spine	59	75.6	19	24.4	78	100
Femoral neck	58	74.4	20	25.6	78	100

3.Women who have the habit of coffee drinking and physical activities not associated with bone mineral density of the lumbar spine. It had no statistical significance at. 05. It turn out that women who drink coffee and exercise, 14person, had Osteopenia and Osteoporosis 10.5 percent (Table3).

Table 3

The relationship between the bone mineral density of the lumbar spine, Coffee drinking habits and physical activity of women who work in Boromarajonani College of Nursing, Nakhon Ratchasima.

Coffee drinking habits And exercise	Bone mineral density of the lumbar spine				Total		Chi-square
	Normal BMD		Osteopenia &Osteoporosis				
	N	%	N	%	N	%	
Coffee drinking and do Exercise	12	15.3	2	2.6	14	17.9	1.006
Coffee drinking and no Exercise	3	3.9	1	1.3	4	5.2	
Don't drink coffee and do Exercise	26	33.3	10	12.8	36	46.1	
Don't drink coffee and no Exercise	18	23.1	6	7.7	24	30.8	
Total	59	75.6	19	24.4	78	100	

* $p < .05$

4. Women who   have   the habit of coffee drinking and physical activities not associated with bone mineral density   of the   femoral neck.   It had   no   statistical significance at. 05. It turn out that women   who drink coffee and exercise, 14 people, had Osteopenia & Osteoporosis 10 percent (See Table4).

Table 4

The relationship between the bone mineral density of the femoral neck, Coffee drinking habits and physical activity of women who work in Boromarajonani College of Nursing, Nakhon Ratchasima.

Coffee drinking and exercise habit	Bone mineral density of Femoral neck				Total		Chi-square
	Normal BMD		Osteopenia &Osteoporosis				
	N	%	N	%	N	%	
Coffee drinking and do Exercise	12	15.4	2	2.6	14	18	1.190
Coffee drinking and no Exercise	3	3.9	1	1.3	4	5.2	
Don't drink coffee and do Exercise	26	33.3	10	12.7	36	46	
Don't drink coffee and no Exercise	17	21.8	7	9	24	30.8	
Total	58	74.4	20	25.6	78	100	

* p < . 05

Discussion

1. Women who work in the Boromarajonani   College of Nursing, Nakhon Ratchasima, mostly have Osteopenia & Osteoporosis at the lumbar spine 24.4 percent, and have Osteopenia & Osteoporosis at femoral neck 25.6 percent. The reason is because of hormonal deficiency. Menopausal women are reduced estrogen level, resulting in increasing bone resorption. It's the most important cause of Osteopenia & Osteoporosis in postmenopausal woman. The rate of declining of bone   mineral   density   in postmenopausal women is very   different, resulting in risk of osteoporosis differently. As studies on the factors that determine the rate of declining of bone mineral in early postmenopausal women by as soc. MD. Bunsong Ongphiphadhanakul. It turn out that the bone mineral density at the spine was not statistically significant decrease in the second year, however, the bone mineral density of femoral neck decreased by 3.9% over two years. Weight, Years of menopause and the hormone estrogen level after menopauses are associated with a decrease   in bone   mineral   density. On the other hand, Gene in estrogen receptor is associated with lower rates of bone density at the femoral neck. In addition, the estrogen receptor gene is also associated with Osteopenia & Osteoporosis in postmenopausal women. (Ongphiphadhanakul B. Et al 2000).

2.Women who work in the Borommaratchonnani College of Nursing, Nakhon Ratchasima, whose have a habit of coffee drinking and physical exercise is not associated with bone mineral density of the lumbar spine & femoral neck. It turns out that woman who drink coffee regularly, 23.1 percent and women who drink coffee and physical inactivity, 5.2 percent. (See Table 3) Even they drink coffee on a regular basis, but they drink coffee in small amount and no more than 1-2 cups per day. Most coffee makers aligned with milk. With a mixture of milk or cream, the amount of coffee drinking does not affected the bone resorption. The epidemiological studies about postmenopausal women show that those who drank more coffee have less bone mineral density than those who do not drink. There were no significant differences in those who drink coffee and drink milk regularly. In the latter cohort study found that drinking coffee did not increases the risk of Osteopenia & Osteoporosis in any way. The incidence of Osteopenia and Osteoporosis are based on the amount of caffeine per day including the effective of food absorption, ageandgenetic. (Journal Clinics, 2548).

Suggestions

1. Researcher support activities to prevent Osteopenia & Osteoporosis behavior for staff who work in Borommaratchonnani College of Nursing, generally focused on modifying behavior such as limited coffee drinking and exercise.
2. We should promote quality of life and well being of the staff whose detected abnormalities or risk factors about Osteopenia & Osteoporosis
3. We should extend the study group of women with similar context. So that we could prediction the factors associated with the Osteopenia & Osteoporosis in women and make it even more pronounce.

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The Perception towards Illness and Chemotherapy of Breast Cancer North-Eastern Women

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Abstract

Breast cancer is an important health people for Thai women. The number of new patients is considered to be at top rank for all cancer diseases on Thai women (e.g. 39.74 percent in 2012). Moreover, there is the first three numbers of new patients in Northeastern region.

Objective: To study the perception towards illness and chemotherapy of Northeastern women who are sick from breast cancer?

Study Method: It uses qualitative research. The data is received from 18 breast cancer female patients in chemotherapy department of a government hospital in the North-East of Thailand. The data is collected from in-depth interviews, observations and fieldwork records. The data collection occurs in 2008 – 2009. The data is analyzed with content analysis and concept analysis.

Result: Breast cancer female patients perceive it through illness experience and chemotherapy. They acknowledge that this disease is a natural disease and cannot be specified. There is high chance that a person will be sick from this disease if some member in the family is sick from it. This disease leads to fear and it is a pathway to death. While chemotherapy is a hope from death, it is a hope in the middle of uncertainty. It will lead the patients to feel like they are already dead as they are so close to it.

Conclusion: This research result leads to deep understanding of perception and feeling of Northeast women who are under chemotherapy for breast cancer. The result can be used as fundamental data for nursing operation to response the perception of breast cancer patients who receive chemotherapy.

Keyword: Perception, Chemotherapy, and Breast Cancer

The Perception towards Illness and Chemotherapy of Breast Cancer
North-Eastern Women

Background

Breast cancer is a health problem of Thai women. According to the annual report of the National Cancer Institute in 2012, 39.74% of newly accepted female patients had breast cancer. Moreover, 9.54% of Thai northeast female patients who were newly accepted had breast cancer (National Cancer Institute, 2014).

Chemotherapy for the breast cancer patients is a systemic treatment that is integrated with surgery or radiation therapy because this cancer spreads through the lymphatic and blood circulation system. The chemotherapy is considered as an adjuvant treatment that aims for eliminating micro metastasis and increasing disease free survival (Mauri, Pavlidis & Ioannidis, 2005).

The number of the breast cancer patients in the Chemotherapy Department of Maharat Nakhon Ratchasima Hospital has increased for the last three years since 40% of all patients in this department had breast cancer (Chemotherapy Department, 2007).

The chemotherapy can affect the quality of the patients' lives in physical, mental and social terms (Tchen, Juffs, Downie, Yi, Hu, Chemerynsky, Clemons, Crump, Goss, Warr, Tweedale & Tannock, 2003; Osoba, Zee, Warr, Latreille, Kaizer & Pater, 1997; Curt, Breitbart, Cella, Groopman, Horning, Itri, Johnson, Miaskowski, Scherr, Portenoy & Vogelzang, 2000; Knobf, 1986). For example, vomiting symptom that is a side effect of the chemotherapy can negative affect the patients' daily activities including sleeping, eating and working (Praduptong, 2002). The vomiting severity reaches the highest level on the first day after taking the chemotherapy and then reduces in the following days (Usa, 2000). This symptom makes the patient's feel tired and suffering (Daloprakarn & Jitpanya C., 2003). This tiredness also has positive relationships with suffering, depression and anxiety (Buranrungrote, Kasemkitwattana, Keerativitayanant & Pongthavornkamol, 2006).

Moreover, a study about the chemotherapy for breast cancer patients found that the anxiety and images of the patients before and after the breast surgery and chemotherapy were not significantly different (Jaungpanich, 1996). This raises an inquiry about the perceptions of the illness and chemotherapy of women with breast cancer because the perceptions have relationships with the patients' adaptive behaviors. This is consistent with a report indicating that illness perception has statistically significant positive relationships with patients' adaptive behaviors at the significance level of .001 (r = 0.7787) (Chanpuang, 1991).

Therefore, the qualitative study that examined the perceptions of the illness and chemotherapy of Thai northeast women with breast cancer who taking the chemotherapy would provide information for improving teachings and nursing practices for the patients.

Research Question

How the Thai northeast women with breast cancer perceive the illness and chemotherapy?

Research Objective

To study how the Thai northeast women with breast cancer perceive the illness and chemotherapy

Methodology

This study is a qualitative one. The methods used by the research was phenomenological since the research focused on phenomena by considering the participants' viewpoints in order to explain the real situations according to the perceptions and opinions of those people as well as to find facts from their behaviors.

Participants – the participants were 18 northeast Thai female volunteers with breast cancer who were being treated with the chemotherapy at the Chemotherapy Department of Maharat Nakhon Ratchasima Hospital. The participants were 27 – 66 years (mean = 45.89 and standard deviation = 8.80). All of them were Buddhists. Additionally, 83.33 of them were married, while 11.1 of them were single. For education levels, 5.6% of them graduated at primary school level, 55.56% of them graduated at secondary school level, 33.33% of them graduated with Bachelor's degree and 5.56% of them were uneducated. Regarding occupations, 38.39 of them were employees, 33.33% of them were farmers, 16.67% of them were business owners and 11.11% of them were unemployed. By considering cancer stages, 44.44% of them were at the 2nd stage, 33.3% of them were at the 3rd stage and 22.22% of them were at the 4th stage. For treatments, 77.78% of them received the chemotherapy after the breast surgery, while 22.22% of them received the chemotherapy before and after the breast surgery.

Data Collection – data were qualitatively collected and analyzed. The research studied the research topic before the pilot study with five breast cancer patients receiving the chemotherapy. The coverage of the data was checked after the data collection in order to prepare questions for in-depth interviews, field notes and observations. The participants' medical histories were also reviewed. The data were collected until the data saturation was reached. The accuracy of the data was also checked during the data collection.

Reliability – the research is a native who is familiar with the participants' cultures and languages. The researcher prepared the phenomenological research contents and methodology by reviewing relevant literatures. The researcher was also trained about qualitative research, data collection and data analysis by an experienced qualitative researcher. The data collection was also triangulated and proved that the data were correct by studying the same phenomena in different times, collecting the data from different locations and using different data collection methods. The data were collected until the data were redundant. The data were theoretically checked according to the concepts of

Martin Heidegger that focus on understanding the opinions of people with direct experiences.

Data Analysis – the content of the data were analyzed (i.e. content analysis) according to the following processes. In the first process, indexation, the researcher checked and interpreted phrases and sentences given by the participants in order to code the statements and set indexes. In the second process, categorization, the indexes were categorized. In the third process, summarization, the data with different indexes was summarized. In the fourth process, interpretation, key words were interpreted and the relationships of stories were identified in order to develop concepts. The researcher emphasized on the data from the conversations and in-depth interviews with the participants. The data were instantly analyzed in the fields in order to categorize and interpret the data and then returned to the participants in order to re-check the data and avoid biases.

The Ethics Committees of Maharat Nakhon Ratchasima Hospital with the registration number of HE 008/2008 approved research ethics – this study. The research objectives, methods and significances were explained to the participants by the researcher. The participants were informed that they could withdraw from the study at any time and refuse to answer the questions that they did not want to answer. The researcher also tried to avoid interfering the participants' daily activities and threatening or hurting the participants with words. The data were presented in overall term and with assumed names. A psychologist of the hospital was also a consultant as suggested by the committees.

Findings

Perceptions of Breast Cancer

The perceptions of breast cancer of the Thai northeast patients could be categorized as follows: 1) perceptions from the causes of cancers and 2) perceptions from their feelings towards cancers.

1. The perceptions from the causes of cancers – these perceptions can be divided into 1) perceptions that cancers are unpredictable and 2) perceptions that cancer risks are linked to their family members. The explanation for each group of perceptions is given below.

The perceptions that cancers are unpredictable indicate that the mentioned cancer is beyond the participants control as explained as follows.

"The cancer occurs without relating to anything." (A 55-year-old married female patient)

"This cancer cannot be controlled." (A 45-year-old married female patient)

"I think it is a consequence of my actions in my former time." (A 66-year-old married female patient)

The perceptions that cancers risks are linked to their family members indicate that the cancer is caused by genes. It was expected that the cancer risk be inherited by next generations, especially for daughters, as explained below:

"It related to genes. My grandfather and uncle had (colon) cancer. Breast cancer is a familial cancer. I have a daughter. I fear that she may have breast cancer." (A 27-year-old divorced female patient)

"Cancers are familial diseases. All of my three great-grand mothers had cancers. Two of them had uterine cancer, and another one had throat cancer. I fear that my child may have a cancer. My physician told me to bring her to the hospital when she has menstruation." (A 34-year-old married female patient)

2. The perceptions from their feelings towards cancers – most important findings regarding perceptions were negative. The perceptions indicated the awareness of the sufferings and deaths caused by the cancers.

In other words, these diseases cause fear and anxiety as well as result in deaths as mentioned by the participants as follows.

"These diseases can kill people. I saw people with cancers. They are all dead. I fear that the diseases may take my child's life. I can't guess and predict what will happen. My child is very young, but I am getting old." (A 46-year-old divorced female patient)

"The diseases are the most frightening ones. The diseases can lead to deaths. No one has ever survived from the diseases." (A 47-year-old married female patient)

Perception of the Chemotherapy

The perceptions of the chemotherapy of the Thai northeast patients could be categorized as follows:

1) Perceptions from the results of the chemotherapy
2) Perceptions from the side effects of the chemotherapy

1. The perceptions from the results of the chemotherapy are positive perceptions. Put differently, the chemotherapy is **a hope to survive**. It is also **a hope during unsteady situations**. In other words, the patients were not sure whether or not the therapy could help them or they could receive the full therapy because of its side effects as mentioned below.

"This is painful enough. I can't eat and sleep because I vomit and feel hot. Sometimes, I feel tired… I don't know whether I can take it anymore… for the six times… However, I hope that I will get well. So, I try to eat in order to have power. I have to take many medicines… I'm still sick. After I could eat foods for three days, I had to take the therapy again… Will I be able to take it?" (A 66-year-old married female patient)

"I felt very tired after taking the chemotherapy. I had to stop working at my shop. My sales volumes decrease because I can't work at my shop as frequent as I used to do… I will work hard again after I'm get well. Sometimes, I can't eat foods and I think that I may die because I can't eat foods." (A 44-year-old married female patient)

"The chemotherapy makes me feel tired… I feel pain because of the therapy… I still wonder whether I will get well… but I will take the full therapy… I hope that I will get well…" (A 54-year-old married female patient)

2. The perceptions from the side effects of the chemotherapy indicate that the patients could not avoid the side effects. They felt that the side effects were acceptable or serious pains.

"I usually vomit. I feel hot. My hairs fall. If I can cure the cancer, it will be great. I feel good when the cancer tissues reduce, but I feel tired like I'm dying… I hope that I have to take the therapy for one time… I don't want to take it again." (A 54-year-old married female patient)

"I already felt bad when I knew that I have the cancer. I felt worse after receiving the chemotherapy. Sometimes, I think that will I die before I take all medicines? After I could eat foods and then regained my power, I thought that I might survive…" (A 45-year-old married female patient)

Discussion

The breast cancer patients perceived that the cancer couldn't be controlled, is a familial disease, results in fear and anxiety, and leads to deaths. Different patients gave different opinions according to their experiences and feelings. Their opinions were consistent with facts in some aspects. Most opinions related to their anxieties. These findings are consistent with a previous report showing that most breast cancer patients had negative attitudes towards the cancer since they thought that the cancer is a serious disease that cannot be cured (Kritpracha, 1995). Regarding their knowledge, the patients did not have clear understandings of the cancer since they knew that if their family members have the cancer, then they would have the cancer risk. Moreover, they perceived that the disease couldn't be prevented. These perceptions can be linked to a Buddhist belief, the **Law of Karma**. According to this law, "karma" refers to an action. This law explains the natural changes of people. That is, the Law of Nature governs the people's health and diseases. Nevertheless, disease can occur because of various causes. Karma or an action is only a factor of the diseases (Tongprateep, Pitagsavaragon & Panasakulkarn, 2001).

The perception of the chemotherapy is a hope. It is a hope to survive during unsteady situations. This is a positive feeling towards the therapy. Nonetheless, the patients had negative feelings towards the side effects of the therapy. They also did not trust in the results of the therapy. These are consistent with a previous study finding that the side effects of the chemotherapy caused the anxieties of the breast cancer patients who received the therapy (Chotanakarn, 1996). This is because the experiences from the therapy related to the interactions among the perceptions, evaluations of and responses to symptoms (*Dodd*, *Janson*, *Facione*, *Faucet*, *Froelicher*, *Humphreys*, Lee, Miaskowski, Puntillo, Rankin & Taylor, 2001). In this study, the patients who were significantly affected the side effects of the therapy and/or knew that they had serious symptoms tended to had negative opinions. For those who knew that they received insignificant side effects from the therapy and/or recognized that their symptoms were relieved, they had positive opinions.

The aforementioned perceptions demonstrate that the patients were painful because of the therapy and cancer. They were physically and mentally affected by this suffering. The perceptions showed the patients had adaptive behaviors since they accepted their problems, though positively and cheered themselves. They tried to take the full therapy, even though they felt very painful because of the side effects of the therapy. These findings are supported by a report showing that breast cancers solved their problems and adjust their emotions (Jantarat, 2006). This is because people usually cope with their problems with these two solutions in order to relieve their stresses (Aitken & Crawford, 2007). This is similar to a study reporting that hope is a tool for handling the possibility of death for cancer patients (Sand, Olsson & Strang, 2009).

Limitations of the Study

Since the findings of this study were derived from a small number of people with limited cultures as well as study is a qualitative one, the findings cannot provide the overall image of the phenomena. However, the findings can give clear the understandings of the phenomena according to the goal of qualitative research.

Conclusion

The findings of this study give the profound understandings of the perceptions of the breast cancer patients. The findings can be used for improving nursing practices according to the perceptions and helping patients taking the chemotherapy to adapt themselves to risky situations and have hopes to survive according to their contexts.

Suggestions

1. The perceptions of the cancer and chemotherapy of the patients reflect their anxieties and opinions that can be changed according to their symptoms or situations. Therefore, nurses who taking care of this group of patients should periodically evaluate the patients' perceptions in order to reduce their anxieties, cheer them, and make them have correct understandings of the cancer and therapy.

2. The chemotherapy makes the patients painful in physical and mental terms. Thus, the evaluation of their pains is important. Nurses must also be aware of their roles as consultants in order to help the patients find appropriate solutions and relieve their pains from the therapy.

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The Study on Satisfaction towards Organization Capital of Personnel at Boromarajonani College of Nursing, Nakhon Ratchasima Fiscal Year 2014

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Abstract

This research is an exploratory research to study an Organization Capital of personnel who work in Boromarajonani College of Nursing, NakhonRatchasima. The Population is personnel who work for the college in fiscal year 2014. Samples are 76 people who are divided into sub-groups by randomly. The data collection is done through satisfaction questionnaire, created within the scope of Department of Skill Development with two factors (hygiene and motivation factors) by three experts. The value of reliability is 0.92. The data is analyzed by SPSS pc+ for window Program. The difference test is done through independent-samples t-test.

The research result concludes that the satisfaction level towards overall Organization Capital is high (3.93). For hygiene factors, self-development skill dimension gains the most satisfaction level (4.01). Accident prevention gains the least satisfaction level (3.55). For motivation factors, altruistic self – esteem gains the most satisfaction level (4.21). Opportunity and career advancement gains the least satisfaction level (3.76). According to the test on satisfaction level difference of personnel due to educational level, it is found that hygiene factors on self-development and career security are different at the significant level of 0.05. In case of working period, it is found that motivation factors, and career success are different at the significant level of 0.05.

This research shows that the personnel have low satisfaction level on Organization Capital in many dimensions. So, executives, colleagues and subordinates should cooperate to concretely build up happiness factors in order to make personnel who have different educational level and working period, gaining the same level of organizational happiness.

The Study on Satisfaction towards Organization Capital of Personnel at Boromarajonani College of Nursing, Nakhon Ratchasima Fiscal Year 2014

Background of the research

Concept of internal organization management is currently not only the importance of Men's power self - improvement, but it's also concerned with minimizing the differences among the workers in that organization in order to create "happiness atmosphere" in the workplace. With the world's trend, both positive and negative effects are occurred in each organization, it's seen clearly in both international and that country itself. Especially when 10 Asian countries (Thailand, Myanmar, Laos, Vietnam, Malaysia, Singapore, Indonesia, Philippines, Cambodia, Brunei) are heading to be united in the same community (ASEAN Economic Community, or AEC) in 2015. Main objectives of this community are to be a large trading market and base cooperation offshore. The 10 countries are focusing on the economic unity in the South- East Asia, and also main- role and power of their negotiation in the world stage. The cooperation is not relevant to only free-trade market, but also the freedom of investment, capital movement, services, and labor mobility. Therefore, the adjustment of the whole organization for being a member of ASAEN Economic Community is very important in order to encourage people understanding, analyzing, and making plan for any possibility or risks in the near future. It's also important to keep high performance workers with each company, avoiding turning- over of employees in the free market. This can be happened by building "Happiness Atmosphere" in the workplace, which is the very important way to increase high satisfaction among the workers. That can lead the people to creative innovation, and reduce the frequency of absence, resignation, tension and possible accidents and sickness of workers. It's also the great strategy to get in the War of Talent to grab the high potential employees. Moreover, high- skill workers can bring the good benefits and productions to the company because of their excellence and high- skill. They could lead their family, community and social to be in the good conditions as well (Paweena Kadedate, 2011: 2, Healthy Organization Promotion Section and The Federation of Thai Industries 2011, National Research Council of Thailand (NRCT), 2011: 1, Martin, Jones and Callan, 2005, Nittaya Wongtada and Rice, 2007: 159-172). Thailand towards the country's development, all economic possibility and tendency are prescribed according to the Eleventh National Economic and Social Development Plan, 2012- 2016 (National Economic and Social Development Board, 2011: The First of Thailand's national development plan. Thailand has brought major social philosophy of sufficiency economy widely applied in all levels. "From the individual level, family, community and society, which are contributed to strengthen the immune system and helps the Upper Thailand to stand firm amid such changes".

Boromarajonani College of Nursing, Nakhon Ratchasima is one of many organizations which have to adjust itself to be ready for any possible changes, since this institute is the training center of nursing science bringing mostly good nursing officers to the social. Internal individual factors result to satisfaction's level towards working conditions in different ways, building the happiness environment among the people is one of a good motivation to improve their performance, and also prescribe working plan of individual person. That will lead the institute reaching it targets, and improve the organization's competency. According to legislation of national learning 1996, the second revision in 1999, any progress under the 7th rule of quality assurance in personnel management, the 7.4th indicator, applying human management system and mechanic must to be emphasized in the organization/ faculty in order to develop and maintain high quality and efficiency of workers. To apply this theory in any progress, the study of satisfaction towards Organization Capital of personnel with Hygiene and Motivation factors is conducted with the kind cooperation of Boromarajonani College of Nursing, Nakhon Ratchasima in terms of developing Organization Capital momentarily.

Research questions

1. What is the satisfaction level of the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima towards Organization capital?
2. Are the education level and period of working for Boromarajonani College of Nursing, Nakhon Ratchasima relevant to the satisfaction level of the personnel?

Objectives of the study

1. To analyze the satisfaction level towards Organization Capital of the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima
2. To examine the difference of education level and period of working influencing on the satisfaction level the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima

Significance of the study

Education level and period of working are influencing to the difference of the satisfaction level of the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima

Conceptual Framework

General information of the personnel
1. Education level
   - Lower than Master's Degree
   - Master's Degree and doctor's degree
2. Period of working
   - Less than 6 years
   - 6 or more years

→

Satisfaction towards Organization Capital
1. Hygiene factors
2. Motivation factors

Research Methods

This research is an exploratory research to study the satisfaction level towards Organization Capital of the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima, to examine the influence of education level and period of working on the satisfaction level difference of the personnel of this college.

Participants and Subjects

Participants of this study are 128 personnel who work in the position of government officers and government employees for Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014

Subjects are 80 personnel of Boromarajonani College of Nursing, Nakhon Ratchasima who were randomly selected according to their education level and period of working for this organization in fiscal year 2014

Research Materials

The research instrument in this finding is a questionnaire survey of the satisfaction level about Organization Capital of the personnel that its content validity was approved by three experts, and 30 personnel of the college through Cronbach Alpha Coefficient Test at score of reliability of 0.95

Data Collection

To collect data for this study, the researcher informed all participants about the objective of the research, and asked for kind cooperation on answering all questions in the questionnaire survey. All sets of questionnaire were collected, verified and analyzed by the researcher for collecting the result of the finding of the satisfaction level of personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014 towards Organization Capital in two points; Hygiene and Motivation factors. There were 76 returned set of questionnaires which were considered as the percentage of 85.

Data analysis

SPSS/ PC+ Window program was used for finding the result of this study as follows:

1. To clarify the frequency and percentage of data of the personnel who work for Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014.
2. To analyze the mean score and standard deviation of the satisfaction level of the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014.
3. To explain the satisfaction level towards Organization Capital of the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014 according to their different education level and period of working in this organization. Using independent- samples t-test was also done in this research with specific level of score at .05

Results

The personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014 were mostly female. 77.6 % of the personnel graduated in Master's Degree level, and 55.6% graduated in Doctor's Degree. 52.6% of the people had been working for the college at 6 or more years (Table 1)

Table 1
Information of personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014

General Information	N	Percentage %
Sex		
Male	17	22.4
Female	59	77.6
Total	**76**	**100**
Education Level		
Lower than Master's Degree	33	43.4
Master's Degree and doctor's degree	43	56.6
Total	76	100
Period of working		
Less than 6 years	36	47.4
6 or more years	40	52.6
Total	76	100

Overall satisfaction level towards Organization Capital of the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014 was at high level (3.93). In terms of Hygiene factors, they were satisfied with self-development skill at the most (4.01), and the accident prevention was at the lowest satisfaction level (3.55). Regarding Motivation factors, it's shown that altruistic self-esteem was at the highest

satisfaction level (4.21). Opportunity and career advancement gains the least satisfaction level (3.76) (Table 2)

Table 2
Satisfaction level towards Organization Capital of personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014

Satisfaction level towards Organization capital	X	SD	Level
Hygiene factors			
1. Recreation activities arrangement for personnel in the organization	3.92	.45	High
2. Right of making request, complaint fairly	3.66	.99	High
3. Admiration for high performance/ sacrifice	3.99	.87	High
4. Good working conditions and atmosphere	3.93	.72	High
5. Accident prevention	3.55	.74	High
6. Self- development	4.01	.67	High
7. Communication	3.78	.63	High
8. Stability of career	3.90	.78	High
Total score of Hygiene factors	3.85	.58	High
Motivation factors			
1. Success in work path	4.04	.65	High
2. Opportunity and career advancement	3.76	.81	High
3. Altruistic self-esteem	4.21	.59	High
Motivation factors	4.01	.57	High
Total score of all factors	3.93	.57	High

Regarding the finding of the satisfaction level towards Organization Capital or the personnel in different education level, it's found that self-development and stability in career towards Hygiene factors were different at the mean score of .05, while the other dimensions were similar (Table 3)

Table 3

different satisfaction levels due to education level of personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014

Satisfaction level towards Organization capital	Lower than Master's Degree		Master's Degree and doctor's degree		t	p
	N	=33	N	=43		
	X	S.D	X	S.D		
Hygiene factors						
1. Recreation activities arrangement for personnel in the organization	3.88	.49	3.95	.57	.517	.606
2. Right of making request, complaint fairly	3.55	.97	3.74	1.0	-.868	.388
3. Admiration for high performance/ sacrifice	3.94	.88	4.02	.87	-.421	.675
4. Good working conditions and atmosphere	3.95	.72	3.91	.72	.205	.838
5. Accident prevention	3.56	.68	3.54	.80	.075	.941
6. Self- development	3.80	.67	4.17	.63	2.448*	017
7. Communication	3.73	.64	3.81	.63	.503	.617
8. Stability of career	3.64	.81	4.10	.70	2.652*	.010
Total score of all Hygiene factors	3.77	.54	3.92	.61	1.123	.265
Motivation factors						
1. Success in work path	4.07	.65	4.02	.67	.315	.754
2. Opportunity and career advancement	3.61	.72	3.88	.86	1.501	.138
3. Altruistic self-esteem	4.18	.63	4.23	.57	.326	.745
Total score of Motivation factors	3.95	.50	4.05	.63	.688	.494
Total score of all factors	3.87	.52	3.98	.60	.861	.392

* p < .05

According to the finding of the difference of period of working for the organization of the personnel, it's found that in work path was motivation factor bringing about the different result at the score level of .05. The other dimensions were similar (Table 4)

Table 4

Satisfaction level due to the period of working's difference of personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014

Satisfaction level towards Organization capital	Less than 6 years		6 or more years		t	p
	N	=36	N	=40		
	X	S.D	X	S.D		
Hygiene factors						
1. Recreation activities arrangement for personnel in the organization	3.88	.58	3.95	.50	.581	.563
2. Right of making request, complaint fairly	3.58	.97	3.73	1.0	.622	.536
3. Admiration for high performance/ sacrifice	4.11	.83	3.87	.89	1.204	.233
4. Good working conditions and atmosphere	3.83	.77	4.01	.66	.205	.838
5. Accident prevention	3.50	.75	3.59	.75	.534	.595
6. Self- development	3.92	.77	4.09	.55	1.053	.296
7. Communication	3.68	.63	3.87	.63	1.319	.191
8. Stability of career	3.82	.83	3.98	.73	.866	.389
Hygiene factors	3.81	.62	3.90	.55	.665	.508
Motivation factors						
1. Success in work path	3.88	.68	4.19	.670	2.094*	.040
2. Opportunity and career advancement	3.64	.94	3.88	.66	1.280	.204
3. Altruistic self-esteem	4.10	.66	4.30	.52	1.450	.151
Total score of Motivation factors	3.87	.63	4.12	.49	1.906	.061
Total score of all factors	3.81	.62	3.980	.55	.770	.444

    * p < .05

Discussion

1. Satisfaction towards Organization Capital of personnel of Boromarajonani College of Nursing, Nakhon Ratchasima in fiscal year 2014 was at the high level (3.93, according to the finding in Table 2) which was involved with the result of the research done by Walaiporn Wachirakhuenkhan (1995), and Nittaya Taweecheep (1998). Regarding all resulted dimensions, the study showed that self- development in Hygiene factor was the highest satisfaction level at the score of 4.01. With the honor and great reputation of Boromarajonani College of Nursing, Nakhon Ratchasima, self-development system were obviously seen within the organization, all personnel were encouraged to get trained during the company's meeting/ training/ seminar, and also to attend any internship to improve their performances.

2. The personnel of Boromarajonani College of Nursing, Nakhon Ratchasima had a different degree in education, so the satisfaction level relevant to Hygiene factors towards self- development and stability of career of each person was at different level of .05, while the other dimensions were similar (As the result shown in Table 3). The workers who had a Degree of Master and Doctor were at the higher satisfaction level than those people who had lower than Mater's Degree, because the people with higher degree would have more chance on attending any seminar or meeting than supportive employees or the workers with lower than Master's degree on hands.

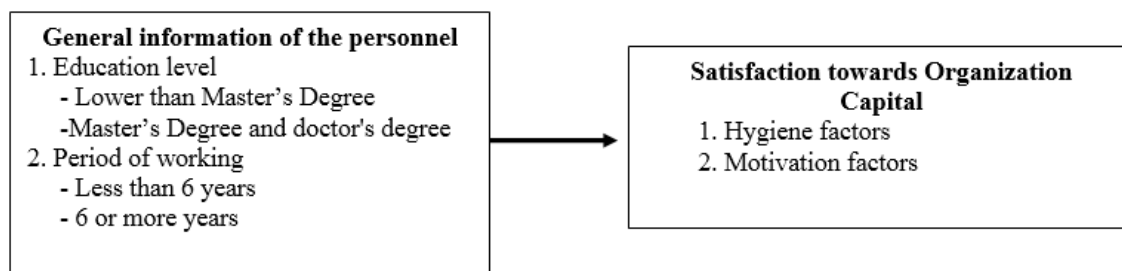3. Period of working affected to the satisfaction level towards Organization Capital of the personnel of Boromarajonani College of Nursing, Nakhon Ratchasima. Motivations factors were also satisfied in different level, the different success in career resulted at the score level of .05, while the other dimensions were similar (Refer to the result in Table 4). Since there were a lot of personnel who had been working for Boromarajonani College of Nursing, Nakhon Ratchasima more than 6 years, they had many kinds of experience about working, and were confident of being member of the organization, so they could handle all tasks smoothly because of well understanding about the organization. They could be very high skill officers in terms of job responsibility, and reach their goal in career. This finding is relevant to the result of the research conducted by Pitak Chancharoen and Nittaya Thaweecheep (1998) that the temptation on working would lead workers being confident and reaching their career's objective. This finding was also emphasized by management board of Boromarajonani College of Nursing, Nakhon Ratchasima.

Recommendation for further research

1. Top management and employees of any organization should have a chance to share their idea of working to each other by attending some company activities in every 3 and 6 months in order to build the trust on each side. All workers with varied education level, including new comers who have worked for the organization less than 6 years should have the same opportunity on attending the organization's activities for being more confident on working.

2. To amplify the result of this research to the other dimension of satisfaction to management board in any level; Manager, Head of Department, Assistant Director, Director and board of directors of the college.

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A Survey of Health Status and Body Mass Index of Clients Participating in a Health Promotion Project at a Buddhist Foundation in Northeast Thailand

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Abstract

Most of Thais adhere to Buddhism and tend to religiously practices when they are getting older. Screening to identify health status of people in adulthood may be more practical, flexible, and accessible, when done in a religious place. This study aimed to survey health status and body mass index of participants visiting a Buddhist foundation Somdet Budhacariya (Toh Brahmaransi) in Northeast Thailand. The sample consisted of 135 participants attending the Healthy Eating Promotion Project temporally implemented in the foundation by the researchers. The researchers purposively selected participants who were older than 15 years old and able to communicate with Thai language. Data were collected by using a weight scale, a height scale, sphygmomanometer, and a structure interview consisting of two parts to collect demographic and health status data. A body mass index was calculated using a participant's weight and height. Data were analyzed using descriptive statistics. The research findings indicated that the majority of the participants were female (69%), were among persons aged 50 to 59 years old (43%), and were overweight (body mass index = 23.5-34.4; 70.4%). Each participant has at least one illness, most of which was hypertension (39.3%). Most of participants in this study were in late adulthood, overweight, and illness. Community nurses should consider religious places to implement health promotion projects, health interventions, or health screening. General and specific suggestions for improving health status and weight and blood pressure control should be documented and distributed to this population.

Keywords: Body mass index, Health status, Hypertension

A Survey of Health Status and Body Mass Index of Clients Participating in a Health Promotion Project at a Buddhist Foundation in Northeast Thailand

Significance of the Problem

Senior adults have increased rapidly in number since the beginning of the 21st century. In 2005, the global senior adult population was found to comprise 672 million senior adults and the number is estimated to increase to 1,200 million senior adults in 2025. In Thailand, a survey in 2010 found the senior adult population to consist of 8 million people and the ratio of senior adults was expected to increase to 14 million senior adults or 20% of the entire population in 2020. This proves that the world, including Thailand, has entered an Aging Society at high ratios (National Statistical Office, 2010).

The aforementioned trend for larger senior adult populations has lead to health risks and other health issues. According to a survey and study of senior adults' health in Thailand's 4 regions conducted in 2006, the chronic diseases found to be health problems among senior adults were cardiovascular diseases, cerebrovascular diseases, diabetes and hypertension (The Agricultural Co-operative Federation of Thailand, Limited, 2006). Most of the aforementioned diseases have been found to originate with excessive body mass index or obesity. (Ford et al., 2014)

According to previous studies (Vasquez, Batsis, Germain, & Shaw, 2014), excessive body mass index or obesity has been found to be a risk for diseases in multiple systems with potential impact on the national economy because the medications used to treat the aforementioned diseases are expensive and require ongoing use because these diseases require long-term treatment. Senior adults are obviously at higher risk for health problems. (Kosaka et al., 2013). Hence, preparations must be made for self-care. Therefore, annual check-ups or preliminary health evaluations are one method of monitoring health conditions and discovering chronic diseases prior to illness.

Boromarajonani College of Nursing, Nakhon Ratchasima, emphasizes sustainable improvements in public health conditions by integrating knowledge, providing care for persons with health problems and promoting the transfer of knowledge to the community by organizing the academic service project on "Eating Enough, Eating Well and Having No Sickness" by integrating pediatric nursing with research and academic services in order to conduct a preliminary health survey of the public who came to receive services at the Somdet Putthachan-Tho Foundation (To Pornhom Rangsi) in Sikuew, Nakhon Ratchasima, which is an important Buddhist religious site and public gathering place, especially for senior adults who practice religion. (Kosaka et al., 2013). Therefore, the researchers are interested in studying body mass index and the health conditions of service recipients at the Somdet Putthachan-Tho Foundation (To Pornhom Rangsi) in order to utilize the data obtained from the study as basic data for application in the care of persons with health problems in order to plan suitable care for persons in order to have good quality of life leading to academic service provision for society in the future.

Research Objectives

To study the body mass index and health conditions of persons seeking services and participating in the "Eating Enough, Eating Well and Having No Sickness" project at **the Somdet Putthachan-Tho Foundation (To Pornhom Rangsi)**.

Research Methodology

This study was based on a descriptive research design.

<u>Population and the Sample Group</u>

The population of this study was composed of people visiting the "Eating Enough, Eating Well and Having No Sickness" academic service project at **the Somdet Putthachan-Tho Foundation (To Pornhom Rangsi)**, Sikuew, Nakhon Ratchasima. The sample group was purposively sampled and comprised 135 people who were willing to participate in the "Eating Enough, Eating Well and Having No Sickness" academic service project at the Somdet Putthachan-Tho Foundation (To Pornhom Rangsi) in Sikuew, Nakhon Ratchasima, and received preliminary health evaluations with the following inclusion criteria: 1) Aged 15 years and up and 2) Ability to communicate in Thai.

Instrumentation

The instrumentation for this study was divided into scientific instruments and interview forms created by the researchers.

1. The scientific instruments consisted of instruments for measuring weight, height and blood pressure.

2. Interview forms were divided into the following two forms:

2.1 The personal data interview form consisted of data on gender, age, marital status, educational attainment, occupation, income and home.

2.2 The health condition interview form covered data on weight, height, body mass index, waist circumference, blood pressure levels, health history and chronic disease.

Protecting the Rights of the Sample Group

This research project was considered and approved by the Institutional Review Board on Research in Human Subjects of Boromarajonani College of Nursing, Nakhon Ratchasima.

Data Analysis

The researchers analyzed the data by using a computer program package and setting statistical significance at .05. Data were analyzed by using descriptive statistics in analyzing frequency, percentage, mean values and standard deviation to show the characteristics of the sample group and study variables.

Research Findings

According to data obtained from interviewing the 135 subjects in the sample group who provided all of the data, most of the subjects were found to be females (94 people) (69.6%) aged 50 – 59 years (59 subjects). Most of the subjects (50 people) (37%) had a weight ranging between 51 – 60 kilograms, the height of 151 – 160 centimeters (72 subjects (73.3%), a body mass index of 23.5 – 28.4 (73 subjects (54.1%) and normal blood pressure (118 people) (87.4%). The female subjects (67 people) were found to have waist circumferences of more than 80 centimeters and the male subjects (23 people) were found to have waist circumferences of more than 90 centimeters. All of the subjects had chronic diseases (100%) with most of the subjects (53 subjects (39.3%) having hypertension.

Discussion of the Findings

Body Mass Index

According to the findings, most of the subjects were found to be females (94 people) (69.6%) and were aged 50 – 59 years (59 people) with body mass indices of 23.5 – 28.4 (73 subjects (54.1%) and waist circumferences of more than 80 centimeters (67 people) (49.6%), thereby meeting the criteria for excessive bodyweight or obesity. The findings concurred with the study of Nichapa Lertchaipet (2010) who studied health behaviors and excessive bodyweight among the working age population of Kanchanaburi and found females to have higher rates of obesity than males (44.7% and 32.6%). For most females, obesity can be explained by housewife roles and duties with responsibilities to cook for self and family. When differences between the male and female genders were considered, females were found to achieve obesity more easily than males because the estrogen and progesterone hormones in women create cell to accumulate fat without metabolizing in preparation for pregnancy. Furthermore, pregnant women have to eat more, thereby causing weight to gradually increase, creating habits and preventing women from losing weight after giving birth. Consequently, women may have behaviors causing them to eat more than males. In addition, most of the women (40 people) (29.6%) were civil servants, which had job characteristics subjecting them to stress, fatigue and inadequate exercise, which may cause more females to have excessive bodyweight than males (Health Systems Research Institute, 2005).

Health Condition

According to the findings, most of the subjects were found to have body mass indices of 23.5 – 28.4 (73 subjects (54.1%) and waist circumferences of more than 80 centimeters (67 people) (49.6%), thereby meeting the criteria for excessive body weight or obesity. Furthermore, all of the subjects had chronic diseases (100%). Most of the subjects had hypertension (53 subjects (39.3%) with disease durations of no more than 5 years (76 people) (56.3%). The aforementioned finding can be explained in that most of

the subjects lived in urban areas rather than rural areas. Changing Thai social values have caused Thais in urban areas to have higher trends toward eating outside the home. In addition, the influence of advertising media by Western fast food manufacturers has altered dietary behaviors among Thais. Moreover, most of the subjects in the present study were aged 50 – 59 years (43%), an age when the subjects still have to work outside the home with more social activities. Consequently, most of the subjects ate outside the home and consumed foods with high fat content (Arantxa Colchero, Caro-Vega, & Kaufer-Horwitz, 2014). Therefore, excessive bodyweight or obesity was an important factor in the etiology of hypertension.

According to the findings, most of the subjects who had chronic diseases met doctors, received medications by appointment and exercised regularly. The aforementioned finding might be explained in that most of the subjects were educated at the junior high school level. Hence, the subjects were able to read and understand Thai with basic health comprehension and high accessibility to healthcare services because most of the subjects lived in urban communities with numerous healthcare service facilities. Each of the service provision facilities was located in areas with convenient communication and staffed with specialists to provide medical services with convenient opening-closing times. Moreover, some facilities might have had special clinics outside business hours. Services were offered at commensurate expenses in terms of service characteristics and quality. This enabled the subjects to access and use healthcare services with continuous care and treatment.

According to the findings, most of the subjects with excessive bodyweight or obesity were also observed to have hypertension. Hypertension can cause heart disease, stroke, paralysis and paresis, which increase the number of disabled persons, thereby creating familial, social and national burdens requiring high costs in caring for patients and treating complications from hypertension. Therefore, knowledge, recommendations and health promotion should be provided to create awareness of the dangers of being overweight or obese because excessive weight or obesity may lead to severe chronic diseases, which require a long treatment time. (Keding, Msuya, Maass, & Krawinkel, 2013). Patients should be promoted in caring for personal health in order to have continual and sustainable behavioral modification resulting in good quality of life in the future.

Recommendations

1. Community nurses should consider religious places to implement health promotion projects, interventions, or screening.
2. General and specific suggestions for improving health status, weight and blood pressure control should be documented and distributed to this population.

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Factors impacting nursing students on the difference of perceived levels of stigma from receiving counseling

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Abstract

The purpose of this research is to study the factors influencing the varying levels of perceived stigma during the counseling of 256 nursing students at Boromarajonani College of Nursing, Nakhon Ratchasima in 2011. The research tools used consisted of a questionnaire created by the researchers using Goffman's concept (1963). Testing for validity was at 0.88 and reliability using Coefficient alpha or Cronbach was at 0.74

The research found that the perceived levels of stigma during counseling for the nursing students were low ($\overline{X}$ =1.05, SD.= 0.39). The nursing students with the different ways of believe who did not see the benefit of a counseling service and sought alternative methods had statistical difference for the perceived levels of stigma (P value = 0.05). Nursing students who had used the counseling service and had benefited from it had a statistical difference in the perceived levels of stigma (P value = 0.05). Of the students questioned who had a difference of opinion on whether the service was of value to them or not had no statistical difference in the perceived level of stigma (P value = 0.05).
The results of this research will contribute and assist students who undertake counseling services.

Keyword: Stigma perception, Counseling service attending, Nursing students

Factors impacting nursing students on the difference of
perceived levels of stigma from receiving counseling

Background

Using a counseling service is one approach to seek helps and to solve ones' problems by an expert who has knowledge and counseling skills. These skills include the formation of a healthy patient counselor relationship built on communication and trust. The counselor uses his or her own judgments for decision-making and provides solutions to help guide and support both the mental and emotional needs of the patient. The counselor works in partnership with the client to provide solutions and manage the pros and cons of decision-making. By creating and providing practical advice through experimentation and providing self help advice, the client can move towards the path of happiness and be relieved of anxiety and suffering (Soundararajan, 2012).

Although a counseling service is an effective way to provide solutions for many, some choose to not take part in the process. There are several factors related to seeking psychological help from professionals such as demographic factors along with gender and age. It was found that gender influenced the decision to seek help. Female attitudes toward seeking help from a counselor were far greater than the ones displayed by men (Deane, Skogstad & William, 1999; Fischer & Farina, 1995). Individuals aged over 20 years old tend to have a better attitude towards seeking help and are more likely to seek helps than those who are in another age bracket. This may be because people in this age group are enrolled in college, and there is an easily accessible source of assistance than those in other age ranges (Vogel, Wester & Larson, 2007). Another factor that is important is the feelings of guilt or stigma associated with seeing a counselor. It is one of the many reasons that hinder the pursuit of psychological help from professionals. This is because there is a social pressure which reinforces the idea that seeking assistance from a counselor is a sign personal weakness. So the perceived stigma is just like a spike which does not allow the person to receive counseling as it produces the appearance of lowering self-esteem and display to others that they are having anxiety issues (Corrigan, 2004).

Goffman said that stigma is a social phenomenon on a characteristic or social inclusion in a negative manner which is not desired by the person. It is a reaction of individuals in society towards people who are different from others which can lead to bias, debasement, and devaluing. The sense of guilt or in this case, stigma can be seen in the relationship between what has referred to as a virtual social identity and an actual social identity. We have defined roles that we see as ordinary and natural. When an individual possesses characteristics that we see as not normal ordinary or natural, the person is then reduced in our minds and there in lies the gap between what is actual and what is virtual. So a sense of guilt (Stigma) is a gap between virtual social identity and actual social identity. It is expressed through the unsatisfactory behavior to other people in society. It is classified as an inappropriate image (Stereotype). Stigma has an effect on the individual and makes

them believe they are not equal or the same as the general public. Often these people are socially deprived and separated which can result in reducing the person's chances in life because they are often seen as socially outcast and undesirable and they carry with them a sense of shame self-loathing and condemnation (Goffman, 1963).

Nursing students who have been educated about mental health care are likely to be those who seek to help themselves when problems occur. However there are few people considered the counseling services of the college as an option (approximately 4% of all students) (Department of Guidance and Counseling, 2012). If one compares this to the results of the survey which considered the state of stress among nursing students at the college (which was approximately 83% of the students who answered the questionnaire), one can see that the services are underused (Kathalae, Treesaranuwathana & Sageamnaimuang, 2008). Although the amount of students to get a counseling service is at low, the reasons for this might be varied. Understanding the perceived stigma about counseling services for students helps to understand the problem allowing an implementation plan to reduce the barriers to counseling services caused by the perceived stigma of the client.

The objective of the research

This research aims to identify the factors that influence the differences in perception levels of stigma on the counseling service for nursing students of Boromarajonani College of Nursing, Nakhonratchasima.

Research Methodology

This descriptive research investigated factors impacting nursing students on the difference of perception levels of stigma about receiving counseling. The group consisted of 517 nursing students who were studying in year 1 – 4 at Boromarajonani College of Nursing, Nakhonratchasima in academic year of 2011. Stratified random sampling was applied to get 226 participations that were willing to join the study.

The tools used in this research consisted of 3 parts. Part 1 was the demographic data including age, gender, levels of education and religious affiliation. Part 2 was a questionnaire concerning the perception of the counseling services including 8 items that follow; 1) Knowing the information about the counseling services 2) Experience in accessing the counseling service 3) Satisfaction from the counseling service 4) The results of the service 5) Confidence in the service 6) Benefits of Service 7) The necessity of the services 8) The confidence agreed upon the way forward. Part 3 was a questionnaire focusing on the perception of stigma of counseling services. Both questionnaires were created by a researcher from a literature review using the concept of stigma from Goffman (1963). The validity of the questionnaires was verified by 3 experts. The validity levels were at .81 and .88 respectively. The reliability of questionnaires were at .82 and .74 respectively using Coefficient alpha or Cronbach.

The researchers protected the rights of the participants by giving them the right to accept or reject the research participation without any impact. All results were kept confidential and were presented for scrutiny in this manner. If the participants had any questions about the research they were able to contact the researcher at anytime. The participants need to sign their names or give verbal consent to participate in the research.

The data was analyzed by computer. The demographic data and the perception of counseling services were analyzed by using frequency, percentage, mean and standard deviation. Analytic statistic to test the hypotheses was chi - square.

Results

The majority of the participants aged 17 - 29 years. Mean age was at 20.06 years (standard deviation 1.44). Most of them were female (91.2 percent). 99.6 percent of the participants were Buddhist.

Most participants (88.5 percent) knew that there were counseling services at the college. 11.9 percent of the sample had used the counseling services. 60 percent were satisfied with the counseling service at moderate level. More than half of the participants (60.00 percent) felt relaxed at moderate level.

The samples (58.85 percent) felt confident in the counseling services of the College at a level defined as moderate. They (59.29 percent) thought that the counseling services of the college were helpful.

The participants (49.56 percent) informed that the department of the counseling services at the college should be provided at a level defined as moderate. They (74.34 percent) believed that the counseling services help individuals find the right choice.

The perception of stigma about counseling service for nursing students in overall was at a level defined as low ($\overline{X}$ = 1.05, S.D. = 0.39) Students who were believed in different ways of discoveries of alternative choices from consulting service had perceived stigma about counseling services at different levels of statistical significance (P < .05). Students who attend a consultation with the effect of the treatment on a different relaxation had the different level of perceived stigma about counseling services at a statistically significant level (P < .05). The different level of satisfaction of the counseling services had not made difference level of perceived stigma about counseling services at significantly statistical level (P < .05).

Discussion

The perceived stigma about counseling service for nursing students in overall was at a level defined as low ($\overline{X}$ =1.05, SD. = 0.39). The participants in this study were nursing students. Result of the perceived stigma of receiving counseling services was at a level defined as low ($\overline{X}$ =1.05, SD. = 0.84). This is consistent with the study measuring the guilt undergraduates felt who has had experience with the counseling services at a university. It was found that students were satisfied with such services they received and their perceived

stigma about counseling was at a level defined as low (Snyder, Hill, & Derksen, 1972). This may be related due to increased educational awareness of mental health issues and the understanding of the importance of counseling. The college has provided 1st year students information on the availability of counseling services on campus. Orientation is considered as one of the learning process that could result in recognition of the importance of the counseling services. Year 2, 3, and 4 nursing students are enrolled in a topic involving teaching and counseling. Also, year 3 and 4 nursing students are enrolled in a topic of that focusing on care to people who have mental health issues along with a topic on psychiatry. It may result in a better understanding of mental health issues and the importance of the counseling service. As a result, the perceived stigma of receiving counseling services at its lowest. By using methods that are consistent with the studies in an anti-stigma program education by both discussion and videotape found that there is a reduced level of stigma from the participants (Corrigan, Larson, Sells, Niessen, & Watson, 2007).

Although the overall level of perceived stigma was low, the details of which were felt to represent the first 3 perceived stigma of counseling service. As for the negative questions were: 1) I feel that people who blame those who received counseling services are more culpable party. 2) I feel that the counseling service is something that should not be disclosed to others. 3) I feel that the person who received counseling services is individual who is in trouble and needs help. The data shows that the stigma of counseling services of the student in this group may be related to the negative perceptions about the counseling services consistent with the theoretical concept of adaptation of Goffman. This concept was discussed about by rationalizing one's behavior by not excepting stigmatization but by accusing others of not having morals (Goffman, 1963). This negative perception about the counseling service will result in a stigma in counseling service. The obtaining of counseling services and the attached stigma surrounding it creates an environment where the participant thinks that others will consider them crazy and scary that people will hate them and consider them worthless (Arin, 2010).

Nursing students were divided into three groups, after analysis, who thought that counseling services would be beneficial. They were defined as sure it would be beneficial, not sure it would be beneficial and do not believe in any benefit. The three groups saw their perceived level of stigma statistically different at a level of .05. This is because the faith of the person's attitude is linked to social norms. This factor contributes to avoid seeking help or to request a consultation. Social norms, which are standards of those people, will affect people's attitudes. These attitudes come from family members and friends who are in the same society lead to role assignment and actions (Ajzen, 1991). Consistent with other studies that found that attitudes were associated with willingness to seek help (Arin, 2010; Frederick, 2011) and negative beliefs about mental health care is correlated positively with stigma and getting for help (Pietrzak, 2009).

The analysis of the factors affecting the different levels of perceived stigma of the students who had accepted counseling from the counseling services was divided into two issues.

1) The group which had undergone the same counseling session but had come away with different feelings of comfort and relaxation had the level of perceived stigma about counseling services at different levels of statistical significance at *P* value of .05. The experience of obtaining mental health assistance services had a direct influence on the intention to obtain mental health assistance from mental health profession students. The experience of seeing the counselor has an effect on the attitudes toward and likelihood of future consultations (Arin, 2010). People who had positive experiences of seeking help from the professional counseling had higher positive attitude and a willingness to seek help than those who had a negative experience of seeking help (Deane, Skogstad & William, 1999). Beliefs that impeded counseling service were related to the experience gained from the previous service. Those who had a stronger negative belief will have a negative experience from getting help especially beliefs associated with perceived stigma (Wilson, Deane, Ciarrochi & Rickwood, 2002). Individuals may lose their opportunities due to the stigma of mental illness. 3 kinds of stigma as a barrier to inspire individuals to seek mental health services include public stigma, self-stigma, and label avoidance (Corrigan & Wassel, 2008).

2) The group which had undergone counseling with different level of satisfaction had no significantly different level of perceived stigma about counseling services at *P* value level of .05. The satisfaction of the counseling services has no direct influence to perceived stigma because the perceived stigma involved with social norms (Ajzen, 1991).

Limitations of the research

This study examined a group of nursing students from only one college. The results of the study could not be a representative for the population of all nursing students. In addition, this study was cross-sectional. The results of the research has shown that people with belief that the service would be beneficial and are confident in its methods along with those who had different experiences in the results of the counseling service were the only two groups that had an impact on the differing levels of perceived stigma.

Suggestions

1. Continuing promotion of counseling services to students should be considered as a major component of orientation.

2. To coincide with the promotion of counseling services on campus, college should organize alternative promotions to make students aware of their mental health and to manage it appropriately.

3. Learning and teaching in caring of individuals with mental health issues because the knowledge that there is a perceived level of stigma in receiving mental health care and allow for an active exchange between students in awareness of the stigma to enhance their learning and encourage debate.

4. A continuation and further study of other factors that affect a person's willingness to receive mental health care.

Acknowledgements

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The Effect of Instructional Video Compact Physiotherapy of Cerebrovascular Accidents for Village Health Volunteers

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The Effect of Instructional Video Compact Physiotherapy of Cerebrovascular Accidents for Village Health Volunteers

Background

Cerebrovascular accidents (CVA), or paralysis, is a disease which is often found and has become an important global health problem. The World Stroke Organization (WSO) reports that Cerebrovascular accidents are the 5th cause of death in people who are 15-50 years old; the 2nd cause of death in the elderly. CVA results in six million deaths annually, or we could say least one person dies every 6 seconds (Nittaya et al, 2012). Additionally, the World Health Organization (WHO) and WSO found that in 2004 the number of global demographic which is approximately 15,000,000 are CVA patients, 5,712,240 died (8.6% in men, 11.09% in women) (Thidarat et al, 2014). Public health statistics in 2009 found that CVA is the 4th cause of death in Thailand; second to cancer, accidents and heart disease, respectively. In 2009 the statistics show that there were 13,353 CVA deaths; an average of 36 people a day or around 3 people die every 2 hours. The disease and death rate are steadily increased (Chadaporn, 2011). Thai demographic prevalence on this disease is approximately 690: 100,000 (Bureau of policy and strategy, 2014). The number of deaths from the disease is anticipated to increase with an upward trend of 17% in 2015.

CVA is a chronic disease, which needs continuous care because after being discharged from the hospital the patient still has pathophysiology, such as paralysis, resulting in dependent patients. Therefore, knowledge, close observation and taking care of the patient are required to help improve their quality of life. Village health volunteers become important in the role of caring for CVA patients in many ways because they live in the area of the patient; help can be delivered in time. Hence, well educated in health care for them consequently has an effective outcome of care. Moreover, CVA patients who have pathology change for long time and an increase in signs and symptoms may affect their ability in their daily life activities and exercises including complication of problems. Additionally, psychological health might also affect the cause of the chronic disease, and then rebound more seriously CVA. Regarding their recuperation period at home, rehabilitation, physiotherapy and exercise are strongly required. Lack of physiotherapy and exercise in a correct way, may cause complications. Planned physiotherapy and knowledge for patients and caregivers is an important role of nurses to help patients maintain their ability of appropriate activity and exercise. Most CVA patients who survive still have a disability.

Neurological Institute and Thai Stroke Society indicated that there are 240,000 Thai people with CVA. Furthermore, 10 million Thai people are at risk for CVA, especially individuals who have high blood pressure and diabetes mellitus. Each year people who survive, around 84,000, will be paralyzed. In addition, it costs 500,000 Baht a year to treat a patient (Bureau of Policy and Strategy of Ministry of Public Health of Thailand, 2014). Due to patients' lack of body movement and balance, daily life activities, learning, communication, behaviour and emotion, it could be said that CVA does not only has an

effect on the patient but also their family, community, development of national economy and society.

According to a survey of CVA patients in three villages in the Nong-Pra-Larn sub-district, there are 530 residences, with 2,371 people in the area. The survey found that there are 12 CVA patients - a left hemiplegia patient, 4 right hemiplegia patients, a paralysis patient and 6 stiff wrist patients. A conversation with 80% of the patients found that most of them never obtained rehabilitation resulting in their stiff wrists due to their problems with travel and expenses. Moreover, lack of health education knowledge, self-care knowledge and knowledge of physiotherapy also affected wrist stiffness. Therefore, researchers are interested in studying in physiotherapy video in CVA patients used for village health volunteers to transfer knowledge to the patient that aims to reduce stiffness wrist in an effective way, body rehabilitation to prevent redundancy disability and improve their quality of life.

Research objectives:

1. To compare the knowledge of village health volunteers before and after obtaining physiotherapy knowledge in CVA patient video is provided.
2. To compare knowledge of village health volunteers between intervention and control groups after physiotherapy knowledge in CVA patient knowledge video is provided.

Research hypothesis:

1. After obtaining the knowledge of physiotherapy in CVA patients, the knowledge on physiotherapy on CVA patients in village health volunteers increased.
2. Village health volunteers who are in an intervention group obtain higher scores of knowledge than the control group.

Variable definition:

Cerebro-Vascular Accident (CVA) patient means:

Patients who are diagnosed with CVA by a physician which brain vessel pathological with vessel constrict, rupture or obstructive cause of partial part or whole part of brain dysfunction consequence loss of ability to self-control which may still conscious or unconscious and hemiparesis. Additionally, the signs and symptoms still with patient after 24 hours and the patient must living in Nong-Pra-Larn sub-district, Muang district, NakhonRatchasima Province (Pajaree, 2004)

Village health volunteers mean:

People who are chosen by members of the village of Nong-Pra-Larn sub-district, Muang district, Nakhon Ratchasima Province and then attended a special course provided by the Ministry of Public Health. Then, they have an important role to act as a leader to improve health behaviour (change agents), promulgate health news, advice and disseminate knowledge of health, plan and coordinate with health provider responsible in the area to develop health activity in the village including health service - for example health promotion, public health surveillance and prophylactic and health aid (northeast resources and information training (esanphc. centre, 2011).

Instructional Physiotherapy knowledge of Cerebrovascular Accidents mean:

A process on instructional physiotherapy and skills practice to rehabilitate CVA patients at home presented in video form to understand rehabilitation and nursing care related to CVA for the caregiver, CVA patient working together while watching the video. The aim of the video is to improve both patient's and caregiver's quality of life.

Research conceptual framework

In this study the "Perception Theory" conceptual framework is used. Perception is the important basis of personal learning because the response to any behaviour depends on individual environment perception and individual ability to interpret that situation. Hence, effective learning will depend on perception factors and effective stimulation. The components of learning factors are senses and psychological factors such as previous knowledge, need and attitude. Additionally, three parts of the perception process are sensation, interpretation and emotion. Much research has found that the human senses are sight = 75%, hearing = 13%, touch = 6%, smell = 3% and taste = 3%. Therefore, learning aims to enhance perception-by-perception theory consequence sense perception 94%.

Independent variable	Controlled variable
Instructional video for village health volunteers	Knowledge before and after use the video

Methodology

This study is a quasi-experimental research. There are two groups; intervention and controlled groups to compare the results with pre-post-test design. Sampling consists of village health volunteers in three sub-districts in Nong-Phra-Larn sub-district, Maung district, Nakhon Ratchasima Province by randomly selecting 1 sub-district for the intervention group and another random 1 for controlled group. The criteria to choose the sampling are as follows: age 25 years and up, working for village health volunteers at least 2 years, appreciate to take part on the project, able to read and write Thai language, and own DVD player and television or electronic devices which are capable of opening the video at home. There are 35 participants in the intervention group and also 35 participants in the controlled group. Research instrument can be divided into 2 parts as following:

- Instructional Video for Physiotherapy of Cerebrovascular Accidents which researchers construct from data collected on physiotherapy by 3 professional physiotherapists and pathophysiologists.

- Data collection for general information instrument, questionnaire to collect general information compiled of 10 open-ended questions and 10 closed-ended questions. And 20 questions of pre and post-test in type of true-false test which researchers construct from information in the video which peer review by three professionals. Criteria of marks are; correct answer obtains 1 point whereas false answer obtains 0, statistic P-value on the test is 0.96.

Researchers collect data collection in both intervention and controlled groups during January 3, 2014 - February 28, 2014.

Ethical principle

Data collection will start after research proposal is considered and approved by ethical committee of Boromarajajoonani College of Nursing Nakhon Ratchasima. Then the letter asks for data collection permission will send to director of NongphalanTambon Health Promotion Hospital. The letter will introduce researchers and team, research purposes and research methodology and process also was explained. Village health Volunteers are able to apply or refuse to sign inform consent to take part as a participant. Although, they had sign inform consent, they are able to leave to take part of the study all the time. However, it does not affect to them in any aspects.

Data Analysis

Data analysis were analysed via SPSS computer program are as following;
1. Compare gap of the average score of pre and post-test to measure knowledge of physiotherapy in CVA patient which learn via the video, then statistic report will be interpreted in term of Dependent t-test.
2. Compare gap of the average score of pre and post-test to measure knowledge of physiotherapy in CVA patient which learn via the video between intervention and controlled groups, then statistic report will be interpreted in term of Independent t-test.

Results

1. The results identified 35 participants of intervention group sampling are all female. They are working as Village health Volunteers average 9.87 years ago. Average of age is 45.93 years old, 100% married. 23 participants Prathom (elementary school) graduated = 57.5%, average income 7,865 Baht/month. Most of them 26 participants = 65% without knowledge about physiotherapy for CVA patient and all of them = 100% without experience to do physiotherapy for CVA patient because they never CVA patient in their family.

2. In terms of controlled group, the result identified 35 participants, all of them are female who work for village health volunteers average 8.30 years ago, average of their age is 46.37 years old, 23 participants = 65.7% married 23 participants Prathom (elementary school) graduated = 57.5%, average income 7,865 Baht/month. Most of them 26 participants = 65% without knowledge about physiotherapy for CVA patient and all of them = 100% without experience to do physiotherapy for CVA patient because they never CVA patient in their family.

3. The average score in intervention group of knowledge on Instructional Video Compact Physiotherapy of Cerebrovascular Accidents after watching the video higher than pre-test on statistical significance at .00 (see Table 1).

4. The average score of post-test on knowledge on Instructional Video Compact Physiotherapy of Cerebrovascular Accidents in intervention group higher than controlled group non-statistical significant at .41 (see Table 2)

Table 1
Comparative between score of knowledge of Physiotherapy in Cerebrovascular Accidents patient before and after watching the video in intervention group (n=35)

Intervention group	Mean	S.D.	df	t	p-value
Before watching video	11.51	1.50	34	9.14	.00
After watching video	14.37	1.72			

Table 2
Comparative between score of knowledge of Physiotherapy in Cerebrovascular Accidents patient before and after watching the video in controlled and intervention group

Group of participant	Number of people	Mean	S.D.	df	t	p-value
Controlled group	11.63	.40	2.81	68	4.32	0.00
Intervention group	12.03	2.86	1.85			

Discussion

According to the research, this research aims to compare knowledge of village health volunteers in three sub-districts in Nong-Phra-Larn sub-district, Maung district, Nakhon Ratchasima Province before and after watching the video for physiotherapy in order to cerebrovascular accident patient. Moreover, this research further aims to find gap of score before and after watching the video in intervention and controlled groups in Nong-Phra-Larn sub-district, Maung district, NakhonRatchasima Province.

As the results, the hypothesis of this research can be explained as following;

1. After watching the video, the knowledge of physiotherapy for cerebro-vascular accident was increased. The mean of knowledge score before watching the video = 11.51, SD = 1.5 and after watching the video the mean of the knowledge = 14.37, SD = 1.72, statistic significant at .50. The video media is able to present clearly all steps of physiotherapy and easy to understand to explain benefits of each position of physiotherapy which affect to participants perception.

2. The intervention group of village health volunteers more obtained knowledge of physiotherapy for cerebro-vascular accident than the controlled group. Furthermore, gap of average score between intervention group and controlled group is 2.86 marks.

This research results is conformed to study of Anong Nilcomehang & Chalia Pimpun (2007) who was conduct the health promotion program to change health behaviour aim to reduce cholesterol in blood stream in staffs of Chainat hospital. The study found that use of motivation theory with group process and social support are effect on changing of health behaviour which consequence to decrease cholesterol level in blood circulation.

Additionally, study of Jaroonluck Pongchareon and Chunchai Maneewong (2011) found that results of program which used to prepare patients relative to provide health care to stroke patient before discharge from Chaoprayayommarat hospital, Supanburi province in intervention group had presented the readiness level of stroke's care giver in each aspects and in totally issues are in highest score of preparedness (X = 2.97, SD = .62) and (X = 3.20, SD. = .93) respectively. Moreover, different of average score of readiness in both sample groups are non-statistic significant at .05. In addition, the study of Darunee Jongudomkarn et. al., (2013) presents that the result of knowledge apply to practice: applied the model of family health nursing of KhonKhan university to knowledge and attitude into practice to prevention duration and rehabilitation to stroke patient found that average score of the knowledge and attitude level in practice role to prevention duration and rehabilitation to stroke patient in family leader after workshop higher than before workshop statistic significant (p < .001).

Suggestion to research apply

1. For nursing care

Health provider should use the video in this research to provide information for village health volunteers and cerebrovascular accident patient's care giver.

2. For administration

In monthly conference health provider should pass on knowledge on cerebrovascular accident disease and care to village health volunteers.

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The Power of Living in the Present Moment among Diabetics

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Abstract

'Living in the present moment', a Buddhist concept, was applied in this research. This concept urged the patients to cling neither to the past nor the future as well as to be mindful of their body, feelings, consciousness, and mental objects.

The purpose of the study was to develop 'living in the present moment' model and to evaluate the power of 'living in the present moment' in terms of physical and mental results. Non-participatory action research was used. The participants were 17 patients who purposively selected.

The developed model consisted of Camp 1-3. The three camps were composed of 6 main activities and 16 sub-activities.

Regarding the physical results, Standard Deviation of 'Before Camp to Camp 3' of waistline (6.40 to 6.32), body weight (11.15 to 9.88), BMI (3.81 to 3.32), SBP (6.52 to 10.83), and DBP (11.87 to 8.82) had changed and improved significantly. The mean of FPG value was also changed considerably (from 184.82 on the first day of Camp 1 reduced to 172.52 on Camp 3).

The mental results revealed that the treatment helped the patients to gain self-awareness and self-realization ('Yonisomanasikara'), as well as, knowledge and hospitality from others ('Kalyanamitta'). They also let go of their clinging and attachment to their physical and mental oppressions. This helped the patients to relieve their daily pain, fatigue, insomnia, and diabetes-related complications.

About 75% of all patients were able to overcome lifestyle modifications. Therefore, implementation of the model should be expanded and utilized in other diabetic centers. The model should also be expanded to pre-diabetes.

Keywords: *living in the present moment, lifestyle modifications, diabetes control*

The Power of Living in the Present Moment among Diabetics

Introduction

The number of people with diabetes continues to increase every year, especially in low- and middle-income countries (WHO, 2012). Unfortunately, Thailand is inevitably moving towards assuming the burden of this health problem as well. According to hospital records, the number of diabetic patients admitted to state hospitals has dramatically increased by 4.02 times within 10 years (from 1999 to 2009) (Ministry of Public Health, Bureau of Policy and Strategy, 2012).

In case of Pak Thong Chai Hospital, the statistics found that diabetes is the second ranking diseases. The first ranking disease is cancer; the third ranking disease is hypertension. Moreover, the number of diabetic patients is increasing every year. As of October 2012, 2761 people had diabetes at Pak Thong Chai Hospital (Pak Thong Chai Hospital, 2012).

Common causes for diabetes include patients' poor eating habits, lack of aerobic exercise, anxiety, and stress. Most patients who are unable to control their mind and behavior tend to consume heavily without thinking, which is a crucial risk factor for diabetes. Additionally, once diagnosed with high blood sugar levels, they choose to increase their medicine intake instead of decreasing their sugar intake. As a result, the cycle of oppression is unbreakable, and the patients continue to assume the risk of diabetes-related complications (Ministry of Public Health, 2012).

The process was intended to encourage the patients' knowledge base, attitudes, and behaviors. Therefore, the purpose of the study was to develop 'living in the present moment' model and to evaluate the power of 'living in the present moment' in terms of physical and mental results of diabetic patients, Pak Thong Chai Hospital, Nakhon Ratchasima.

Objectives of the study

There were two objectives of the research as stated below:
1. To develop 'living in the present moment' model.
2. To evaluate the power of 'living in the present moment' in terms of physical and mental results.

Materials and Methods

This research was a non-participatory action research. Participatory observation, focus group discussion, and in-depth interviews were conducted.

Population and Participants

The population was type II diabetic patients both male and female attending Pak Thong Chai Hospital. They were residents of Northern Pak Thong Chai subdistrict zone, Pak Thong Chai district, Nakhon Ratchasima province. The number of population was 119 people. (Pak Thong Chai Hospital, 2012).

The participants were 17 purposive sampling of Type II diabetics. The criteria used to select participants did not take into consideration their gender, education, or duration of illness. The participants' diabetes treatment included oral hypoglycaemic drugs and/or insulin therapy. Before participating in the research study, Fasting Plasma Glucose (FPG) levels higher than 130 mg/dl were found at least twice consecutively in a monthly check. The participants ranged in age from 40-70 years, agreed to attend the diabetic camps (Camps 1-3), and did not have any serious diabetes-related complications such as chronic renal failure or diabetic retinopathy. They did not require knowledge about 'living in the present moment' prior to joining the diabetic camps.

Methods of the study

The research methodology was as follows:

1. Study Buddhadhamma under the scope of the Tipitaka and the Theravada texts that relevant to 'living in the present moment' based on the Bhaddekaratta Sutta and the Mahasatipatthana Sutta.

The Bhaddekaratta Sutta teaches us not think about the past because it is already gone, and the future is not yet come. Only this present moment is exist and real. Thus, we should do our best in the here and now to cultivate and to see the ultimate truth (Nannamoli Bhikkhu and Bodhi Bhikkhu, 1995: 1419-1420).

The Mahasatipatthana Sutta teaches us to be mindful of our body, feelings, consciousness, and mental objects. Whatever arises, they are subject to come and go, to pass and decay. Therefore, nothing should be grasped. (Walshe, 1995: 335).

2. Prior to developing the model, the sample's characteristics which included the participants' socio-demographic, physical and mental illness status, as well as their Primary Care Unit information were collected and synthesized. This was done in order to assess the patients' problems and needs. At this stage, information from in-depth interviews and focused group discussions were collected from 13 of the 17 participating diabetic patients, and from 5 nurses and 5 volunteers who worked with the patients.

The questions are 1) experiences of confronting with diabetes, 2) lifestyles modifications that have impact from diabetes in terms of mindful eating, and exercising, 3) pleasant mind and coping with stress, 4) individual problems solving skills and coping with diabetes both physically and mentally, and 5) needs analysis for promoting diabetic patients' health both physically and mentally.

3. Create an integration model by applying the principle of living in the present moment (from 1) and synthesizing the data (from 2) for coming up with a conclusion that enhances the power of living in the present moment among diabetics. The developed model was based on the Deming Cycle (Plan–Do–Check–Act).

- Planning by synthesize patients' problems and needs in terms of physical and mental illness, conduct meetings and discussions with related teams, and set up schedule.

- Doing by conduct activities for 17 purposively selected of diabetic patients for three times (Camp 1-3). The time length of conducting the activities is approximately one month.

- Checking reliability and validity by rearranging a model and confer a seminar for a developed model by scholars and specialists in order to solve problems, share contributions, and come up with recommendations.

Scholars and specialists are 1) Phra Paisal Visalo whose mission is to empower the people, 2) Mae Chee Sansanee Satrirasutta practices on the path of living in the present moment, 3) Medical Doctor Ruchira Mangklasiri has direct experience in conducting diabetic camps with similar characteristic participants, 4) Medical Doctor Sakawdien Numsangkul has experience in caring and conducting research for diabetic patients, and 5) Assist. Prof. Ratana Rujirakul has direct experience in working with the community in Nakhon Ratchasima province.

Acting the developed model in accordance with Camp 1-3. The first camp was conducted over 3 days and 2 nights (6-8 May 2013). The second and the third camps were day camps (31 May 2013 and 28 June 2013 respectively).

During acting the developed model, the activities were adjusted and applied in accordance with the patients' needs, context, and situation at a particular time.

4. In order to assess the effectiveness of the model, two categories of data were collected: 1) physical results and 2) mental results.

1) Physical results were gained from quantitative research. The physical results included:

(1) Waistline measurements
(2) Body weight (BW)
(3) Body Mass Index (BMI)
(4) Blood Pressure (SBP and DBP)
(5) Fasting Plasma Glucose (FPG) levels

The statistics used are expressed by using mean ($\bar{x}$), Standard Diviation (S.D.), Dependent One-Sample T-Test. Prior to do the data analysis, Shapiro-Wilk W test was used to test the normal distribution of the data because the participants were less than 30 cases.

2) Mental results were gained from qualitative research by conducting in-depth interview and focus group discussion.

The mental results included:

(1) Lifestyle modifications in terms of eating: food consumption and medicine intake, exercising, and emotion.

(2) Accomplishment of living in the present moment in terms of their pleasant mind and coping with stress.

The questions used were the same as in 2. They were 1) experiences of confronting with diabetes, 2) lifestyles modifications that have impact from diabetes in terms of mindful eating, and exercising, 3) pleasant mind and coping with stress, 4) individual problems solving skills and coping with diabetes both physically and mentally, and 5) needs analysis for promoting diabetic patients' health both physically and mentally.

The data collection was tested credibility, truth of findings by triangulation. The researcher used the revision techniques. That was asking the same questions with different times and places. Additionally, there were a team of researcher who helped to do data collection both by in-depth interview and participatory observation.
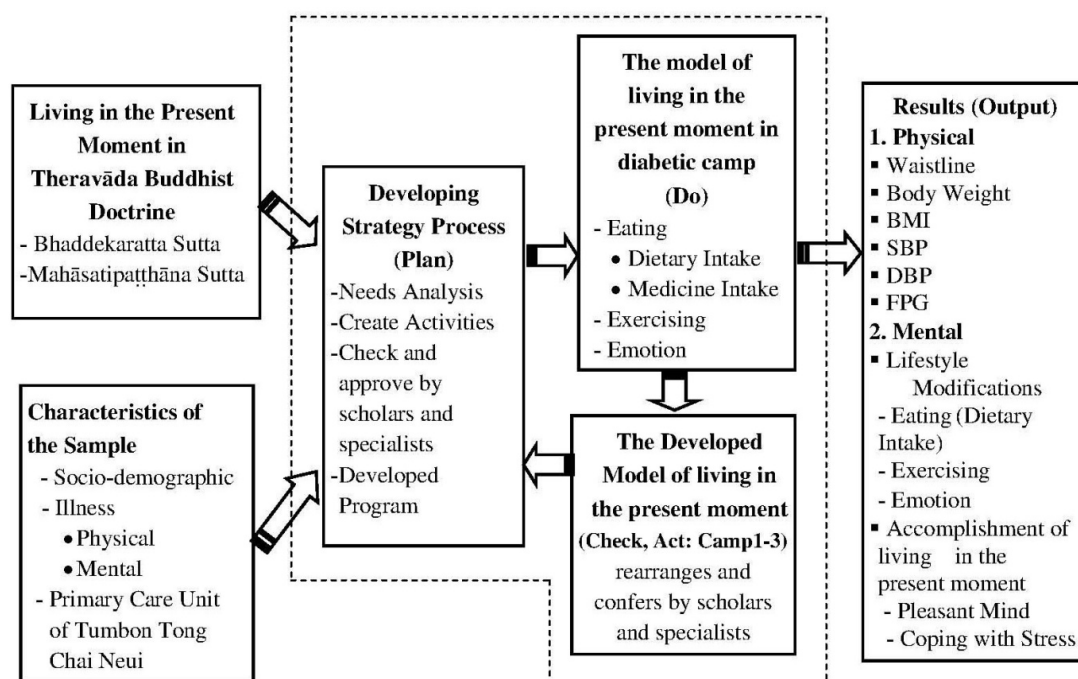
Chart 1
Conceptual Framework

Ethical considerations

This study was approved for the protection of participants by the Ethical Clearance on Human Rights by the Institutional Review Board, Maharat Nakhon Ratchasima Hospital Ethics Committee prior to its commencement. Further, permission and written consent were obtained from all participants. The certificate of approval number was: 010/2013.

Results

According to the first objective, to develop 'living in the present moment' model, it found out that the developed model was consisted of Camp 1-3. The first camp was conducted over 3 days and 2 nights. The second and the third camps were day camps. Six main activities and 16 sub-activities were held in the research camps. All activities are shown in Table 1.

Table 1
The activities of the developed model

Activities	Sub-Activities
1. Participatory Learning	1) Raising Awareness of Diabetes
	2) Food Exchange
	3) Fasting Plasma Glucose (FPG) monitoring
2. Total Relaxation	4) Group Total Relaxation
3. Movement Exercise	5) Sanctband Exercise
	6) Yoga
4. Counseling Therapy	7) Group Counseling Therapy
	8) Individual Counseling Therapy
5. Meditation	9) Bell of Mindfulness
	10) Flowers Bloom
Chanting	11) Salutation to the Buddha, Dhamma, and Sangha
	12) the Bhaddekaratta Sutta
	13) the Sutta on extending loving kindness
Dhamma Talks	14) Life leads by the Eightfold Path
6. Walk Rally	15) Greed Awareness
	16) Hatred Awareness

Regarding to the second objective, to evaluate the power of 'living in the present moment' in terms of physical and mental results, it found out as follows:

Table 2

The participants' socio-demographic information

Socio-demographic information	Number (Person)	Percentage (%)
Gender		
Female	16	94.12
Male	1	5.88
Age (Years)		
>40-49	4	23.53
>50-59	5	29.41
$\geq$60	8	47.06
Marital Status		
Married	13	76.47
Single	0	0
Widowed, Divorced, Separated	4	23.53
Number in Family (Persons)		
<3	8	47.06
4-5	5	29.41
$\geq$ 5	4	23.53
Duration of Diabetes Mellitus (Years)		
0-5	8	47.06
5-10	2	11.76
>10	7	47.18

1. Physical Results

Table 3

Paired Samples Statistics of Before Camp and Camp 3

Physical Results	$\overline{X}$	S.D.	t	Sig.
Waistline				
Before Camp	92.60	6.40	3.601	.003*
Camp 2	89.33			
Camp 3	90.00	6.32		
Body Weight				
Before Camp	68.93	11.15	2.469	.027*
Camp 2	67.23			
Camp 3	66.87	9.88		
BMI				
Before Camp	26.59	3.81	2.320	.036*
Camp 2	25.98			
Camp 3	25.80	3.32		

Physical Results	$\overline{x}$	S.D.	t	Sig.
SBP				
Before Camp	135.80	6.52	2.689	.018*
Camp 2	130.93			
Camp 3	127.20	10.83		
DBP				
Before Camp	82.67	11.87	.367	.719
Camp 2	79.47			
Camp 3	81.33	8.82		

* Sig. < .05 indicates that the difference is statistically significant at the .05 level.

According to Fasting Plasma Glucose (FPG), it was analysed by using mean ($\overline{x}$) as shown in Table 4.

Table 4
Fasting Plasma Glucose (FPG)

	Fasting Plasma Glucose (FPG)				
	Camp 1			Camp 2	Camp 3
	Day 1	Day 2	Day 3		
$\overline{x}$	184.82	184.529	168.176	175.176	172.529

From Table 3 and Table 4, they can be seen that most of the patients were able to reduce their 1) waistline measurement, 2) body weight, 3) body mass index, 4) blood pressure (SBP and DBP), and 5) Fasting Plasma Glucose (FPG) levels during the 'Before Camp' and 'Camp 2' sessions. Their figures significantly improved during this period. On the contrary, during 'Camp 2' to 'Camp 3', some of the patients' figures were not their best value at the end of 'Camp 3'.

Overall, there was an improvement in the physical well being of most patients. At the end of the research about 75% of all the patients were able to manage their diabetes through the adoption of a healthy lifestyle.

2) Mental results
Most patients made a big determined effort to modify their lifestyle. The patients provided the following commentaries about their experiences.
1) Lifestyle Modifications
- Eating (Dietary Intake)
It was one of the main causes that the patients' need to pay caution to themselves. Thus, most patients have changed their lifestyle on eating habits.

From the in-depth interview, Patient F, aged 53, was the representative.

She said "I have a mindful eating. I eat more veggies, and avoid fatty foods… I try to have only vegetables in my meal. I also cut down on my portion. What is too much, I make it less"

Another participant, Patient K, aged 61, declared as follows:

She said "I've changed my eating habits. One day my granddaughter gave me a piece of mango, it was a Barracuda mango. She told me it was not too sweet, and encouraged me to have some. I took a bite and spitted it out. I had to restrain of myself, otherwise my sugar level would go up. No more mango and no more sweets for me. Only veggies, chilli, and fish are okay. My granddaughter used to buy me a soft drink. Now I told her not to, I stop drinking sugar-sweetened drinks. "

- Exercising

All of the 17 patients had been staying motivated to exercise regularly. Here are some success stories.

Patient L, aged 52, was the representative. She said "I do a resistive exercise band exercise every day. I lie down and stretch every parts of my body. I break out in a sweat after the workout."

As a result of exercising, the patients revealed that their daily pain was relieved by doing exercises. In this case Patient N, aged 61, was a representative. She said "Exercise helps me to relief my pain. I choose the one that are safe and appropriate for the elderly such as sitting, stretching, pulling and extending arms forward and backward."

- Coping with Emotion

Patients also gained an improvement on their emotion. They could deal with their life much better than before. Patient F, aged 53, said "I am happy in my mind. I have a good night's sleep. I get along with my husband...Before I joined the camp, I used to be unhappy. Now I don't mind anything. I miss my daughter… she's in Bangkok. I told her about my camp activities, including my blood test, my dietary intake, my chanting routine. She asked me if there will be another camp, she wanted me to join… I've been thinking about a lot of things, and I let them go. During the day after I done my housework, I take a nap in a garden. My husband takes a nap too. There is nothing between us… I try to practice 'Living in the Present Moment' in my life and watch my mind goes."

From the statement, it can be seen that, once the patients knew how to manage their emotion, her weariness was replaced by good sleep. Diabetes related complications were also relieved.

2) Accomplishment of Living in the Present Moment

- Pleasant Mind

In addition to coping with emotions, the outcome of happiness among diabetes patients are much better than before. During 'Camp 2' focus group discussion, they have rated their happiness on a 1-10 scale. If one is not happy, use a 0. As the numbers get higher, they stand for happier state one can get. A 10 means it is the happiest one have ever had. There was only one (out of 17) patient that rated oneself a 9, and the rest evaluated themselves a 10. They were also shared their happiness as follows:

As Patient I, aged 42, stated:

"I'm so grateful that I joined with this camp. I brought back useful tips to take care of myself. I'm very happy that my sugar level is going down. I would like to thank all the camp team for your support."

Another example, Patient E, aged 64, stated:

"My mind is delighted. Even though I'm sick, I'm not worried about it. I don't think about anything too much. I'm happy. I'm fortunate."

Once the patients are happy and cherished, they are also a great source of inspirations to others as well, especially their love ones and families, including spouse, children, and relatives. Patient P, aged 54, stated an inspiration story:

"I've let down and detached myself from a lot of things. Once I return home, I free my mind from my children. I'm not worried what he or she is doing, or when he or she will come home. Now I have a good night's sleep. I go to bed whenever I feel sleepy… I've been thinking about what I've learned from the camp. There is no use for me to be worried, because it's just made me misery. So it's better for me to let go of my thoughts… Before I used to call my husband and ask him where he is. Now I don't call and ask for him anymore. Since my husband knew that I stop looking for him, now he doesn't really go anywhere and stop drinking too."

- Coping with Stress

The diabetic patients learn how to manage their stress by practicing 'living in the present moment'. The more they are in the present moment, the more they can manage their stress. Patient B, aged 44 revealed that "If there is no stress, my sugar level won't go up. Now I can let my mind goes free of thoughts for a little while, but not all the time as yet. I can't stop thinking, I'm working on it though. Sometimes I think about other people, now I know I should be concerned about myself first. I'm very anxious when I'm going to die."

In conclusion, there were two factors that helped the patients to cope with their diabetes. The first was the internal factor, 'Yonisomanasikara'. The patients gained proper consideration, self-awareness, and self-realization, and learned right understanding and right mindfulness from the camp activities. The second was the external factor, 'Kalayanamitta'. The patients received great support from their friends. These friends helped the patients to improve themselves in a variety of ways.

Discussion

'Living in the present moment' has increased the patients' physical and mental well beings. The patients' energy, peace, and joy were demonstrated in their higher degree of mindfulness of their dietary intake, exercise, and coping with their emotions. As a result of lifestyle modifications, they were able to cope with their diabetes. (Ministry of Public Health of Thailand, 2013: 23-24).

This concept correlates with the Buddha's teachings, "the mind is the forerunner" (Nyanaponika Thera and Bodhi Bhikkhu, trans., 2010: 7). That is, mind is the most dominant factor and when people's minds are intended, accepted, and inspired they will be prepared to carry out whatever actions are required. They had a chance to take a break from their burden, pressure, and hardship.

According to the 6 main activities and 16 sub-activities, they were provided new input information for the patients. At the same time, the old storage information especially all the bad memories and situations that they had faced in life were also encouraged to forgive and forget. For instance, the 'Problem Solving Counselling and Therapy' session was developed. The important part in this session was the 'Alms Round Distress' activity, which involved giving out all the distress one have in life as an act of virtue. This activity helped to enrich patients' mind to be stress free and relaxed. The patients were able to discover their own feelings, more open minded, and got rested during the research camps. Being present can dramatically reduce stress and increase happiness. (Sinakrittaya, 2010: abstract).

In *neuroscience*, this can be explained in terms of body and mind connection. This connection affects to the brain and the neuron system. Normally, human beings receive message from the external world into the brain system emotionally rather than intellectually. We tend to think negatively, influenced, shaped, and painted in accordance with our past history. The positive thinking can be created by practicing continuously until brain created new 'synaptic change'. This made us to receive message from the external world intellectually. Then, right thinking occurs. (Hayward and Varela, 1992: 182-186). This mindfulness practice is called the practice of 'living in the present moment' (Nhat Hanh, 2002: 24-25).

As they watered the positive seed of self-awareness, they were being kind to their body and mind. The diabetic patients were determined to monitor their dietary intake, exercise routines, and coping with their emotion. Once negative thoughts occurred, the patients were able to acknowledge them and, with wisdom, transform them. These are the results of 'living in the present moment'. (Phra Brahmagunabhorn (P.A. Payutto), 2007: 702-703; Dalai Lama and Chan, 2005: 63). Then, this leads to the positively physical and mental power of 'living in the present moment' among diabetic.

Conclusion

The results of the study shown that 'living in the present moment' helped to improve the quality of life of the diabetics, and helped them to both maintain their physical, mental, social, and spiritual well-being. The developed model provides different kind of activities to help patients with their lifestyle modifications. These helpful sessions have offered; 1) Knowledge, 2) Total Relaxing, 3) Movement Exercise, 4) Problem Solving Counselling and Therapy, 5) Meditation, Chanting, Dhamma Talks, and 6) Walk Rally, to diabetes patients. As a result of this research, the concepts and activities from this study should be expanded and utilized in other diabetic centers. For further benefit, the model should be developed for pre-diabetes patients as well and launch as a long-term strategic plan.

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Spiritual Support: Media's Responsibility in an Aging Society
Case Study of "News Decodedd"

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Abstract

After decades of rapid economic growth, China has been increasingly confronted with the aging society issue. The unique one-child policy and unbalanced development between the urban and the rural have brought drastic changes in Elder Care. The lack of elder care professionals and the deceased-single-child families have attracted public attention through media reports. Increasing concerns of elderly emotional care are considered as a good sign for Chinese society. To treat elders well **is the new goal** to achieve of high quality life. Nevertheless, the improvement of qualification of media reports has been limited by many factors, such as the incapability to resolve complex issues, the lack of applicability of recommendations, the short of professional reporters. Governments and medias need to work together to turn the slogan of respecting elders into actions. Journalists should learn experience from their foreign peers and deliver the new approaches and ideas of respecting elders to the entire society, to enhance the quality of lives of elders and to create a better public opinion environment. High-quality news coverage will play an important role in the improvement of quality of elders' lives.

Key word: Spiritual Support, aging society, Responsibility

Spiritual Support: Media's Responsibility in an Aging Society
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With the rapid economic growth, China has been getting rid of the lack of material poverty, but not yet s*piritual* poverty .As traditions lasting thousands of years are quietly changing, our parents are no longer able to enjoy the way of being respected like their parents did. They cannot enjoy the joy of "four generations under one roof" and "grandchildren playing around" every day. As of 2013, there was over 200 million of Chinese aged over 60, which is 14.9% of the Chinese population. China is the country with the largest population of elders in the world. In Chongqing city (where I live), the aging population is gradually increasing. As of 2013, there were 6.25 million elders aged over 60, which is 18.61% of the total population in Chongqing. Most of China is on the way toward aging society, which has become a new issue in China.

In1996, China promulgated the "People's Republic of China Senior Protection Law". The provisions of Article XI of this law: "Supporters have the obligation of providing economic support, life care and spiritual consolation for the seniors, to fulfill the special needs of the aged." "Spiritual consolation" mentioned in this law is colloquially called spiritual support by law practitioners and sociologists. The essence of spiritual support is to meet the spiritual needs of the elders. It includes three areas of needs: self-esteem, expectations and family love. Spiritual support is not only the responsibility of family members, but also the responsibility of the whole society. [1]Each senior belongs to not only his/her family, but also the whole society. To make the elders happy is the responsibility of both society and media.

In spite of the emotional needs of elders, the media used to pay more attention to them only during the Chung Yeung Festival (Chinese Seniors' Day), Chinese New Year and other traditional festivals. But two years ago, the promulgation of "People's Republic of China elderly Protection Law" completely changed this situation. In the following, I will use the cases in "News Decoded" show of Chongqing TV as examples to analyze this situation.

1. Spiritual Support behind Lens

Since July of 2012, the show named "News Decoded" has been the only show focusing on the latest social affairs in Chongqing TV. So far, the show has broadcast 16 episodes about spiritual supports for the seniors. As a studio guest, I have been involved in 4 episodes of them.

(A) "Going home" needs legislation?

On June 26, 2012, the seventh meeting of the Chinese Eleventh National People's Congress deliberated the "People's Republic of China elderly Protection Act (Amendment Bill)" for the first time. The Article XVII of this draft says: Family members should pay attention to the spiritual needs of the elders, should not ignore or neglect the elders.

Supporters who are not living with their elderly parents should constantly visit or send regards to their parents. Accordingly, the employer of these supports should provide for the fulfillment of the latter's rights so that they have vacation to visit their parents.

Although this provision was full of human warmth, and it was trying to turn spiritual support into reality, its weakness was captured the episode of "The Legislation of 'Coming Home'": Young people who are making a living far from home hardly have any vacation for visiting their parents. Both money and time problems make it difficult for them to live around their parents. This was the first time "News Decoded" discussed the topic of spiritual support. In July 2013, after the official implementation of the amended Act, cases of parents demanding their children to visit them appeared in Jiangsu, Sichuan, Chongqing and other places. Media's focus sparked heated debate in the society. The later episodes of "News Decoded": "How can I honor my parents," "Have you come home today?" The prohibition of 'NEET group' ", continued to explore this topic.

(B) Deceased-single-child family and Disability Family

In the early eighties of last century, hundreds of millions of Chinese young parents responded to the national One-Child policy. However, the some of these families have subsequently lost their only child, which tends to leave them in deep anguish. China currently has more than one million families that have lost their only child. Although the phenomenon of loss of independence is not new, as it relates to re-examining the current family planning policy, media coverage should be particularly cautious. Until July 14, 2012 CCTV's the program named "The deceased-single-child families" was the very first time to report this group publicly and it had resulted in domestic television media follow-up. In October 2012, "press decoded" broadcast "The pain of deceased-single-child family", the beginning of which showed Qin Jinglan, a mother, so grave and crying. She said: "God is not fair, why give a son to me only to leave us the elderly behind." Parents of deceased single child are particularly worried about going to hospital or nursing home, which in some circumstances woudl not accept them without signature of child.

In addition, Qin Jinglan's husband is disabled and depends on her for his daily care. The numbers of disabled elderly like him in China amounts to 10 million. "Care for Both Ends of Life" and "Who Will Take Care of the Elder?" featured the loss and pain of the deceased-single-child families and disabled-senior families.

(C) The Loneliness of Left-behind in Rural China

Public facility construction in rural areas is far behind that in the cities, and the majority of the rural elders are least educated, therefore the elders in rural China have been practically ignored. When Chinese coastal cities opened up, thousands of Chongqing Rural youth migrated to the Pearl River Delta, the Yangtze River Delta to make a living, and their parents stay in the countryside. This practice still continues. If all this means that the problem of food and clothing for the elderly population has been solved, they have to experience the anguish, which their grandparents did not.

When the rate of urbanization increased, young people left the countryside, wife and children, the parents stay in the countryside. "Wenlong Chronicle" is about the story of a man named Wenlong in a Chongqing village, who left the elderly, women, children behind. Reporters documented after the Spring Festival through the eyes of the helpless wife Liao Zexiu. A detail in this program was particularly memorable: As the neighbor family have left the village for work, Liao Zexiu's ducks settled in the main room of the neighbor's house. In left-behind villages, with the lack of young people, the problem with support for senior is not a matter of quality but often times that there is no support available at all. And yet, the decay of the rural coupled with the exodus of the young makes the problem particularly thorny.

(D) Indispensable Social Life

Noise of Square Dance is a hot topic in China nowadays. The noise is too loud for nearby residents and business. Behind the noise, it reflects the elderly groups need social life and yet government is just into high GDP but elderly emotional needs. "Do not let the square dance turn into " square violence ","" Stop the Noise "," "Aunt" is tagged behind" This three programs told the community, Square Dance is not only a dance for fitness, but also for communication. However, in today's China, it is hard to find a free place. "Who will take care of elders?" told the successful and pity stories of Community of Dadukou District.

"Nursing home must be built where the terrain is flat and requires at least 500 square meters of land," says Li Yongshu, a worker at a nursing home in Dadukou District of Chongqing. And a place like that is hard to find in the city. And building new branches of nursing home, if without the support from higher levels of government, is almost impossible." Elderly Adult College is not only a good place for learning knowledge, but also a place to make new friends. In "Lonely Alarm", there was uncle Zhao whose children work in Beijing. In order to find someone to talk with after divorce, he even called emergency number for over 1500 times within a year!

Media should look into the many problems the elderly emotional needs, which is a manifestation of China's social progress. We found problems in the elderly emotional needs. Most important is not only what problems we can find, but the courage to address the problem. To treat elders with respect will be one criteria of high quality of life.

2. Media's Responsibilities

Officials and civilians tend to use the term "facing" when discussing aging society. Instead of making empty gestures, we should have asked ourselves: Are we prepared? What do our media people need if we want to help improving the life quality of elder people?

(A) Improve Analytical Abilities

Who can take care of this old man raises a question of why community nursing houses are difficult to approach and proposes that government get involved. With population aging issue often related to policy, industry and health-care, it requires media reporters to develop their interpretive ability on policies. For example, old couples that lost their sole child sought for solace in temples, a story prompting not only assessment on one-child policy but also religious controversy. To choose words carefully and narrate properly is a great challenge to the reporters of *News Decoding* and anchors like me.

Don't forget your parents in digital age tells a story of elder people trying to catch up with trends of new media by learning to use instant message apps like QQ and WeChat. In the story, while the children are patient with teaching their parents, the latter are found to feel uncomfortable with obstacles like blurry texts and fussy designs. Such technology gap blocks the communication between youth and elder.

The story, it seems to me, could have taken a step further to raise the question why are these elder people unable to use Internet and smart phones? Why haven't the government and electronic producers meet their needs?

(B) Ensure the Feasibility of Proposals

News Decoded features a commentary section for prospecting and proposing possible solutions to the issues discussed. Of course, not all successful foreign experiences can be applied in China's actual conditions.

It is reported that certain countries would encourage young people to live with elder people within the community. Given the rocketing price of real estate in today's China, which makes it increasingly hard for one to provide housing for both parents and children, the solution is in fact nearly impossible. In my estimation, it might exacerbate the frustration among viewers if such "solution" is frequently mentioned. A same issue occurred after the episode "Not Empty Nest but Empty Heart". It is found that most nursing houses only provide care for the physical well being of the seniors but ignore their mental condition. Without trained paramedics, the nursing service can only satisfy the most basic needs. Furthermore, with the lack of geriatric nursing training in vocational schools, the labor market is unable to meet the domestic demand for aged nursing. At such a point of time, if we keep talking about how highly qualified American nursing staff are, we could further dampen the spirit of the seniors who are already feeling frustrated.

(C) Forge a Professional Reporting Team

1. Stabilized Team

Since the media always underestimates the complexity of news reporting related to elder people, News Decoded doesn't have a stable reporting team. The 16 episodes that have been aired so far were produced by 8 different production crew--- a loosely organized team would surely impair the continuity and depth of reports on elder people. That media should give more attention to news on elder people is a commonplace rhetoric, however, the government must translate commitments into concrete action and meanwhile social media should make greater efforts on it.

2. Reading, Writing and Sharing Skill

On average, the directors of News Decoded are no more than 35 years old. A generation gap seems to exist between them and their subjects. One of the reporters told me that the most difficult problem of such interviews is to communicate with elder people. Many news reporters are unfamiliar with the world of elders. To avoid this, young reporters should do more reading about aging society. Secondly, timely reflection would be good for sharing experiences among colleagues. Essays written by Chinese reporters often limit themselves to program scheming and market positioning. Two essays written by Li Fuchen of CCTV which impress me most are "The Ethnic Review on TV Program Scheming about Elder People", and "Reviewing the Spectacle Perspective and Future Development of Programs on Elder People". When talking about the future of such programs he wrote: "When we 'purified' the room in which old groups live, minimizing and weakening the binds, contradictions and collisions between youth and elders, we narrow the room of spectacle for elder people shows which made them a pure world of white hairs…"[2] Thus he points out the problem of lacking adolescence in elder people shows.

The foreign TV news story that impressed me most was about the Japanese centenarians in 100-meter races, which is covered each and every year. But other aspects are rarely reported and there is a lack of systemic translation. Over this past summer, I watched a news story on how certain Japanese nursing staff train with a specialist from France. There was a discussion about how best to lift a feeble man, and I was very impressed that it was emphasized that, lifting a senior lying in bed by pulling the arm would be inappropriate, because that would make him/her feel him/herself as being treated as a weak person. Such delicate approach to respect the personality is what Chinese nursing facilities lacks. Media should transfer such new ideas and practice of respecting the old to our society. After all, we want our aging society to enable everyone in it to live gloriously and die with dignity. High quality reports on elder people will throttle the high quality living standard of elder groups.

There is a pattern that the lens of China's media today tends to picture seniors as weak and stubborn. TV workers should take the responsibility to shoot the smile of elder people. Certainly a society needs "happy sunny elders", but it depends on how much sunshine we cast on them.

Appendix

Brief introductions of episodes of "News Decoded" mentioned above[3]

Date	Title	Main Content of The Show	Producer and Director
20120710	The legislation of "coming home"	Written in law, supporters who are not living with their elderly parents should often visit or send regards to their parents. The employer of these supports should guarantee the rights having vacation to visit their parents in accordance with relevant regulations. Legal provisions also encourage family members to live with or close to the seniors of their families, to provide conditions for seniors to move with their spouses or supporters, to help other family members taking care of seniors. Some experts say, although it is a Chinese tradition to respect and love the elderly, the wording of legislation of "coming home" should be deliberated carefully.	Jia Zhang, Ke Ma
20120917	Who will provide for the aged?	Parents of the first generation of "the only child" are getting into old age, the situation of one couple supporting four seniors are facing by more and more families. Is that possible to let the communities taking care of the aged parents? Community elder security has been projecting for 10 years, is it really possible in China? how much love and fund is needed?	Jia Zhang, Ke Ma
20121023	Those who lost their only child	Family planning is one of China's basic national policies. Since 1980s, hundred millions of Chinese parents have followed this policy and had only one child. Unfortunately, some of them lost their Only Childs and have been living in pain.	Jie Xiong De'wei Li

20130305	The story of Wenlong Village	In China, the revenues of farming are inadequate for living, so labor force in countryside flows to cities, and the works of farming are only handled by the seniors. Young migrant workers leaving their hometown and going to cities to work is one of the most special phenomena in China, which makes the aging problem in Chinese countryside more severe.	Jie Xiong, De'wei Li
20130812	The problems of Chinese nursing homes	disputes, arson, why did these tragedies happen in nursing homes, where aged people should live joyfully and peacefully? From support capacity to service conception, what kind of problems are being faced by Chinese nursing homes?	Lu'lu He, Xiang Wang
20131128	Do not turn square dance into vilence	Square Dance is a unique Chinese entertainment activity: aged people dance in squares to the music, and this entertainment makes them feel that their lives are getting better. But neighbors constantly complain that the music is too load and disturbing. Recreation and relaxing, different needs are creating conflicts.	Lu'lu He, Xiang Wang
20140320	Parents in the digital age	According to statistics of CNNIC, there are more than 6 hundred million netizens in China; 5 hundred million of them are getting online through mobile phones. But for the seniors, learning how to use Internet is beyond their capabilities. As supporters, how could they fix this problem for their parents?	Lei Wang, Cong Wang
20140611	How to contain the noise of square dance?	"Baba dance" is the Chongqing's version of square dance, and it shares the same problem of square dance: it makes too many noises. Yangjiaping business district is trying to formulate regulations of Baba dance, to harmonize each party.	Kai'wen Li, Xi Liu

20140729	Why are Chinese "Damas" being labeled?	making noises by doing square dances; lacking of public awareness; fighting for giveaways in supermarkets; rush to purchase gold in Wall Street – these are public images of Chinese "Damas". Last year, "dama", meaning middle-aged women, was included into Oxford Dictionary. And "Damas" have become a special group of people in Chinese society. Why are the Chinese damas being labeled and discussed by all?	Lei Wang, Cong Wang

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FACTORS INFLUENCING THE 21st CENTURY SKILLS OF THE NURSING STUDENTS.

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Abstract

The 21st century skills are hot issues in education today include nursing education. Therefore the nursing educators try to seek how the student gain new knowledge and skills that suitable to live in 21st century, then we should know what the factors that influence the 21st century skills in nursing students due to adjust the didactic strategy for them.

Objectives

This research aimed to study 1) the learning factors of nursing students. 2) the 21st century skills of nursing students 3) the relationship between the learning factors and the 21st century skills of nursing students and 4) the predictor variables to the 21st century skills of nursing students.

Methods

The stratified random sampling were use to collect 320 nursing students in academic year 2013 at Boromarajonani college of Nursing, Chakriraj. The Questionnaire was used for collect data. The IOC was use for validity. The reliability by Cronbach's Alpha Coefficient was 0.96 and 0.98. The data was analyzed by frequency, percentage, mean, Standard Deviation, *Pearson* product-moment *correlation,* and multiple regressions.

Results

Of 320 nursing student enrolled in the study. 94.7% were female and 5.3% were male. The learning factors were at high level ($\bar{x}$ = 4.01). The 21st century skills of nursing students were at medium level ($\bar{x}$ = 3.94). The learning factors were correlated with the 21st century skills of nursing students at the significant level 0.01 (r^2 = .761) The predictor variables were self directed learning, learning motive, and teaching quality. All three predictor variables explained approximately 60.8% of the variance in the 21st century skills of nursing students (R^2 = .608, adjusted R^2 = .605), was a statistically significant predictor. The predictive equation were wrote: Skill = 49.452 + 1.710 SDL + 1.383 Motivation +. 552 Teach

Conclusion

The results suggest that self-directed learning is high influence to promote the 21st century skills of nursing students. Then the nursing educator should be aware in design teaching –learning style that promotes Self directed learning. Furthermore how to promote learning motive is essential for nursing student not less than the quality of teaching.

Key words: *21st century skills, Self directed learning, nursing students*

FACTORS INFLUENCING THE 21st CENTURY SKILLS
OF THE NURSING STUDENTS.

Background

Today "21st century skills" have recently become watchwords in Thai education. As we know The Partnership for 21st Century Skills (P21) has developed a vision for 21st century student success. These skills are a set of abilities that students need to develop in order to succeed in the future**.** (Partnership for 21st Century Skills, 2009). In the context of complexity, nursing and nursing education have been changed not only the nursing student's skills but also health care delivery and professional issues to nursing. Nursing educators must be prepared to confront the challenges associated with the education of nurses. Pokpong Chanvit and Supanut Sasiwutiwa (2013) stated that the education system should be able to create a powerful capability for each student to have the 21st century skills for living in modern society. According to Wicharn Panitch (2013) stated that higher educators need to reform education to keep pace with the stream of changes and to prepare students for the 21st century skills, The essential skill are reading, writing, arithmetic's, creativity & innovation, critical thinking, and problem solving, cross-cultural understanding, collaboration, teamwork & leadership, communications, information & media literacy, and career & learning skills. So the nursing educator should emphasize on developing necessary students 'skills to navigate the health care system, including the ability to services and to make healthy decisions.

Furthermore the establishment of the ASEAN Socio-Cultural community in 2015 affect to Thai people as The ASEAN citizens. Since the ASEAN citizens' attribute include lifelong learning, potential in science and technology, access to training, innovation and opportunity to equal access to human development (Chalemlaph Tongaht.(2013). Entering the arena of ASEAN, not only prepare language but be prepared the skills to work with others in order to stay on the differences of ethnicity, religion. Or can be said that a new generation must learn to live together under a multicultural society with happily enough. Within context of change, Society requires nurses with knowledge and abilities to practice in the future including critical thinking and ability to work under different culture of people who receive the services It is important to reflect on how educators define new approaches to the preparation of professionals (Kramer, 2005) between 2009- 2013 the Thai nursing curriculum has been developed according to many changes that occurred. Laddawan Waisuriyasing and Supawadee Nopparutjinda (2011) stated that the goals of nursing education are develop the potential for students to self directed learning, critical thinking skills, problem solving and clinical decision making. According to Kanjana Tana and Sirirat Nittayawan (2013) stated that Thai nursing education has been changed both curriculum structure and teaching – learning model in order to promote the student to reach the capacity in nursing practice, analytical thinking, critical thinking and clinical judgment. However, we found that some studies have reported that the ability of critical thinking in nursing

students still moderate (Chanta prumnoy et.al, Somkiat Suthirat and Pachanee Somkamlang including the readiness of self directed learning,(Surapan pnomlit et.al.) Additionally, a follow up study on the satisfaction of the supervisor to graduates from Boromarajonani College of Nursing, Chakriraj in 2013 and 2014 revealed that knowledge and cognitive skills were moderate level (kuluedee jittayanun, 2012)

For the reasons mentioned above, the researchers considered the question: "how do we know that nursing student are prepared to practice capably according to social need, and can work as the knowledge worker or learning people that suitable with the context of 21st century. In taking up this question the researcher interested to study factors influencing the 21st century skills of nursing students in order to find out the appropriate model to develop the nursing student's skills

The purpose of the study

The purpose of this study was to describe the factors influencing 21st century skills of nursing student. Specific objective included:
1. Describe the learning factors of nursing students.
2. Describe the 21st century skills of nursing students
3. Explore the relationship between the learning factors and the 21st century skills of nursing students
4. Explore the predictor variables to the 21st century skills of nursing students

METHODOLOGY

Conceptual framework

The conceptual framework of this study believes that The nursing students who perceived learning factor including learning behaviors, learning motivation, self directed learning, teaching quality, relationship among friend, learning environment and climate in learning situation will have 21st century skill.
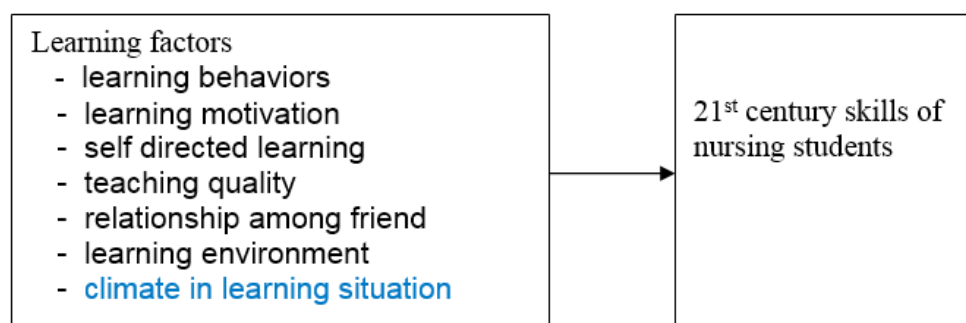
Figure 1
Conceptual framework of the study

Method

The research design of this study was quantitative and used stepwise multiple regression analysis to measure the relationship of the learning factors as predictive variables to the dependent variable, the 21st century skills of nursing student.

The learning factors include the learning behavior, learning motivation, self-directed learning, and relationship among friends, teaching quality, learning environment and climate in learning situation.

This research was carried out from April 2014 to September 2014 in College of nursing Chakriraj, Ministry of public health, Thailand. Population was nursing student's year 1-4 in academic year 2013. The samples were selected by stratified random sampling to collect 320 nursing students. The instrument used in this study was questionnaire that formulate from reviewing literature about learning factors and 21st century skills, The IOC was use for validity. And the questionnaire was tried out with 33 nursing students. The reliability by Cronbach's Alpha Coefficient was 0.96 and 0.98. After approval by the Ethics Committee of College of nursing, Chakriraj and give the participants informed consent before taking part in a study.The data were collected.

Data Analysis

Data regarding the dependent variable and the predictive variables were analyzed using frequency, percentage, mean, standard deviation, *and Pearson* product-moment *correlation.* Factor predicting the 21st century skills of nursing student were tested by using stepwise multiple regression analysis after all the assumptions of multiple regression including normality of distribution, linearity, homoscedasticity were met.

The result

Table I shows that the samples were 320 nursing students. A majority of the sample was female (94.7%) and 5.3% were male. Also, a majority of the samples were 2st year student (39.06%). 22.5 % were 3rd year student. 20.63 % were 4th year student and 17.81 % were 1st year student. A majority of the sample had grade point average between 2.51-3.50 (86.56%). 12.19% had grade point average less than 2.50. Only 1.25% had grade point average more than 3.51. (See Table I)

Table I

frequency percentage of the sample (n = 320)

Personal data	(n = 367)	Percentage
Sex		
male	17	5.31
female	303	94.69
Total	320	100.0
Year 1	57	17.81
Year 2	125	39.06
Year 3	72	22.50
Year 4	66	20.63
Total	320	100.0
Grade point average		
> 3.51	4	1.25
2.51- 3.50	277	86.56
< 2.50	39	12.19
Total	320	100.0

Table II showed the mean score for the learning factors of nursing students were at the high level ($\bar{x}$ = 4.01 sd. = 0.16) of the six dimension of learning factors, Relationship among friends had the highest mean scores, ($\bar{x}$ = 4. 26, SD.= 0.53) follow by learning motivation ($\bar{x}$ = 4. 11, SD. = 0.48) the lowest was Learning environment ($\bar{x}$ = 3.79, SD.= 0.58) (see table 2)

Table II

Mean and standard deviation of the learning factors of nursing students

	N	Min	Max	Mean	Std. Deviation
Learning Behavior	320	2.00	5.00	3.84	.54
Learning Motivation	320	2.46	5.00	4.11	.48
Self Directed learning	320	2.00	5.00	3.96	.51
Relationship among friends	320	1.63	5.00	4.26	.53
Teaching quality	320	1.93	5.00	4.04	.52
Learning environment	320	1.70	5.00	3.79	.58
Climate in Learning situation	320	1.00	5.00	4.07	.53
				4.01	0.16

Table III show the 21st century skills of nursing students were at high Level ($\bar{x}$ = 3.94, SD..11) 0f the nine dimensions 0f the 21st century of nursing students, Career & learning skills had highest ($\bar{x}$ = 4. 16,SD. = 0.46) follow by collaboration, teamwork & leadership ($\bar{x}$ = 4. 08, SD.=0.53) the lowest was writing Skill ($\bar{x}$ = 3.79, SD.=0.64) (see table 3)

Table III

Mean and standard deviation of the 21st century skills of nursing Students

	N	Min	Max	Mean	Std. Deviation
Reading Skill	320	1.67	5.00	3.84	.65
Writing Skill	320	2.00	5.00	3.79	.64
Arithmetic's Skill	320	1.33	5.00	3.81	.69
Creativity & innovation	320	2.83	5.00	3.94	.54
Critical thinking and problem Solving	320	2.20	5.00	3.89	.54
Cross-cultural understanding	320	2.00	5.00	4.00	.54
Collaboration, teamwork & leadership	320	2.50	5.00	4.08	.53
Communications, information & media literacy	320	2.44	5.00	3.99	.53
Career & learning skills	320	2.93	5.00	4.16	.46
				3.94	0.11

Correlation was conducted to examine the relationship between the learning factors and the 21st century skills of the nursing students. As can be seen each of the learning factors were positively and significantly correlated with the 21st century skills of the nursing students at the 0.01 level (r =. 616, .716,729,554, .581, .532 586 (show in table IV)

Table IV
The relationship among the learning factors and the 21st century skills Of the nursing students

The learning factors

Learning Behavior	Pearson Correlation	.616(**)
	Sig. (2-tailed)	.000
Learning Motivation	Pearson Correlation	.716(**)
	Sig. (2-tailed)	.000
Self Directed learning	Pearson Correlation	.729 (**)
	Sig. (2-tailed)	.000
Relationship among friends	Pearson Correlation	.554(**)
	Sig. (2-tailed)	.000
Teaching quality	Pearson Correlation	.581(**)
	Sig. (2-tailed)	.000
Learning environment	Pearson Correlation	.532(**)
	Sig. (2-tailed)	.000
Learning Climate	Pearson Correlation	.586(**)
	Sig. (2-tailed)	.000

**. Correlation is significant at the 0.01 level (2-tailed).

The Table V shows that Self Directed Learning was the first variable can predict the 21st century skills of the nursing students. The second variable was learning motivation and the third Variable was teaching quality. The multiple regression was .780 and the predicting variables could explain the 21st century skills of the nursing students at 60.8% Std. Error of the Estimate was ± 16.024

Durbin-Watson was between du to 4-du (1.57 < d=2.010 < 4-1.57) A value near 2 indicates that means accept Ho, or no autocorrelation. (See table V)

Table V
Multiple Regression stepwise method

Variables	R	R²	R² Change	SE	F	p-value	Durbin-Watson
SDL	.729	.532	.532	17.464	361.415	.000	
SDL , motivation	.770	.593	.061	16.307	47.743	.000	
SDL , motivation, teach	.780	.608	.015	16.024	12.291	.001	2.01

Table VI showed that three factors were significantly predicting 21st century skills 0f nursing student. Beta values showed self directed learning had a strongest predictive power ($\beta = .38$, p <.01) followed by Learning motivation ($\beta = .34$, p <.01) and Teaching quality ($\beta = .16$, p <.01). Overall, all predictors could explain 60.8% of variability in the 21st century skills of nursing students. Std. Error of the Estimate was ± 16.024 (see table VI)

Table VI
Multiple regression analysis of factors predicting 21st century skills of nursing student (n=320)

Predictive variables	B	β	T	p-value
Self directed learning	1.71	.38	6.59	.000
Learning motivation	1.38	.34	6.05	.000
Teaching quality	.55	.16	3.51	.001
Constant = 49.43 SE.= ± 16.02 r^2 = .608 F= 12.29 P-value = .001				

skill   = 21st century skills of nursing student
SDL   = self directed learning
Motivation   = learning motivation
Teach   = teaching quality

Now that a model to predict 21st century skills of nursing students could be write down use the raw score model to compute the predict scores

The multiple linear regression equation is as follows:

Skill   = 49.452 + 1.710 SDL + 1.383 Motivation +.552 Teach

Results

Of 320 nursing student enrolled in the study. 94.7% were female and 5.3% were male. The learning factors were at high level ($\bar{x}$ = 4.01). The 21st century skills of nursing students were at medium level ($\bar{x}$ = 3.94). The learning factors were correlated with the 21st century skills of nursing students at the significant level 0.01 (r^2 = .761) The predictor variables were self directed learning, learning motive, and teaching quality. All three predictor variables explained approximately 60.8% of the variance in the 21st century skills of nursing students (R^2 = .608, adjusted R^2 = .605), was a statistically significant predictor. The predictive equation were wrote : Skill = 49.452 + 1.710 SDL + 1.383 Motivation +.552 Teach

Discussion

The first objective of this study was to describe the level of learning factors among student nurses in College of nursing, Chakriraj. The result indicated that the mean score of the learning factors of nursing students were high level. of the six dimension of learning factors, Relationship among friends had the highest mean scores follow by learning motivation and the lowest was Learning environment . This mean relationship among friends **is** quite strong, the nursing students who came in nursing curriculum must live together in the dormitories in the college. Then the relationship among friend had influenced on them, According to Ladaporn tongsong and tanimporn (2013) found that learning behavior, friend in class, environmennt in dormitory had positive related with nursing achievement in pediatrics nursing subject. The second objective of the study was to describe the 21st century skills of nursing students. The result indicated that the mean score of the 21st century skills of nursing students were high level) 0f the nine dimensions 0f the 21st century of nursing students, Career & learning skills had highest, follow by collaboration, teamwork & leadership, the lowest was writing skill. Obviously the nursing student concern about career & learning skills. It may be nursing student study both theory and practice. And most of them learn in small group especially when they practice on ward. And practice to give nursing care as one of health team. Then career & learning skills and collaboration, teamwork & leadership is quite strong. The third objective, explored the relationship between the learning factors and the 21st century skills of nursing students it revealed that the learning factors were positively and significantly correlated with the 21st century skills of the nursing students at the 0.01 level, indicating students with higher scores on these scales were expected to have higher scores on the 21st century skills. According to Arkom Posuwan and Supaporn Wornarum (2006) found that learning behavior had direct affected to achievement of nursing student and teaching quality, learning environment had indirect effect to achievement of nursing student. The forth objective was to explore the predictor variables to the 21st century skills of nursing students. With stepwise multiple regressions the model showed that self-directed learning was the first variable could predict the 21st century skills of the nursing students. The second variable was

learning motivation and the third variable was teaching quality. The multiple regressions were .780 and the predicting variables could explain the 21st century skills of the nursing students at 60.8%. that mean the self directed learning are necessary for nursing student to create 21st century skills .

Conclusion

The results suggest that self-directed learning is high influence to promote the 21st century skills of nursing students. Then the nursing educator should be aware in design teaching –learning style that promotes Self directed learning. Furthermore how to promote learning motive is essential for nursing student not less than the quality of teaching. Moreover the educators should promote the learning environment and climate in learning situation. It will support the nursing student to create their learning motivation.

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An Empirical Study of the Impact of Media Use on Trust in Government in College Students

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Abstract

Trust in government is the key to maintain social stability and promote the efficiency of government in power. Clarifying the factors conducive to trust government can help government develop targeted strategies to enhance public trust. In China, the media is not only the main tool to spread government-related information but also the major image builder of government. This thesis take college students in Shanghai as the main object, based on media use behavior, used the questionnaire method to research the trust in government in college students through two dimensions including average daily using time of media and media dependent. The results showed that college students' education, age, average daily using time of the broadcast, the attention of official website and microblog of the local government significantly affect the degree of trust in government in college students. Thus, the researchers put forward some suggestions to promote trust in government. On the on hand, government should strengthen the construction of new media platform of local-government from three aspects: staff allocation, interaction among different new media platforms and interaction between traditional media and new media, On the other hand, government should take government-experts proactive policy discourse coalition at public events.

Key Words: *media use, trust in government, average daily using time of media, media dependency*

An Empirical Study of the Impact of Media Use on Trust in Government in College Students

Trust in government is an important prerequisite to maintain social stability and promote economic development. In recent years, many survey showed that public trust in government has decreased. Promoting trust in government has become an urgent national needs at all levels of government. In China, media is the main image shaper of our government and an important communicator of public policy. In particular, the birth of the network make the amount of information exponentially increases, and media construction become the main dependent that public understanding the real world. So the research of relationship between the media and the trust in government has practical significance for government to communicate with the public through media, shape governments' image and enhance public trust. College students are the backbone of nation-building, and this group's evaluation of the trust in government largely determine the future of our governments' mass base. In view of this, the research take college students as the main object, examined the relationship between media use and trust in government, and the researchers hope to provide reference for government to use the media platform to enhance public trust.

Literature review

Trust in government is an important part of political trust and it's the key prerequisite for maintaining social stability. Trust in government is a two-way interaction between citizens and government, involving specific relationship among citizens, government systems and public value, and it is the trust of political system, government agencies, government decision-making and government officials of the public based on their perception of rational, practical perception, psychological expectations, and emotional factors (Liu Junxian, 2009). Basically speaking, trust in government including four dimensions: trust in agencies, trust in officers, trust in public policies, and trust in institution. During the study, some scholars placed all dimensions of trust in government in a variable and researched the whole trust in government; but some scholars believe that we should study every dimension of trust in government respectively, which is the main point of this study, and this paper mainly explore the factors on trust in government agencies. From the broad sense, the main parts of government agencies including administrative organization, prosecutors, courts and other departments.

With the advent of mass media, the public construction of the world is mainly depended on the media. In 1960s, Gerbner proposed "Cultivation Theory" that the content of television violence strengthened degree of public awareness of the environmental hazards (Guo Qingguang, 2011). In 1990s, Newman summarized the characteristics of methodology of media constructing reality from the perspective of the relationship between reality and media. Although he stressed that the reader (viewer or listener) is a positive actor and emphasized interaction of the public and the media, he still believed that public constructing

reality through media during interactive process (Jiang Genyuan, 2013). In the society with a higher degree of information explosion that formed by the Internet, public awareness of society is more dependent on a variety of media, especially in the process of public awareness of government. Due to the special nature of media in our country, media in most cases and most public cognitive of government activities constructs the image of our government and policies are also derived from the media. According to the definition of trust in government, public cognition is the premise of evaluation of trust in government, and therefore media construction has a greater impact on public trust in government.

By researching literatures on the relationship between trust in government and media use, we found that perspective in this research field changed from media content to media use. In the initial study on the media and trust in government, Kimberly Gross etc. focused on the impact of television content on the political trust and they mainly researched the relationship between positive and negative information and political trust. The results showed that negative news form public negative perception of government (Kimberly Gross etc, 2004). Miller and other scholars from the angle of newspaper content, the results showed that readers who have read contents with more critical messages would have less trust than those who have read contents with less critical massages, while reading the reader more negative information on government less confidence reading is below negative information readers (Miller, 1979). And then the perspective has gradually shifted to the media use. At first, the scholars mainly studied the effect of traditional media on trust in government, the findings indicated that audience who were more likely to depend on the television would have a less trust in government than those who depend on the other media (Robinson, Michael J, 1976). In recent years, the network has been widely used, the research perspective gradually shifted to the comparative study of the impact of traditional media use and the Internet use on trust in government. At the level of media use, Media-system Dependency theory has made scholars paid attention to the dependency of access to information. Media-system Dependency theory was originally proposed in 1976 by Melvin • DeFleur and Ball-Rokeach. This theory is similar to the Uses and Gratifications theory, and the former said that the audiences depend on media information to meet their needs and achieve their goals (Gong Xinqiong, 2011). Scholars usually investigate channel from which public obtain information to measure their media-system dependency. When a medium meets the needs of audience, the audience will increase the probability of obtaining information from this medium. Scholars believed that different media brought different satisfaction (Wang Huaichun, 2009), and the audience's dependency on media platform is decided by dual factors: message provided by media and the audience's needs. The amount of research of relationship between media dependency and trust in government is less. Among them, the research of effect of media dependency on social trust, political trust, interpersonal trust conducted by Yao Junxi,etc. has provided support for our research. We explored the relationship between media dependency and trust in government in depth.

Hypothesis and methods

Relevant literature showed that there is a correlation between media content, average daily using time of media, media dependency and trust in government. In the respect of average daily using time of media, the results indicated that the using time of television was negatively correlated with trust in government. At the same time, the average daily using time of the Internet had a negative correlation with the trust in government (Yao Junxi, 2014). In the respect of media dependency, the current studies mainly measured the access to information, and the results showed that media dependency has a strong predictive ability on trust in government (Yao Junxi, 2014). Therefore, in this study, researchers set the media use as an independent variable which was divided into two dimensions: the general media use behavior (average daily using time of television, newspapers, radio, magazines, the Internet), access to information dependent (main access to get information in public events; government official media attention); the college students' degree of trust in government was set as dependent variable (university students using the questionnaire on the "government" of the overall level of trust value). The study put forward hypotheses as follows:

H1: The average daily using time of television, newspapers, radio, magazines are positively correlated with trust in government;

H2: The average daily using time of the Internet is negatively correlated with trust in government;

H3: The frequency of social media use is negatively correlated with trust in government;

H4: The attention of governments' official media platform shows a significant positive correlation with trust in government.

This study used the questionnaire survey method and take college students in China as main respondent. The questionnaire was designed, distributed, recovered by Social Survey Center in Shanghai Jiao Tong University. During the process of designing questionnaire, the research team consulted extensive literature and the questionnaire reviewed by experts to ensure scientificity and validity of questionnaire. Questionnaires were issued in 13 universities in Shanghai and each university was randomly distributed 200 copies. At last, 2,467 valid questionnaires were recovered and the effective rate was 94.9%.

Status of Students' trust in government

Trust in Government including multiple dimensions. This study mainly evaluated trust in government agencies of college students in Shanghai. From the vertical dimension, trust in government including trust in central government and local government; from the transverse dimension, trust in government including the degree of trust in the police, parliament, judicial, political, educational, health and other institutions (Wang Tao, Chen Xiaohua, 2012). The main findings are as follows:

In the public events, trust in government of college students is relatively low

Statistics showed that when a public incident occur, only 15.9 percent of students trust government; 40.6 percent of students trust the litigants of events and this percent is the highest; 17.7 percent of students trust experts and 17.0 percent of students trust media. The level of trust of college students in public events was demonstrated relatively low, 28.8% of students said they do not trust anyone.

From the vertical dimension, degree of trust in the central people's government was higher; from the transverse dimension, degree of trust in procuratorate was the highest.

Survey results showed that 37.7 percent of college students who more likely to trust government, 12.6 percent of college students who more likely to distrust government. The mean of overall students' degree of trust in our government agencies is 3.28. Through analyzing the degree of trust in different departments of government, we found that from the vertical dimension, the mean of degree of trust in the central government (3.66) was higher than the degree of trust in local government (3.14); from the transverse dimension , according to the mean of degree of trust in descending order: the Procuratorate (3.51), the Court (3.49), the National People's Congress of the People's Republic of China(3.44), the National Committee of the Chinese People's Political Consultative Conference (3.39), the public security department (3.31).

Table 1
The mean of trust in various departments of government

	N	min	max	mean	Standard deviation
Central government	2399	1	5	3.66	.929
local government	2390	1	5	3.14	.920
NPC	2365	1	5	3.44	.952
CPPCC	2352	1	5	3.39	.968
Procuratorate	2359	1	5	3.51	.874
Court	2367	1	5	3.49	.888
public security department	2373	1	5	3.31	.915

Factors affecting college students' trust in government research
The correlation between daily using time of media and trust in government

The results showed that **daily using time** of radio and the Internet significantly affect the degree of trust in government of college students, while daily using time of newspapers, television, magazines impact on the degree of trust in government. The frequency of social network use also has no significant impact on trust in government.

Through correlation analysis between average daily using time of newspapers, radio, television, magazines, the Internet and degree of trust in government of college students, chi-square test results showed that average daily using time of broadcast is

significantly associated with trust in government of college students (P=0.082, sig<0.001), and there is a significant positive correlation between them, the longer broadcast daily use, the higher the degree of trust in government of college students. Average daily using time of the Internet is also significantly associated with trust in government of college students (P=-0.043, sig<0.05), but two variables showed a significant negative correlation, the longer the Internet daily use, the lower the trust in government of college students. Most of students interviewed use the Internet in 1-5 hours everyday, in which 20.4 percent of students use the Internet in 2-3 hours. Students' average daily using time of newspapers, television, magazines have no significant impact on trust in government. In addition, there is no significant correlation between frequency of social media use and trust in government. The result of correlation analysis between the frequency of bulletin board system (BBS), microblogging, we-chat use and trust in government showed that there is no significant correlation between the frequency of the three social media use and trust in government.

Table 2
Correlation analysis between frequency of media use and trust in government of college students

		Newspaper	Broadcasting	Television	Magazine	The Internet
Trust in government	Pearson Correlation	0.027	.082**	.020	.033	-.043*
	sig（2-tailed）	.199	.000	.352	.121	.037
	N	2258	2225	2217	2227	2364

** p < 0.01, two-tailed test.

* p < .05, two-tailed test.

The impact of access to information dependence on trust in government

5.2.1 News media become the main way to obtain information in public events; access to information by way of government departments and experts have a significant impact on trust in government of college students.

When public events occur, college students mainly obtain information through the news media and it accounts for 75.9 percent; 49.3 percent of students obtain information through mobile phone news client; 44.2 percent of students choose microblog, 30.6 percent choose we-chat; 30.1 percent choose BBS, 23.1 percent choose friends and family. Fewer students obtain message through government and experts, accounting for 9.7 percent and 4.5 percent.

ANOVA results showed that the mean of trust in government of students who obtain information by government departments (3.55) is significantly higher than those who don't obtain information by government departments (3.12); the mean of trust in government of students who obtain information by experts (3.53) is significantly higher than those who don't obtain information by experts (3.18). Other access to information has no significant impact on trust in government of college students.

5.2.2The attention rate of official websites, microblog and we-chat of local government showed a significant positive correlation with trust in government of college students.

Correlation analysis showed that college students' attention rate of new media platforms of local government significantly affect their trust in government, new media platforms of government including government's official website (P = 0.199, sig <0.001), official micro blog (P = 0.186, sig <0.001), official we-chat (P = 0.175, sig <0.001), and all of these platforms are positively correlated with trust in government. That is, the higher the attention rate on new media platforms of local government, the higher level of trust in government of college students.

Table 3
Correlation analysis between attention rate on the official website, microblog, we-chat and trust in government

		Official websites of local government	Official microblog of local government	Official we-chat of local government
Trust in government	Pearson Correlation	.199**	.186**	.175**
	Sig（2-tailed）	.000	.000	.000
	N	2356	2355	2349

** p < 0.01, two-tailed test.
* p < .05, two-tailed test.

The regression analysis of influencing factors of trust in government of college students.

In order to investigate the overall impact of media use on trust in government, this part used hierarchical regression analysis. The researchers placed demographic variables in the first layer, placed average daily using time of newspapers, radio, television, magazine, the Internet in the second layer, and placed the media channel dependency of access to information in the third layer. The results of regression analysis showed that college students' age, education background, average daily using time of broadcasting, attention rate on official websites and microblog of local government are together affect trust in government. Among them, college students' age (β = -0.063, sig <0.05), education (β= -0.070, sig <0.05) are negatively correlated with trust in government, students with doctoral degree have the minimum mean of trust in government; average daily using time of broadcasting and trust in government of college students show a significant positive correlation (β= 0.061, sig <0.05), the longer of broadcast daily use, the higher the degree of trust in government; college students who obtain information from the official media of local government, such as those who pay higher attention rate on official websites(β= 0.125, sig <0.001) and microblog (β= 0.070, sig <0.05) have a higher degree of trust in government. But under the influence of other factors, the attention rate on the official we-chat of local government has no effect on trust in government.

Table 4

The regression analysis of influencing factors of trust in government of college students

Model		Coefficients		Standardized Coefficients	t	Sig.
		B	Std.Error	Beta		
1	(Constant)	3.727	.200		18.664	.000
	Age	-.018	.010	-.049	-1.723	.085
	Education background	-.146	.058	-.071	-2.521	.012
	Gender	.071	.040	.039	1.771	.077
2	(Constant)	3.681	.202		18.194	.000
	Age	-.017	.010	-.046	-1.629	.103
	Education background	-.149	.058	-.073	-2.577	.010
	Gender	.069	.040	.038	1.725	.085
	Newspaper	.049	.037	.036	1.326	.185
	Broadcasting	.084	.030	.073	2.781	.005
	Television	-.026	.023	-.028	-1.119	.263
	Magazine	.000	.025	.000	.006	.995
	The Internet	-.005	.009	-.013	-.597	.551
3	(Constant)	3.451	.199		17.320	.000
	Age	-.023	.010	-.063	-2.269	.023
	Education background	-.143	.057	-.070	-2.520	.012
	Gender	.061	.039	.034	1.565	.118
	Newspaper	.017	.036	.013	.482	.630
	Broadcasting	.071	.030	.061	2.388	.017
	Television	-.035	.023	-.038	-1.534	.125
	Magazine	-.029	.025	-.029	-1.160	.246
	The Internet	-.007	.009	-.017	-.765	.445
	Official website of local government	.127	.034	.125	3.772	.000
	Official microblg of local government	.073	.037	.070	1.988	.047
	Official we-chat of local government	.052	.040	.046	1.295	.196

a. Dependent variable: Trust in government

Conclusions

The results of research show that among the demographic variables, age and education of respondents significantly affect trust in government of college degrees. In the using time of media variables, the results of correlation analysis showed that the using time of the Internet has a negative correlation with the trust in government; the using time of broadcasting has a positive correlation with the trust in government. But the results of regression analysis showed that with the impact of the other variables, the using time of the Internet has no effect on trust in government and using time of broadcasting still correlate with trust evaluation. In the media dependency level, students' attention rate of official media platforms has significant effect on trust in government, the higher attention on the official websites and microblog of the local government, the higher degree of trust

in government. Official media were operated by government agencies, and usually deliver positive messages, and therefore the higher attention on the official media platforms, the more positive information obtained, and the degree of trust in government is relatively higher. Meanwhile, when public events occur, students obtaining information from government departments and experts have a higher degree of trust in government.

Based on the findings, the researchers proposed to enhance trust in government from the perspective of media. At first, government should build a professional team to operate official new media platforms (including official websites, microblog, we-chat according to their respective advantages. Timeliness of official we-chat is the highest of the three platforms, so it shall be responsible for important information release; collection of audience feedback in official microblog is the most convenient, so government can use data mining and other methods to collect public opinions in microblog; higher credibility and comprehensive content are advantages of official websites, so government can make full use of it to release massages systematically. Operators of official new media platforms should allocate information resources efficiently. Second, government should establish linkage mechanism between official new media platforms and traditional media to help government improve credibility. Traditional media credibility is higher than the new media. Government should take advantage of traditional media to organize news conference to release messages, at the same time, government should construct the multiple channels of information distribution system that made up of traditional media and new media. Multiple channels of information distribution system can help public form complete cognition of government. Last but not least, government should pay attention to the words of experts, build the discourse strategy of Government-Experts interaction in public events. The credibility of the expert discourse can help government to enhance trust to some extent, especially in the face of public events with professional information; expert discourse can establish public correct awareness and positive attitude. Therefore, government should enhance proportion of expert discourse. And during the construction of Government-Experts interaction discourse strategy, each part should take "defend the common sense" as a precondition.

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Adjuvant effect of chitosan for intranasal Japanese Encephalitis (JE) Vaccine

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Abstract

Chitosan, a partially deacetylated polymer of N-acetyl glucosamine, is derived from the crustacean waste. Japanese Encephalitis virus (JEV) infection is a significant cause of encephalitis in Asia. Although, mosquito-borne JEV is mucosa-unrelated pathogen, an intranasal route of administration was chosen in this study because it is non-invasive and does not require the use of needles as well as specialized personnel. Potential for frequent boosting may also represent further advantages over injectable vaccines. In this study, low and high molecular weight chitosan were investigated for their adjuvant properties against JEV. Swiss Albino mice were divided into three groups of eight. They were immunized intranasally with JEV in normal saline (JE/NSS) and in chitosan solutions with low and high molecular weights (JE/Chi-L and JE/Chi-H). The protections for JEV were assessed using a JEV plaque reduction neutralization test (PRNT). It was found that neutralizing antibodies from all groups were higher than the protective level recommended by WHO (i.e. $PRNT_{50} >= 1:10$). The sera collected from JE/Chi-H immunized mice showed about 6 times greater levels of antibodies to JEV than sera from JE/Chi-L. JE/NSS could induce lowest level of antibodies. However, no significant difference among these three groups was observed. Notably, the seroconversion rate for the group of mice receiving JE/Chi-H was higher than 80% while seroconversion rates of JE/Chi-L and JE/NSS were 62% and 50%, respectively. These results demonstrate that high molecular weight chitosan may have potential to be used as adjuvant for intranasal JEV.

Keywords: *Chitosan, Japanese Encephalitis, Adjuvant*

Adjuvant effect of chitosan for intranasal Japanese Encephalitis (JE) Vaccine

Introduction

Japanese Encephalitis (JE) is an inflammatory mosquito-borne viral disease of brain caused by Japanese encephalitic virus (JEV). JE is considered a serious public health issue in many countries of Asia. Recently, the World Health Organization (WHO) reports that 67,900 JE cases occur annually (World Health Organization, 2013). Approximately 30% of clinical JE cases are fatal, 50% of survivors experience irreversible neurologic damage (Errra, et al., 2012). No effective antiviral therapy exists. Injected JE vaccination is the only strategy to develop long-term sustainable protection against JEV infection (Gatchalian, et al., 2008). However, the vaccines administered parenterally cause poor compliance. Moreover, the parenteral vaccine may have a high risk of transmission of infectious diseases. Therefore, nasal vaccination, which is non-invasive, simply accessible and eliminated needle-spread infections, has emerged as attractiveness for inducing a protective immune response in JE disease (Maltais, et al., 2014). However, there are limitations for nasal immunization including poor transport of antigens across the nasal epithelial membrane and the mucociliary clearance (Soane, Frier, Perkins, Jones, Davis, & Illum, 1999). To overcome these obstacles, a non-toxic, biocompatible, and biodegradable mucoadhesive polymer such as chitosan has been used (Dodane & Vilivalam, 1998; van der Lubben, Verhoef, Borchard, & Junginger, 2001).

Chitosan is the second most abundant organic compound in nature after cellulose. It is produced from the crustacean waste chitin (Mahdy Samar, El-Kalyoubi, Khalaf & Abd El-Razik, 2013). Chitosan is a linear co-polymer of D-glucosamine and N-acetyl-D-glucosamine. The amino groups of chitosan provide a positive charge in aqueous solution (Sonia & Sharma, 2011). Chitosan has been shown to exhibit strong mucoadhesion to mucosal cells which reduced the rate of clearance from nasal cavity thereby increasing the contact time of the delivery system with the nasal mucosa (Lehr, Bouwstra, Schacht, & Junginger 1992; Henriksen, Green, Smart, Smistad & Karlsen, 1996; Soane, Frier, Perkins, Jones, Davis, & Illum, 1999; Soane, Hinchcliffe, Davis, & Illum, 2001). Noticeably, the molecular weight (MW) of chitosan has been reported to have an effect on mucoadhesion (Peppas & Buri, 1985; Lehr, Bouwstra, Schacht, & Junginger1992; Schipper, Värum, & Artursson, 1996). An increase in MW of chitosan results in the stronger mucoadhesion because the interpenetration of polymer chains into the mucus layer becomes more efficient as the chain length of polymer increases (Peppas & Buri, 1985).

In addition to mucoadhesion, several studies have shown that chitosan could enhance the paracellular permeation of hydrophilic compounds via transient and reversible modulation of tight functional complexes between adjacent epithelial cells (Illum, 1998; Smith, Domish & Wood, 2005). The altering of the tight junction integrity allows paracellular transport to occur. This is believed to be a result of an interaction of the positively charged amino groups on the C-2 position of chitosan with the negatively charged sites on the cell

membranes and tight junctions (Artursson, Lindmark, Davis, & Illum, 1994; Schipper, Olsson & Hoogstraate, De Boer, Vårum, Artursson, 1997). This combination of induction of mucoadhesive effects and paracellular transport has prompted to use chitosan as adjuvant for the nasal route (Smith, Perelman, & Hinchcliffe, 2013). Following intranasal vaccination of subjects with chitosan plus trivalent inactivated influenza, it was observed to increase serum haemagglutination inhibition (HI) titers for at least one of the three antigens in the vaccination schedules used (Read, et al., 2005). Mann and coworkers (2014) presented that intranasal chitosan adjuvant H5N1 Influenza vaccines induced high levels of antibodies protected against significant mortality, reduced viral replication and abrogated disease of pathogenic avian influenza (HPAI) in ferret model. Our previous study demonstrated that chitosan could elicit both IgA and IgG immune responses to ovalbumin (OVA), the model antigen, in BALB/c mice via nasal route (Boonyo, Junginger, Waranuch, Polnok, & Pitaksuteepong, 2007). In general, mucosal immunization is known to induce only mucosal IgA. Thus an induction of both mucosal and systemic immune responses may be benefit for the development of nasal vaccine against JEV and other non-mucosa pathogens. Harakuni et al (2009) have demonstrated the promising applicability of nasal immunization approach against JEV. However, this study co-administered a mouse brain-derived formalin-inactivated JE vaccine with cholera toxin and pertussis toxic, adjuvants derived from bacterial products, which are known to cause adverse reaction. Therefore, this study was aimed to investigate the adjuvant effect of chitosan with different MW for intranasal vaccine against JEV.

Experimental methods

Materials

Chitosan with difference molecular weight were used in this study. Low molecular weight chitosan; Chi-L (degree of deacetylation (DD) = 96%, molecular weight (MW) = 160 kDa) and high MW chitosan; Chi-H (DD = 96%, MW =500 kDa) were purchased from Aqua Premier, Thailand. Mouse brain-derived formalin inactivated JEV (Beijing-1 strain, lot JVJ51001) was a kind gift from the Thai Government Pharmaceutical Organization (GPO) (Bangkok, Thailand) in concentrated form.

Animals

Female Swiss Albino mice 6 – 8 weeks of age were used in all experiments. Mice were housed in groups of 8 mice at controlled temperature with free access to rodent chow and water. Mice were bred and supplied by the National Laboratory Animal Center, Mahidol University, Thailand. Animal experiments were approved by a Committee for Animal Experimentation of Naresuan University, Thailand.

Preparation of vaccine formulations

The JEV in saline solution (JE/NSS) was prepared by simply adding concentrated JEV in 0.9% w/v sodium chloride solution. For JEV in chitosan solution, low and high MW chitosan were first dissolved in 1% w/v acetic acid, separately. Then JEV was added to the solutions. Finally, chitosan solution coadministered with JEV was diluted in saline solution to obtain a 1% w/v chitosan solution. The final concentration of JEV in each formulation was 0.1 titer of human dose of concentrated JEV (about 141.27 µg/ml). The pH of the solutions for immunized formulations was adjusted to 4.5.

Immunization protocol

Three groups of 8 Swiss Albino mice were immunized on days 0, 7 and 30 with the formulations described in Table 1. Mice were immunized nasally with 0.1 titer of human dose of JEV in 0.9% saline solution (JE/NSS), JEV in low MW (JE/Chi-L) or JEV in high MW (JE/Chi-H) chitosan solutions. Nasal dosing was performed in supine position without anesthesia and the vaccine was administered to the left and right nostril in a total volume of 30 µl using a precision micropipette (Biorad, USA). Blood samples were collected by cardiac puncture following anesthesia of the mice with diethyl ether on days 60 (at the end of study). The sera from each mouse were prepared by centrifugation at 8,000g for 5 min at room temperature after allowed clotting overnight. All serum samples were stored at -20 ºC until assayed.

Table 1
Immunized formulations

Intranasal immunization (i.n.)*
1. JEV in 0.9% saline solution (JE/NSS; control)
2. JEV in 1% w/v Low MW chitosan solution (JE/Chi-L)
3. JEV in 1% w/v High MW chitosan solution (JE/Chi-H)

Note: * Nasal dose for mice based on the potency data of JEV and dose reference from Thai Government Pharmaceutical Organization.

Determination of the Neutralizing Antibody Response

Immune responses were evaluated using a virus plaque reduction neutralization test (PRNT). This assay was performed by Center for Vaccine Development, Mahidol University according to the method described by Russell et al (1967). The plaque count was determined by using LLC-MK2 plaque assay single overlay technique. Briefly, sera were thawed, diluted, and heat-inactivated by incubation at 56 ◦C for 30 min. Serial four-fold dilutions of serum were made (1:10, 1:40, 1:160, 1:640, and 1:2560). An equal volume of diluted JE virus, Beijing-1 (genotype III) vaccine strain, to contain about 50 PFU/well

was added to each serum dilution tube. Following incubation at 37 °C for 60 min, 0.2 ml was removed from each tube and inoculated onto duplicate 6-well plates of confluent LLC-MK2. Each plate was incubated at 37 °C for 90 min and monolayers were then overlaid with 4 ml of 3.5% Carboxy Methyl Cellulose/MEM. Plates were incubated for 7 days at 37 °C with 5% CO_2. Plaques were counted and $PRNT_{50}$ were determined. The final endpoint neutralization is a 50% reduction in plaque formation ($PRNT_{50}$) (Chokephaibulkit, et al., 2010). A $PRNT_{50}$ titer of >=1:10 is accepted as positive and protective immunity (Hombach, Solomon, Kurane, Jacobson, & Wood, 2005).

For each immunisation group, seroconversion rates (SCRs) referring to the number of sera giving the protectiveantibodies level of $PRNT_{50}$ titer $\geq$ 1:10 per number of the animal tested was also calculated.

Statistical Analysis

Logarithmic transformations of the reciprocal $PRNT_{50}$ titers of the mice in each immunization group were made, and the mean log titers between experimental were compared with the Mann-Whitney test. $p < 0.05$ was considered significant.

Results and Discussion

The neutralizing antibody titers for anti-JEV-antibodies and seroconversion rates are shown in Figure 1 and 2, respectively. It was found that all formulations had detectable neutralizing antibodies to JEV ($PRNT_{50}$ >= 1:10 which is accepted as indicator of protective immunity by WHO consultation group (Hombach, Solomon, Kurane, Jacobson, & Wood, 2005)) on day 60. The differences in the $PRNT_{50}$ titers between the 3 groups were not significant ($p > 0.05$). However, mean neutralizing antibody titers of mice receiving JEV/ Chi-H were 6-fold higher than that of those receiving JE/NSS or JE/Chi-L. Remarkably, mice received JE/Chi-H formulation also presented the highest seroconversion rate (80%). Interestingly, JE/Chi-L was also showed slightly higher seroconversion rate than control group. This may be due to positive charges of chitosan which is able to interact with the negatively charged sites on the cell membranes and then open the tight junctions (TJs) between the epithelial cells allowing the paracellular transport of JEV through nasal mucosa (Artursson, Lindmark, Davis, & Illum, 1994). Besides the mucoadhesive property of chitosan can slow down the clearance of the formulations from the nasal cavity resulting in an increased half time of clearance of an antigen which permit maximal availability of the antigen to the mucosal epithelium (Soane, Frier, Perkins, Jones, Davis, & Illum, 1999). Therefore, this combination of induction of paracellular transport and mucoadhesive effects of chitosan may be reasons of higher protective effect against JEV than control group. The effect of MW of chitosan for inducing immune responses was clearly shown in this study. The results are in agreement with our previous study which investigated that high MW chitosan could induce higher IgG and IgA levels than low MW chitosan (Boonyo, Junginger, Waranuch, Polnok, & Pitaksuteepong, 2007). The effect of MW can be explained by the efficiency of the polymer to interpenetrate into mucus layer which increases as the chain

length of chitosan polymer increases (Peppas & Buri, 1985; Lehr, Bouwstra, Schacht & Junginger, 1992). Thus an increase of the polymer chain results in the increased residence time of higher MW chitosan and thus the stimulated immune responses are more pronounced.
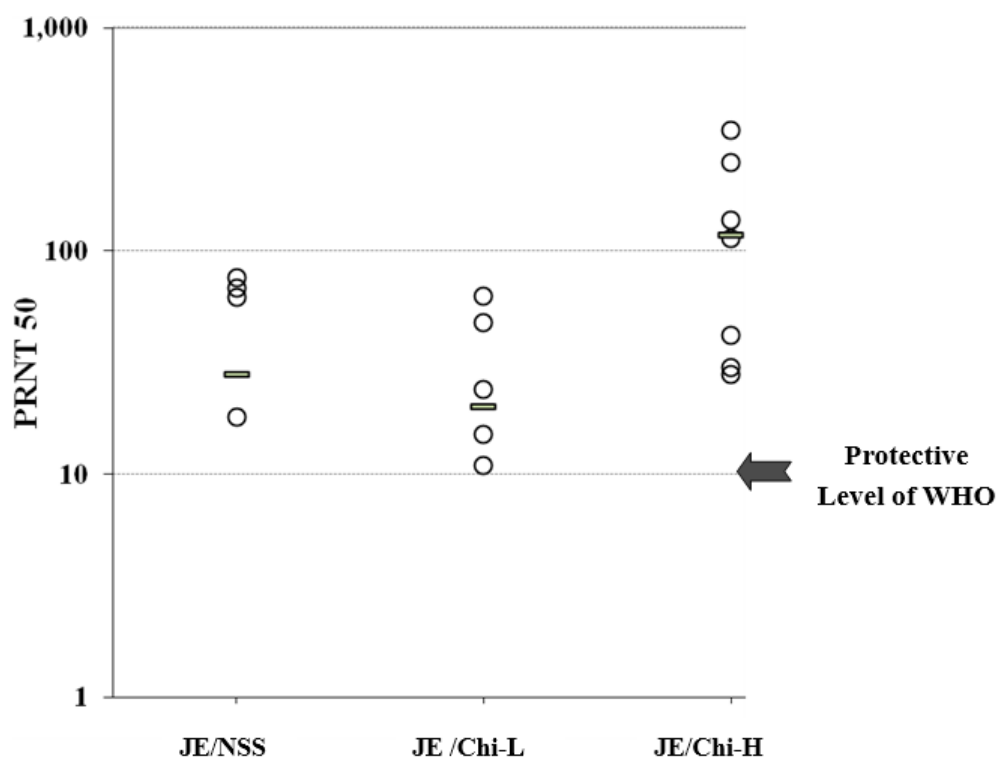
Figure 1. The PRNT$_{50}$ of JEV-neutralizing antibodies obtained in the sera of mice following nasal immunization with JEV in different formulations. PRNT$_{50}$ at day 60 were obtained from individual sera. Each circle represents the result of individual sera samples and the horizontal bar represents the GMT of the group. The black arrow indicates a protective level of PRNT$_{50}$ $\geq$1:10, accepted by the WHO, as an immunological correlate of protection from JE in human (Hombach et al., 2005)
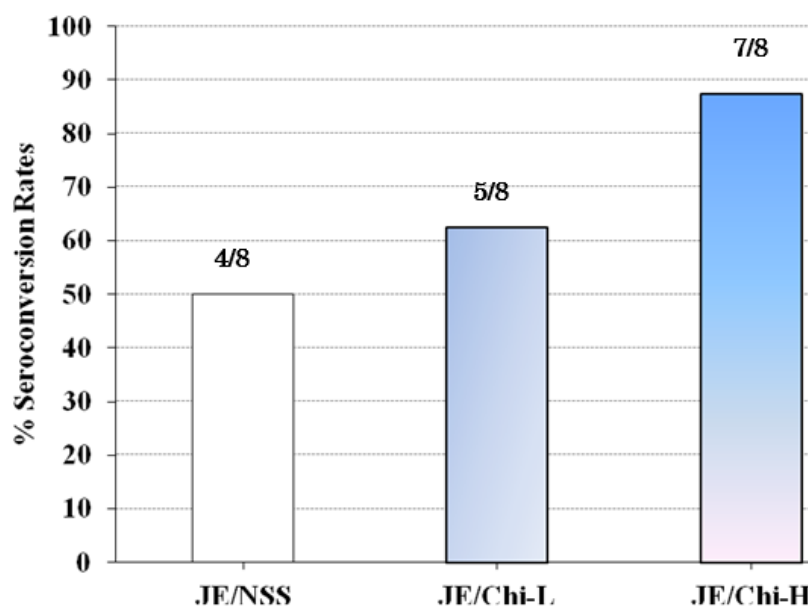
Figure 2. Seroconversion rates of mice at day 60 following nasal immunization with JEV in different formulations. The number above the bar presents the number of sera giving the minimum protective level of $PRNT_{50} \geq 1:10$ per number of animals tested.

Conclusion

JE vaccine co-administered with chitosan with high MW elicits higher neutralizing antibody titer and seroconversion rate than chitosan with low MW and control when vaccination via nasal route. Although the significant differences in neutralizing antibody titer and seroconversion rate between them were not observed, it has shown the potential to induce immune protection following intranasal immunization with JEV. Therefore, our findings suggest that nasal immunization with JEV co-administered with chitosan may be an attractive candidate vaccine for the prevention of JEV infection.

Acknowledgements

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Problems with and Prospects for the Data Analysis of Cross-National Comparative Surveys: With Examples from Religious Consciousness Surveys

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Problems with and Prospects for the Data Analysis of Cross-National Comparative Surveys: With Examples from Religious Consciousness Surveys

I. Introduction

This paper examines the methodological problems with the data analysis of cross-national comparative surveys. Examples were used from the International Social Survey Programme (ISSP) Religion Module Surveys (1998 and 2008), and the Surveys on Values and Religious Consciousness in Japan and Germany (conducted by Manabe and Kawabata in 2007 and 2008) to identify the problems with data analysis and to seek their solutions.

II. Examples from the Data Analysis of Cross-National Comparative Surveys

1. Cross-National Comparison versus Cross-Regional/Societal/Cultural Comparison

A cross-national comparative survey is a tool used for making comparisons at the national level. Compared with cross-regional surveys, cross-societal surveys, and cross-cultural surveys, they have the advantage of offering a more concrete, specific (rather than analytical or abstract) unit of comparison. At the same time, however, they make it impossible to see the regional, societal, and cultural differences that are all encompassed within the unit known as a "nation."

I examine this problem here by looking at the analysis of question items on denomination in Germany from two perspectives when the former West Germany and former East Germany are treated as separate regions and when the two are combined together (Manabe 2011, 2013).

The results of perspective show that the percentage of respondents indicating a denomination is 84% in western Germany and 24% in eastern Germany. There is a big difference in religious consciousness between the two. This significant difference between eastern and western Germany becomes impossible to discern when the two are combined together (the results of perspective).

2. Percentage Descriptions versus Exploration of Meaning

The results of a cross-national comparative survey are usually shown in the form of a percentage of respondents who selected individual responses to questions. Such results should be the starting point for analysis, not the end result. From a sociological perspective, the end results are achieved in analyzing, interpreting, and then understanding the target country based on the content of each individual question item while focusing on people's subjective realities. By setting the question results into the historical, social, and cultural context of the nation being studied, the percentages of specific responses to each question finally take on a sociological meaning.

3. Denomination versus Faith

The ISSP question item that asks respondents about their "denomination" is worded in Germany as follows: "To which religious group do you belong?" while in Sweden the question is "Do you consider yourself as belonging to a church/denomination or a religious group or community?" From the former question, one understands that the word "denomination" is used to express "membership." While wording based on this concept has long been effective in Germany, in Sweden, which is thought to be more secularized, the same question text would make it impossible to distinguish between people who are only "nominal members" of a church and those who are truly religious respondents. Thus, the wording of the question has been revised in Sweden, as shown in the wording of the latter text. That is, the use of a new question gave respondents an opportunity to rethink whether they would consider themselves church members. Since a question based on this concept of "membership" would not be suitable for the Japanese actual situation, the question there focused on the presence or absence of religious faith, and was worded in Japanese as "Do you have religious faith?" In a cross-national comparative survey, question items must be worded in such a way that they reflect the actual realities of each country in which the survey is conducted.

4. Quantitative versus Qualitative

If the goal of a cross-national comparative survey is to analyze, interpret, and understand each country surveyed by focusing on people's subjective realities, a so-called multi-method approach which adopts both quantitative and qualitative survey techniques must be deemed essential to research in this area (Manabe 2011, 2013).

The ISSP Religion Module Survey contained the following response categories, using the wording from the Source/Master Language Questionnaire:

V63 Would you describe yourself as…

1.Extremely religious, 2.Very religious, 3.Somewhat religious, 4.Neither religious nor non-religious, 5.Somewhat non-religious, 6.Very non-religious, 7.Extremely non-religious, 8.Can't choose.

If the percentage of respondents who selected the response category "neither religious nor non-religious," is compared across countries, we find that the figure is lowest in eastern Germany (6%) and highest in Sweden (38%), with Japan and western Germany lying somewhere in the middle (17% and 15%, respectively). Sweden's 38% figure is more than double the figures for Japan and western Germany. Why is the number of respondents identifying themselves as "neither religious nor non-religious" so high in Sweden? Based on the fieldwork and interview surveys I conducted in Sweden, I can develop my interpretation that people's faith in Sweden are beginning to change from an "institutional, public, aggregate" form to a more "personal, private, individual" form. If that is the case,

the Swedish respondents identifying themselves as "neither religious nor non-religious" may essentially be indicating their puzzlement at having to rate their own religiosity on a spectrum between these two types of faith patterns. If that is the case, this particular response pattern may reflect a new depiction of the reality of religious consciousness in Sweden.

The qualitative survey method I employed in Sweden may not be deemed sufficient by a researcher who specializes in this method. Nonetheless, it is impossible to deny that had it not been based on findings derived from the qualitative surveys (fieldwork and interview survey) I conducted, it would have been impossible to interpret Sweden's results of data analysis from the ISSP's Religion Module Survey.

5. Question Item versus Dimension

A single question item used on a cross-national comparative survey is usually treated as a single variable. However, by analyzing the data on a variety of surveys, I have learned that even a single question item can incorporate multiple "dimensions."

Again, if we look at the survey results above, we can extract the trends in each country.

First, in western Germany, 84% of respondents report "belonging to a church," while 48% of respondents report that they are religious ("extremely" plus "very"). Subtracting 48% from 84% yields 36% of people who belong to a church but are not religious (did not report being religious).

Following the same process in Sweden, 69% minus 18%, or 51% of people, belong to a church but are not religious (did not report being religious).

Finally, in Japan, the wording of the question regarding denomination is "Do you have religious faith?" The wording of the question about whether the respondent is "religious" asks, "Do you have religious piety or a sense of faith?" Since the text of these questions have almost identical meanings, the results show that 38% have religious faith while 33% have religious piety or a sense of faith, with only a five point difference between them.

These results suggest that in western Germany and Sweden, church membership is not just a matter of "proof of one's own individual faith," but rather something that incorporates elements of the "social customs in those countries." This trend is particularly remarkable in Sweden. In the case of Japan, however, the wording of the two questions is such that both measure "individual faith."

Thus, in the countries of Europe, a question item that asks about church membership can be viewed as having two dimensions; a dimension of individual faith and a dimension of social custom.

6. Description versus Analysis

When it comes to the practice of data analysis in the social sciences, there is a distinction made between "description" and "analysis." Let us see in what context and in what sense the term "description" is used in association with questionnaire surveys. According to McGraw & Watson (1976), the statement that, for example, "voting turnout in the US is 60%" is a univariate hypothesis. However, this type of hypothesis is a "descriptive" hypothesis that does not address the relationship between variables, and was viewed as "low-level" and "hardly scientific." As a result, "description" has come to be regarded as a minor status to "analysis" in the social sciences. In the same vein, even when it comes to the analysis of data from a questionnaire survey, for example, a "description of a univariate distribution" is deemed to be a minor status to an "analysis of the relationship between multiple variables." However, McGraw & Watson disagree to this view. That is, the testing of a univariate hypothesis can lead to the construction of important theories in the social sciences and thus can contribute significantly to the accumulation and development of social scientific knowledge. This argument by McGraw & Watson is just in line with my own empirical experiences, as I have published research findings on people's religious consciousness based on the data analysis of cross-national comparative surveys over the past 10 years.

7. Looking at the Trees versus Looking at the Forest

My basic approach to data analysis is, figuratively speaking, to begin by "looking at the forest" rather than "looking at the trees." The data analysis of questionnaire surveys begins with the identification of the overall structure of data, and this is followed by efforts to intensify the analysis by focusing on specific aspects of the data. I refer to the former structural aspects as "looking at the forest," and the latter more specific aspects as "looking at the trees". What kinds of techniques, then, can be used to "look at the forest"? Smallest Space Analysis (SSA) developed by Lois Guttman is a very useful tool in examining "the forest."

As a type of multidimensional scaling, SSA is a method of expressing the relationship between n question items shown in a correlation matrix by the size of the distance between n points in an m-dimensional (m<n) space. The higher the correlation, the smaller the distance, and the lower the correlation, the greater the distance. This shows that SSA is an appropriate method of visually depicting the overall structure and relationships among question items (Manabe 2001).

I have applied this approach to the analysis of data from various questionnaire surveys. One example of this can be found in my data analysis of the Survey on Values and Religious Consciousness in Japan (Manabe 2008).

First I created a correlation matrix showing the relationships between the question items about "religious behavior" (10 items), and then conducted a SSA using the Hebrew University Data Analysis Package (HUDAP), a computer software package for analyzing data. The results produced a 2D SSA map (spatial plots), as shown in Figure 1.

In this way, ten question items on religious behaviors are separated into three groups within the concentric circles into which the space has been divided. There are (a) Bible/sacred scripture reading, worship, devotions, shrine/temple/church visits, (b) grave visit, household shrine/alter worship, and (c) New Year's Day shrine visits, fortune-telling sticks, protective charms and amulets, and prayer for success. I then further focus on the shared social characteristics of the activities in each groups to describe them as (a) faith-manifestation behavior, (b) traditional or customary behavior, and (c) event-specific behavior.

1	Q10	Do you visit a shrine on New Year's Day?
2	Q12a	Visit ancestors' graves during the obon and higan seasons.
3	Q12b	Draw a stick with a number on it to learn my fortune.
4	Q12c	Buy protecitive charms or amulets (for traffic safety, passing entrance exams,etc.)
5	Q12d	I visit a shrine, temple, or church to pray for such things as business prosperity and passing the entrance exams.
6	Q12e	I am regularly involved in relgious activities, such as worship and devotions.
7	Q12f	I read books related to religion, such as the Bible or sacred scriptures.
8	Q12g	I visit a shrine, temple, or church on certain days.
9	Q12h	I worship before a household shrine.
10	Q12i	I worship before a household Buddhist altar.

Here I have specifically explained what it means to "look at the forest" in a data analysis using the analysis of Japanese religious behaviors as an example.

8. Laws of Causality versus Laws of Structure

In the social sciences, "laws of causality" are a category of "law" that is often spoken about. This is surely because the very discovery, establishment, and accumulation of laws of causality have been the goals of the human intellectual inquiry known as science.

However, in contrast to the mainstream tendency to see laws of causality as the sole laws that have significance in science, doubts have arisen about whether laws of causality are really the only laws in play. Thus, the possible existence of "laws of structure" has been proposed. The effort to establish "regional laws" or "structural laws" in L. Guttman's Facet Theory is an example of such research (Manabe 2001).

In this way, the results reported in Data Analysis Using Smallest Space Analysis (SSA) of the Religious Behaviors of the Japanese that I conducted have been methodologically positioned such that they confirm one of these "structural laws."

9. Hypothesis Testing versus Hypothesis Exploration

The data analysis of questionnaire surveys is categorized as either hypothesis testing or hypothesis-exploring. Of course, the traditional method is hypothesis testing. Over time, however, doubts have been raised about whether it is a good idea to adhere to the hypothesis-testing procedures that have become routine in data analysis.

The widespread use of the concept of exploratory data analysis and its methods were sparked by *Exploratory Data Analysis* by John W. Tukey (M.A.: Addison-Wesley, 1977). The visualization tools known as the box-and-whisker plot and the stem-and-leaf graph, which were developed by Tukey, are quite well known.

Here, however, I use the phrase "exploratory data analysis" in a somewhat broader sense. The key elements of what I refer to as exploratory data analysis, in contrast with hypothesis-testing data analysis, are as follows. The SSA map of the various elements of Japanese religious behavior depicts the similarity in people's orientation toward religious behavior at a particular point in time. In spite of this, however, it is not impossible to imagine, using the spatial plots as clues, a so-called "intensification" process in the religious behavior of the Japanese. I go beyond the traditional reading of the SSA map to develop my own interpretation.

10. Measurement Model versus Causal Model?

In the data analysis of questionnaire surveys, researchers generally begin with the examination of measurement models, and then move toward the confirmation of causal models. The issue addressed here is the analytical process wherein researchers start by investigating whether the measurement indicators capture a theoretical concept, and then proceed to analyzing the relationships between those indicators (variables) and other variables. Why am I examining this process? At the present stage of cross-national comparative survey researches, in which optimal measurement indicators have not yet been confirmed for any theoretical concepts, there is great significance in conducting exploratory analyses of the relationships between those indicators (variables) and other variables, just as there is in the rigorous examination of measurement indicators (Jagodzinski and Manabe 2009).

(1)Examples of measurement indexes with high reliability, but low validity, and low reliability, but high validity:

Table 1   Reliability of religiosity indices

Country	Cronbach's α				Eigenvalues	
	Religiosity 7 items	4 items	3 items	2 items	1	2
NZ New Zealand	.912	.886	.864	.802	4.586	0.785
AU Australia	–	–	.855	.820	–	
US United States	.866	.850	.792	.768	3.989	0.965
CA Canada	.887	.858	.847	.815	4.210	0.946
DK Denmark	.847	.834	.757	.711	3.665	1.065
SE Sweden	.878	.838	.820	.776	4.068	0.870
NO Norway	.908	.881	.816	.776	4.524	0.666
NL Netherlands	.904	.866	.852	.835	4.464	0.777
AT Austria	.846	.803	.818	.795	3.660	1.070
PT Portugal	.865	.872	.813	.719	3.893	1.231
ES Spain	.882	.868	.835	.788	4.127	1.032
FR France	.914	.880	.866	.813	4.641	0.699
IT Italy	.890	.884	.833	.777	4.249	1.001
IE Ireland	.867	.821	.793	.700	3.907	0.909
NI Northern Ireland	.877	.846	.830	.804	4.054	1.005
CH Switzerland	.843	.823	.799	.782	3.720	1.077
GB Great Britain	.881	.857	.807	.778	4.181	0.904
DW Germany West	.882	.869	.851	.830	4.123	1.093
DE Germany East	.878	.830	.882	.877	4.208	0.942
CZ Czech Republic	.906	.886	.840	.781	4.502	0.776
SK Slovak Republic	.950	.938	.922	.887	5.393	0.587
PL Poland	.868	.889	.795	.740	3.942	1.172
HU Hungary	.904	.908	.848	.822	4.469	0.987
SI Slovenia	.903	.883	.876	.827	4.477	0.944
LV Latvia	.902	.906	.844	.808	4.435	0.997
BG Bulgaria	.906	.956	–	.767	4.199	0.973
RU Russia	.891	.927	.841	.803	4.366	1.238
CY Cyprus	.850	.880	.649	.664	3.781	1.007
IL Israel	.920	.944	–	.838	4.309	0.857
CL Chile	.761	.743	.744	.639	2.891	1.365
JP Japan	.795	.869	.759	.722	3.229	1.779
PH Philippines	.539	.618	.419	.251	1.976	1.323

(2)Examples of measurement index/ indicator showing strong relationship to "participation in volunteer activities":

Table 2   Religiosity and volunteering in charitable organizations: bivariate correlation and regression analysis (listwise deletion)

Country	Volunteering in charitable organizations		
	β 2 items	$\beta_{RELPART}$	R^2
NZ New Zealand	−.097a	−.252a	.109
AU Australia	−.061	−.283b	.108
US United States	−.082a	−.212b	.072
CA Canada	−.109a	−.232b	.100
DK Denmark	−.057	−.098b	.019
SE Sweden	−.076a	−.178b	.055
NO Norway	−.130b	−.163b	.070
NL Netherlands	−.086b	−.142b	.044
AT Austria	−.098a	.000	.010
PT Portugal	.011	−.147a	.019
ES Spain	−.026	−.071b	.008
FR France	−.075	−.215b	.075
IT Italy	−.103a	−.067	.025
IE Ireland	−.062	−.082a	.017
NI Northern Ireland	−.100a	−.122b	.040
CH Switzerland	−.029	−.165b	.033
GB Great Britain	−.107a	−.215b	.085
DW Germany West	−.039	−.093a	.015
DE Germany East	.003	−.111a	.012
CZ Czech Republic	−.105b	−.157b	.059
SK Slovak Republic	−.137b	−.079	.043
PL Poland	−.018	−.041	.003
HU Hungary	.082	−.168a	.016
SI Slovenia	−.086	−.077	.023
LV Latvia	−.125b	−.153a	.065
BG Bulgaria	−.148b	–	.022
RU Russia	−.057	−.025	.006
CY Cyprus	−.026	−.057	.005
IL Israel	−.361b	–	.100
CL Chile	−.050	−.155b	.036
JP Japan	−.065a	−.138b	.033
PH Philippines	−.108a	−.020	.013

a $p \leq 0.05$ in a two-tailed test;   b $p \leq 0.01$ in a two-tailed test;

RELPART = participation in religious services

Conclusion

In this paper, I use the examples of the ISSP Religion Module Surveys in 1998 and 2008 as well as the Survey on Values and Religious Consciousness in Japan in 2007 to present 10 problems with the data analysis of cross-national comparative surveys, specifically examining each one and exploring possible solutions.

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Results of the Buddhist Integrated Model of Caring End-of-Life Stage Cancer Patients

Dutchanee Sinthuvongsanon

Abstract

The objective of this research was to find out the results of the Buddhist integrated model of caring end-of-life stage cancer patients. It was a quasi-experimental research. The participants were the 13 cancer patients at Pakthongchai Hospital, Pakthongchai District, Nakron Ratchasima Province.

The mean and the standard deviation of quality of life between before and after the research found out 1) the mean of physical result after the research was significantly higher than before the research, 2) the mean of mental result after the research was significantly higher than before the research, 3) the mean of social relationship between before and after the research was not different, 4) the mean of environmental factors after the research was significantly higher than before the research, and the overall mean and the standard deviation of quality of life after the research was significantly higher than before the research. The patients were calm, happy, stable, accept reality of life, gain life-hope, and satisfy the meaning of what life is. The triple gems were their confidence. They accepted their illness body, and cancer was a part of their body, not their mind. The rest of their life was for happiness in the here and now, acceptance of the three characteristics: arising, stilling, and fading as the natural law. Even the patients still afraid of death, they accepted to train that death is the natural phenomenon, speed up to do good deeds, good wholesome action, and undo bad deeds.

Keywords: *Buddhist integrated model, End-of-life stage cancer patients, quality of life*

Results of the Buddhist Integrated Model of Caring End-of-Life Stage Cancer Patients

Introduction

The statistics of the Bureau of Policy and Strategy, Ministry of Public Health in 2007 found out that the death rate of cancer patients has increased every year. This is the highest death rate in Thailand from 2002 to 2007. The problem of cancer is very serious which effects to illness situation, society, and economics. Illness situation can be divided into two types. There are physical and mental illness. Conventional medicine seems to diagnose and cure illness by looking only at the physical part. Holistic Heath Care or Integrated Heath Care is the approach that takes care of both physical and mental illness. This makes the Holistic Heath Care to look the balance of body, mind, emotion, society, and environment. That means Holistic Heath Care integrated both the conventional medicine as well as the alternative therapy. Healthy body is more emphasized than curing illness. This is correlated with what Buddhist Doctrines suggest. Dependent origination explores that there is mind and matter, in other words, body and mind. Both of them work together as colleagues. Buddhist Doctrines can be used as a mean to an end, for solving problems occurred by the burden of illness.

Working as a nurse at Pak Thong Chai Hospital, the researcher is responsible to Self Help Group Program. This made the researcher to have a chance to see the truth of suffering among cancer patients in terms of quality of life and spiritual well being. Therefore, this research is conducted accordingly.

Objective of the study

The objective of this research was to find out the results of the Buddhist integrated model of caring end-of-life stage cancer patients.

Methods of the study

This research was a quasi-experimental research (One group Pre test-Post test Design).

The research methodology was as follows:

1. Data collection

(1) Questionnaire was used to evaluate quality of life of end-of-life stage cancer patients. There were two parts. The first part asked about personal and health status data. The second part asked about quality of life of end-of-life stage cancer patients which was consisted of four categories: body, mind, society, and environment. There were 26 questions.

(2) In-depth Interview was focused to seven main questions. The questions were 1) problems, conditions, and needs of body, mind, society, and environment, 2) causes of sufferings, 3) quality of life in terms of body, mind, society, and environment, 4) spiritual well being, 5) acceptance of cancer illness, 6) acceptance truth of life, and 7) acceptance of death.

2. Population and Participants

The population was end-of-life stage cancer patients who joined with Self Help Group Program, Pak Thong Chai district, Nakhon Ratchasima province in the fiscal year 2012-2013. The participants were 13 purposive sampling of end-of-life stage cancer patients.

Conceptual Framework (Quasi Experimental Research)

The Buddhist Integrated Model of Caring End-of-Life Stage Cancer
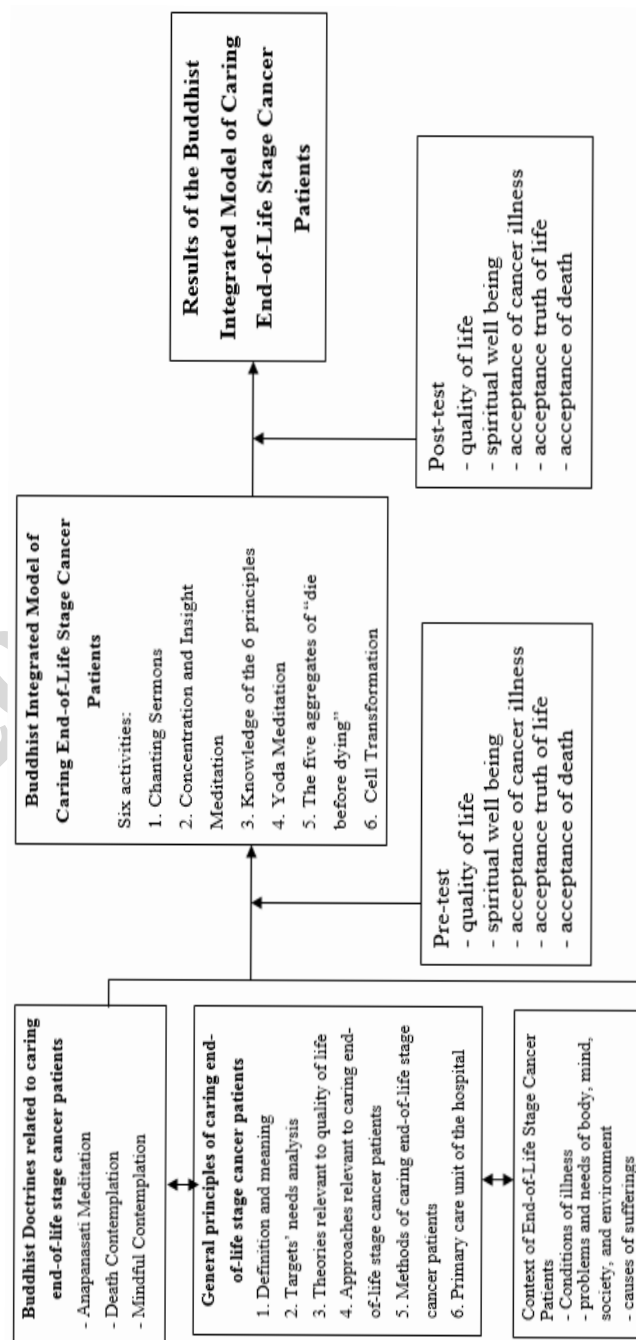
3. Ethical considerations

This study was approved for the protection of participants by the Ethical Clearance on Human Rights by the Institutional Review Board, Maharat Nakhon Ratchasima Hospital Ethics Committee prior to its commencement. Further, permission and written consent were obtained from all participants.

4. Research Instruments

Six activities were held in the three research camps. They were 1) Chanting Sermons, 2) Concentration and Insight Meditation, 3) Knowledge of the 6 principles, 4) Yoga meditation, 5) The five aggregates of "die before dying", and 6) Cell Transformation.

Teaching Program

Based on Natural Therapy and Buddhist Doctrines, the first camp was conducted over 3 days and 2 nights. The second and the third camps were conducted over 2 days and 1 night.

5. Quality of the measurement

Content Validity Index (CVI) was measured. The criteria was more than 0.8 (Polit, D.F. and Beck, C.T., 2004). The CVI of the research instrument was 0.96 which was more than the criteria. Cronbach's alpha coefficient of the research instrument was 0.884.

6. Data Analysis

The qualitative data was analyzed by system management in according to its categories as shown in the conceptual framework. The quantitative data was analyzed by using 1) frequency, percentage for personal and health status data, 2) mean for quality of life, 3) Relate Sample Test of Wilcoxon Signed-Ranks Test for comparing quality of life in four categories: body, mind, society, and environment.

Results

1. Socio-demographic characteristics of the participants

The participants were 13 females. The majority of the participants were 51-60 years old (46.20%). The second and third majority of the participants were 61-70 years old (30.80%) and 41-50 years old (15.40%) respectively. The group of those between 71-80 years old was the smallest with 7.70 %. Most participants were diagnosed with cancer in the year 2006 and 2009 (15.40%). The rest were diagnosed with cancer in the year 1997, 1999, 2001, 2003, 2005, 2008, 2010, 2012 (7.70% each). Types of cancer were breast cancer (46.20%), cervical cancer (23.10%), and lymphoma, skin, and neck area (7.70% each). Most of the participants were married (69.20%). The rest were widowed (23.10%) and separated (7.70%). Most of the participants were studied in the primary school (84.60%). The rest were secondary school (15.40%). The participants' occupations were house worker (53.80%), agriculturist (30.80%), and merchant (15.40%). The participants' incomes were less than 5,000 baht (84.60%), between 5,001-10,000 baht (7.70%), and more than 10,000 baht (7.70%). All of the patients (100.00%). did not have closed relatives to look after. Most of the participants had insurance card (61.50%). The rest had official identification card (38.50%). The participants had experiences of surgery (84.60%), and chemotherapy

(15.40%). Most of the participants had exercises less than three times a week (92.30%). Only 7.70% of the participants had exercises three times a week. All of the participants joined with social activities. About 61.50% of the participants got food with antioxidants. All of the participants (100.00%) made appointments as suggested.

2. The mean and the standard deviation of quality of life between before and after the research found out 1) the mean of physical result after the research is significantly higher than before the research ($p<.001$), 2) the mean of mental result after the research is significantly higher than before the research ($p<.001$), 3) the mean of social relationship between before and after the research is not different ($p>.05$), 4) the mean of environment factors after the research is significantly higher than before the research ($p<.009$), and the overall mean and the standard deviation of quality of life after the research is significantly higher than before the research ($p<.001$).

3. The results of spiritual well being revealed that the patients were calm, happy, stable, accept reality of life, gain life-hope, and satisfy the meaning of life. The triple gems were their confidence.

4. The results of acceptance of cancer illness found that they accepted their illness body, and cancer was a part of their body, not their mind. The rest of their life is for happiness in the here and now.

5. The results of acceptance of the three characteristics were arising, stilling, and fading as the natural law.

6. The results of acceptance of death found out that the patients still afraid of death. However, they accepted to train that death is the natural phenomenon. They need to speed up to do good deeds, good wholesome action, and undo bad deeds.

Discussion

The Buddhist integrated model effects to the quality of life of cancer patients in terms of physical, verbal, and mental. This made the patients to have more physical endurance, more verbal contemplation, and more mindful heart. Then, this led the patients conduct more good deeds as well as more open mind. At last, the patients understand the supreme goal of Buddhist integration. That is "Death at peace". It means at the time of death comes; patients do not have any unnecessary suffering both their physical body and mind. They know how to be at peace, and letting go. This is correlated with P.A. Payutto mentioned that "good death is mindful death". At the time of death is very important. The mind should not stubborn. The mind should be pure, clear, and joyful. The mind can be linked with chanting sermon, or the word "Arahang" as a mean. This helps the patients to be mindful at death.

Suggestions

1. Health Care System should be utilized Buddhist Doctrines in Theravada Buddhism to caring end-of-life stage cancer patients. This is for the highest efficiency in caring end-of-life stage cancer patients.

2. For Further Studies, the researcher is interested in applying Buddhist Doctrines in Theravada Buddhism to take care other diseases such as diabetes, hypertension.

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Chinese Internet Users' Communication Behaviors in Public Events: A Survey on Internet Users from 36 Cities

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Abstract:

Based on a nationwide telephone survey on the sample of 1080 Chinese Internet users from 36 cities conducted by the Social Survey Center in Shanghai Jiao Tong University, the research provided the general overview of Chinese Internet users' communication behavior in public events, and unveiled the their communication characteristics in terms of communication channel, communication purpose, topic preference and rumor spreading on Sina Weibo or Tencent WeChat (two popular social networking sites in China). Results showed that (1) 64.7% Chinese Internet users have communication behaviors in public events; (2) Chinese Internet users have shared information about public events through various methods, and more than 30% respondents would select face-to-face communication; (3) the main purposes of communication in public events include reminding their families and friends to avoid risks; (4) livelihood issues are the most preferred topics for Chinese Internet users to communicate on Sina Weibo or Tencent WeChat; (5) Chinese Internet users show low level of trust on the information on Sina Weibo and Tencent WeChat which was not reported by traditional media. Notably, those who relatively trust in SNS more than traditional media have a higher proportion to forward unconfirmed information on Sina Weibo. On the basis of descriptive analysis, the research further proposed a logistic regression model to present the influence of the demographic factors, media using habits, concerns about public events, trust of information sources and media, and perception of social identification on Chinese Internet users' communication behaviors. Regression results showed that gender, age, usage of Sina Weibo, trust factors in information sources had significant influence on Chinese Internet users' communication behavior, i.e. information transmission behavior. Specifically, (1) female and the younger internet users are more likely to have communication behavior in public events; (2) Sina Weibo users have a higher probability of communicating public events information; (3) Concern about public events and the probability of communicating public events has a positive relationship; (4) Lack of trust on information sources in public events leads to the decrease of probability of communication behavior. (5) Perception of social safety and the probability of online communication behavior have a negative relationship.

Keywords: *Chinese Internet Users; Public Events; Communication Behavior; Influencing Factors*

Introduction

Nowadays, China is in the period of economic and social transition. Many conflicts of interest and social contradictions are constantly emerging. Under such circumstances, public emergencies and great public events occurred frequently, drawing wide public concern as well as the government's and media's attention. Another dramatic change was in the media environment. With the increase of Internet penetration rate and the rise of Web2.0 techniques, Chinese Internet users have been grown into a large, special and powerful group. By concerning about the public events, expressing their views, discussing with others and sharing information both online and offline, Chinese Internet users played an increasingly important role in public life than ever before. They are changing from the "onlookers" to "participants" in public events. Therefore, research on their communication behavior characteristics in public events has been the hot topic in the field of communication, psychology, political science, sociology, and so on. Through the literature review, we found that relevant research on communication behaviors of Internet users in public events can be divided into the following three directions:

Internet users' behavior in public events

Since the public emergencies occurred frequently in China in recent years, a lot of Chinese scholars have done research on the theme of the Internet users' online or offline behavior, under the circumstance of public emergencies, such as SARS, earthquake, anti-Japanese Parade, etc. The online behaviors of Internet users include expression, communication, network rough, group behavior, etc. Some research concentrated on the communication behavior and discussed its characteristics. Yu and Wang (2009) investigated the concern about public events as well as the communication channels and communication effect among residents in Beijing, Shanghai and Guangzhou. Zeng and Xu (2010) study the location, media using habits and attitude toward interested parties of Internet users who replied to the public events news.

The influencing factors of Internet users' communication behaviors in public events

In fact, Internet users are not the only subject in their communication behavior. According to some research, government which is the recessive subject, and media which played as intermediary are related closely to Internet users' communication behaviors. Given the complexity of Internet users' communication behaviors, some research specialized in analyzing the factors influencing communication behaviors. A survey conducted by Pew shows that how the social and political climates in which people share opinions depends on their confidence in how much they know, the intensity of their opinions and their level of interest in the topic. Based on the "Field Theory", Yu (2010) concluded that the public opinion on Internet communication behavior is composed by three parts, "new media field", "psychological field" and "social field".

With the subject of Chinese Internet users' communication behaviors, first, our study aims to draw a comprehensive portrait of Chinese Internet users' communication behaviors in public events, based on the nationwide survey data. From the portrait, we expect to discover the characteristics and regularity of Chinese Internet users' communication behaviors in following aspects: (1) whether Internet users communicate or not in public events, (2) communicating channels, (3) communication purposes, (4) preferences of topics to spread, (5) rumor spreading, etc. On this basis, the study further tries to explore the influencing factors that impact Internet users' communication behavior (if they communicate or not) in public events. Based on the insights gained from the previous discussion of the literature, we propose the following questions:

Research Question 1: Do demographic variables influence Internet user's communication behavior in public events?

Research Question 2: Do media using habits influence Internet user's communication behavior in public events?

Research Question 3: Internet users' attention on public events makes any difference in their communication behavior in public events?

Research Question 4: Does trust play an important role in promoting Internet users' communication behavior in public events?

Research Question 5: Does the perception of the current society influence Internet user's communication behavior in public events?

Method

Procedures

The data for this study came from a national survey of 1,080 Chinese Internet users from 36 cities conducted by the Social Survey Center in Shanghai Jiao Tong University from April to May 2014. The survey was conducted both through landline and mobile phones by using CATI (Computer Assisted Telephone Interviewing) system, with a method of RDD (Random Digit Dialing) sampling. Each interview lasted about 20 minutes on average. The response rate for the survey was 36.7% (AAPOR RR3). The margin of error for the full sample is within 3%.

Before analysis the sample were weighted by gender structure of the Chinese sixth census. The weighted sample consist of 51.0% male and 49.0% female; 9.4% were below 20 years old, 47.3% were between 20 and 29 years old, 31.0% were between 30 and 44 years, 9.6% were between 45 and 59 years old, 2.8% were over 60 years old; 4.6% with no more than elementary education, 19.4% with junior high education, 25.1% with senior high or technical secondary school degrees, 29.0% with bachelor degrees or junior college degrees, 4.9% with master degrees or above.

Measurement

In this study, the dependent variable is defined as a binary variable to describe the Internet user's information transmission, which is the most basic and important communication behavior in public events (1=have communication behavior through any of the channels, 0=have no communication behavior). Furthermore, we define two dependent variables to describe the offline communication (specifically, face-to-face conversation) behavior and online communication (communicate through Internet or SNS) in public events separately. Both of them are dummy variables with Internet user who had the corresponding behavior coded as 1, otherwise coded as 0.

The potential factors influencing the Internet users' communication behavior can be divided into three blocks:

The first block contained demographics variables. Here we consider gender, age and education. These demographic variables are possible influencing factors according to research question 1, and they are also control variables in the regression model.

1. Gender is defined as a dummy variable with male coded as higher (1=male, 0=female).
2. Age is an ordinal variable with six categories ranging from "below 20 years old" to "above 75 years old".
3. Education is an ordinal variable with six categories ranging from "elementary education and below" to "master degrees and above".

The second block contained three variables characterizing different aspects of Media usage habits:

1. Daily average time spent online, which is measured by an ordinal variable with 10 categories ranging from "0.5~1 hour" to "above 8 hours";
2. Sina Weibo user or not (1=Sina Weibo user, 0= Non-Sina Weibo user);
3. Tencent WeChat user or not (1=Tencent WeChat user, 0= Non-Tencent WeChat user).

The third block contained different types of cognitive factors of Internet users:

1. Concern about public events, which is measured by a singer item ranging from "very low" to "very high", correspondingly taking the value from 1 to 5;
2. Trust factors were measured by asking the respondents about their most trusted information source and media in public events. The information source alternatives include: person concerned in the public event, government, media, experts and scholars, other sources and none of above. The media alternatives can be divided into traditional media (newspaper, TV, radio, magazine), new media (news websites, news APP, Tencent WeChat, Sina Weibo) and none of above. On this basis, we define the following dummy variables as trust predictors in the model.

(a) Lack of trust (i.e. trust none of the information sources) takes the value 1, otherwise takes the value 0;

(b) Trust the government or not (1=trust the government, 0=do not trust the government),

(c) Trust the traditional media or not(1=trust the traditional media, 0= do not trust the traditional media),

(1) Perception of society was measured in three items: perception of social harmony, perception of social safety and perception of social equity. All of them range from "very low" to "very high", correspondingly taking the value from 1 to 5.

Results

Communication Behaviors

According to the survey, 64.7% of Chinese Internet users say they had conducted communication behaviors in public events through offline or online channels. That compares with 35.3% who say they never had communication behaviors in public events.

Communication Channels

Among the respondents who say they had communication behaviors in public events, 35.3% of them spread the information through face-to-face conversation, 27.0% of them spread the information on Tencent WeChat, 19.4% of them forwarded related messages on Sina Weibo, and the rest of them reposted on BBS or Tencent QQ (the most popular instant messenger in China). Parts of respondents used more than one communication channels to spread information about public events.
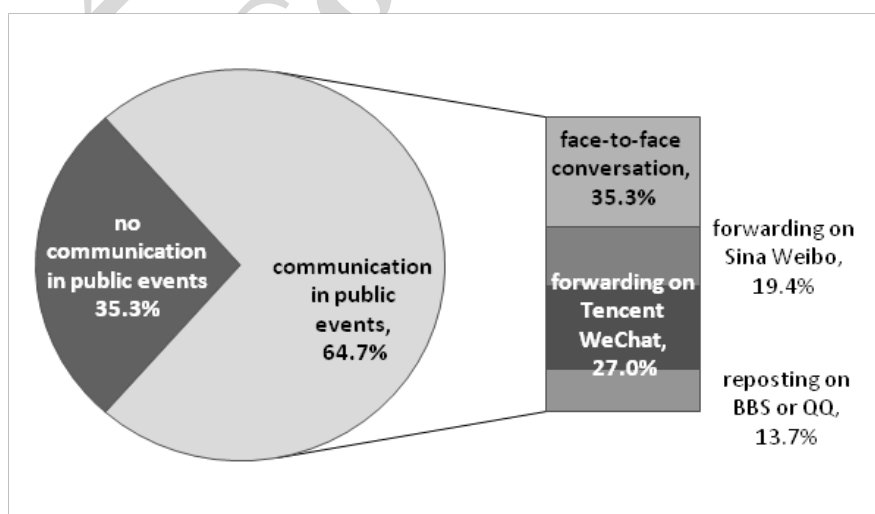
Figure 1
Communication Behaviors in public events

Communication Purpose

The most important reason why Internet users communicated in public events is to remind relatives and friends to avoid risks, with 65.2% of those who had communication behaviors selected this reason. Among those who had communication behaviors in public events, 40.9% are to express their own attitude to the public event, while 38.4% are to anticipate government's attitude. For some Internet users, communicating in public events is a kind of emotional catharsis, with 23.6% and 12.0% of them communicating for the purpose of seeking justice and venting emotions.
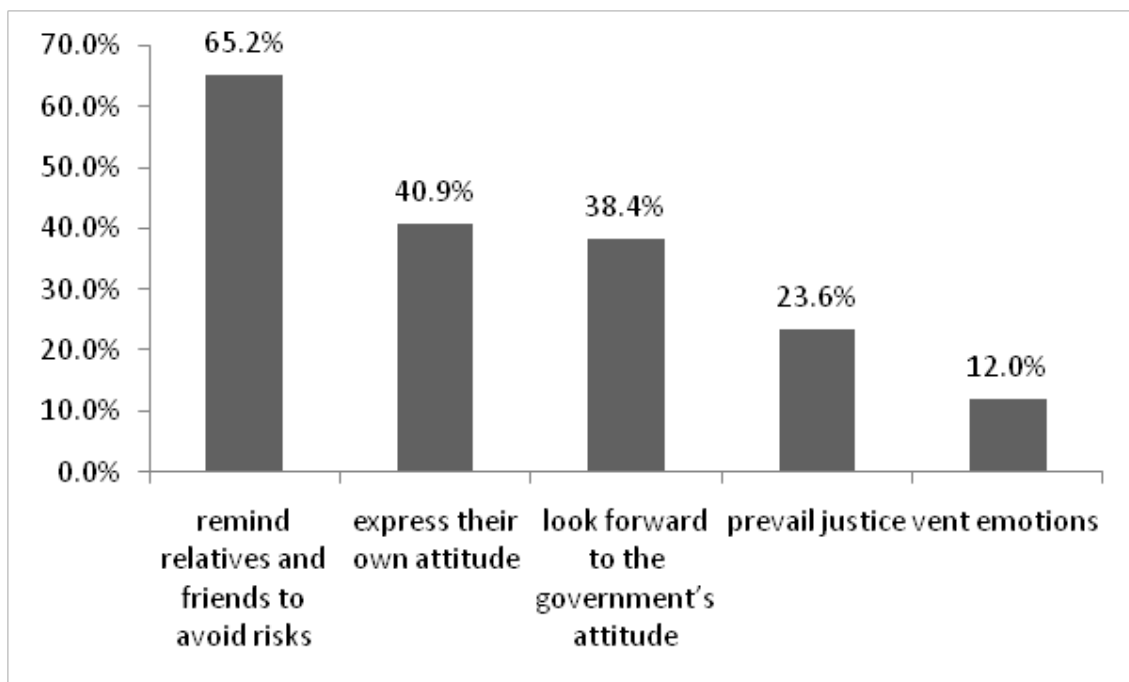
Figure 2
Communication Purposes in public events

Through the cross-table analysis, we found that the difference in communication channels between Internet users with different communication motives is statistically significant (χ^2=41.001, p<0.001). Internet users who communicate for the purpose of "emotional catharsis" or "looking forward to the government's attitude" have a higher frequency of online communication in public events.

Table 1

Cross-Table Analysis on Communication purposes and Communication channels

Channel Purpose	face-to-face conversation	online communication
remind relatives and friends to avoid risks	55.2%	62.4%
Anticipate government's attitude	51.8%	73.1%
express their own attitude	52.0%	67.5%
emotional catharsis	48.8%	73.8%

Topic Preferences on SNS

Among the topics of public events, livelihood issues are the most preferred content for Chinese Internet users to communicate on Sina Weibo or Tencent WeChat, with 40.1% of Internet users prefer to forward or make comments on related news. Due to the serious threat to people's lives and property, 28.3% of the respondents are willingly to forward or make comments on news about disasters, ranking the second place among the topics. Current political topics rank third among the topics of public events, with 25.9% prefer to spread political news. Notably, there are still 29.9% of respondents not interested in forwarding or making comments on any type of public events news.
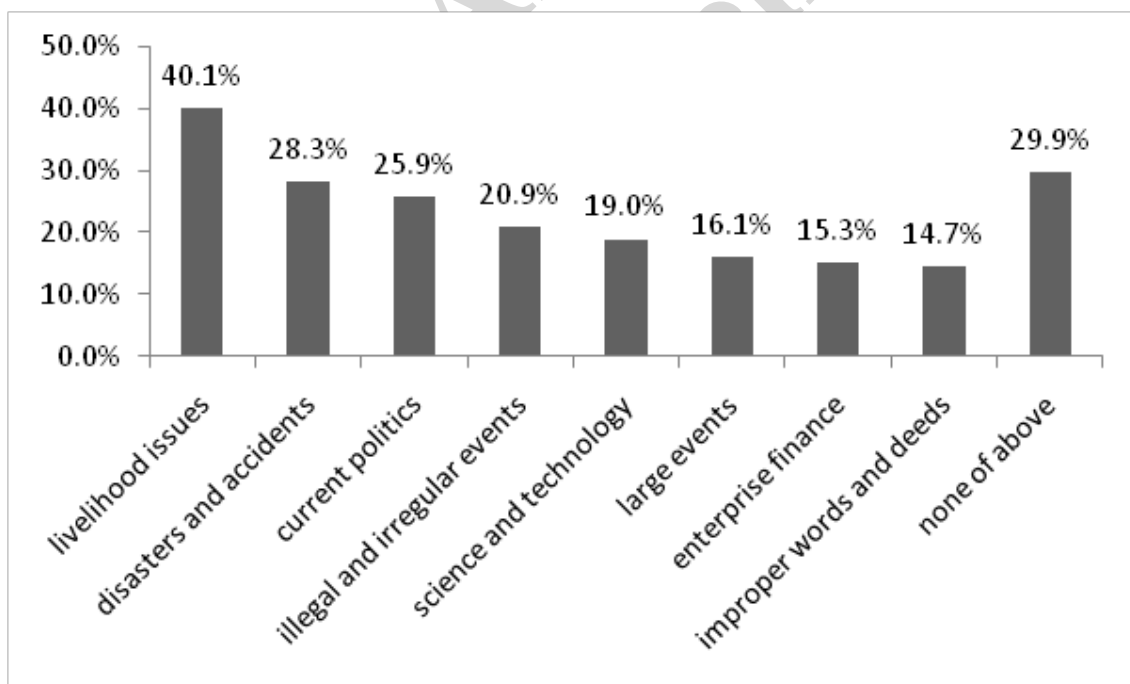
Figure 3
Topic Preferences on Sina Weibo or Tencent WeChat

Rumor spreading on SNS

According to Allport and Postman (1947), a rumor produces a response which can "respond to a state of uncertainty"[1]. Based on the keyword "uncertainty" of rumor's definition, we invited Internet users to make a judgment as to whether they are going to forward the unconfirmed messages on Sina Weibo or Tencent WeChat, in order to investigate their attitude to rumors and potential risk to spread rumors on social networks. We found that more than 80% respondents believed they wouldn't spread unconfirmed information on Sina Weibo or Tencent WeChat, while only 16.4% of respondents say they will spread unconfirmed messages on Sina Weibo and 13.7% of respondents say they will spread unconfirmed messages on Tencent WeChat. These people are considered as a high-risk group for spreading rumors.

Historical research showed that trust is an important factor affecting the spread of rumors[2], lack of trust of the organization is the soil of rumors[3]. In order to clarify the influence of trust on rumor spreading through SNS, respondents were asked "Do you believe the messages on Sina Weibo or Tencent WeChat while not reported by traditional media (newspaper, TV, official micro blog)?", providing a measurement of relative trust in SNS compared with traditional media. Results showed that 61.8% of Internet users say they don't believe such messages and only 10.3% believe the messages from SNS but not traditional media, while 27.9% volunteer that it makes no difference. Among the small group of Internet users who relatively trust in SNS than traditional media (10.3%), 45.6% of them believe that all the information that unveiled by Sina Weibo or Tencent WeChat but not reported by traditional media "must be true", some 18.5% of them hold the belief because "celebrities forwarded the messages", while only 18.5% of them make judgments based on "investigation and verification by themselves".

Through the cross-table analysis, we found that Internet users who relatively trust in SNS more than traditional media have a higher proportion (29.4%) to forward unconfirmed information on Sina Weibo, comparing to those who relatively trust less in SNS (12.4%) and those who makes no difference between the trust levels for these two media platforms (18.1%). Chi-square test proved the difference is statistically significant (χ^2=10.311, p<0.01). Similarly, Internet users who relatively trust in SNS more than traditional media have a higher proportion (20.0%) to forward unconfirmed information on Tencent WeChat, comparing to those who relatively trust less in SNS (12.2%) and those who makes no difference between the trust levels for these two media platforms (14.9%). However, the difference is not statistically significant (χ^2=3.450, p>0.05).

[1] Allport G W, Postman L. The psychology of rumor. New York : Russell ＆ Russell, 1947, 222-247

[2] 谣言传播的影响因素及动机机制研究述评，赵娜

[3] Rumor Psychology: Social and Organizational Approaches

Table 2

Cross-Table Analysis on Relative Trust in SNS and Potential Risk of Rumor Spreading on SNS

Relative trust in SNS	Will you forward the unconfirmed messages on Sina Weibo?			Will you forward the unconfirmed messages on Tencent WeChat?		
	No	Yes	Sum	No	Yes	Sum
low trust	64.3%	48.7%	61.8%	62.5%	54.8%	61.5%
neutral	27.1%	32.1%	27.9%	28.9%	31.7%	29.3%
High trust	8.6%	19.2%	10.3%	8.6%	13.5%	9.2%
Sum	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Factors Influencing Communication Behavior (Information Transmission)

In this part, we concentrate on studying the relationship between communication behaviors (i.e. information transmission) and potential influencing factors proposed by Research Questions 1-5. Therefore, we first construct a hierarchical logistic regression model, in which the dependent variable was a binary variable to describe the Internet user's communication behavior in public events (1=have communication behavior through any of the channels, 0=have no communication behavior). In the hierarchical logistic regression model, there are three blocks of predictors. The first block contained demographics variables; the second block contained three variables characterizing different aspects of media usage habits; the third block contained different types of cognitive factors of Internet users. In the above model, the dependent variable reflects the general status of internet user's communication behavior without distinguishing communication behaviors through different channels. So we further proposed two sub-models with the same format and independent variables compared to the original logistic regression model. One of the sub-models discussed the factors influencing Internet user's face-to-face conversation, which is a kind of offline communication behavior. Another sub-model discussed the factors influencing Internet user's online communication behavior, including communicating on BBS, instant messenger and SNS.

Table 3

Influencing Factors of Internet Users' Communication Behaviors in Public Events

	Communication (both offline and online)		Face-to-face conversation		Online communication	
	β	OR	β	OR	β	OR
Gender	-0.452**	0.636**	-0.208	0.812	-0.387***	0.679***
Age	-0.320***	0.726***	-0.053	0.948	-0.346**	0.708**
Education	-0.048	0.953	0.099	1.104	-0.054	0.947
Daily Average Internet Time	0.047	1.048	0.013	1.013	0.036	1.036
Sina Weibo User	0.335*	1.398*	-0.165	0.848	0.929***	2.533***
Tencent WeChat User	0.187	1.206	-0.336*	0.714*	0.756***	2.130***
Concern about public events	0.330***	1.390***	0.108	1.113	0.310***	1.363***
Lack of Trust	-0.559**	0.572**	-0.482*	0.618*	-0.345*	0.709*
Trust in Government	-0.216	0.806	-0.049	0.952	-0.267	0.766
Trust in Traditional Media	-0.037	0.963	0.064	1.066	-0.061	0.940
Perception of Social Harmony	0.022	1.022	0.076	1.079	0.023	1.023
Perception of Social Safety	-0.085	0.919	0.040	1.041	-0.182*	0.833*
Perception of Social Equity	0.022	1.022	-0.014	0.986	-0.017	0.983

Notes:* p<0.05, ** p<0.01, *** p<0.001

Table 3 shows the results from logistic regression analysis predicting different kinds of communication behaviors. Overall, it is obvious that the significant influencing variables of different communication behaviors are not the same. In addition, since the Cox and Snell R^2 increase in each model, which indicates that the three blocks of independent variables has a great influence on the dependent variables. The strength of impact of demographic variables, the media using habits and the cognitive factors on communication behavior is increasing.

In the demographic variables, gender and age significantly influenced the communication behavior and the online communication behavior of Chinese Internet users. In the first model, we found that the odds ratio of gender is 0.636, which means that the odds of a male conducting communication behavior are only 0.636 times of a female. The coefficient of age is negative, which means that with the increase of age, the probability of an Internet user had communication behavior decreased. Education is not a significant influencing factor to any kind of communication behaviors. In a word, we can draw the conclusion that female internet users are more likely to communication in public events than male, especially through online channels. The younger people are more likely to have communication behavior in public events than the olders.

As to the Media using habits, the time spent online is not related to internet user's communication behavior, but the usage of SNS is related to communication behavior and online communication behavior in public events. Specifically, the odds of a user of Sina Weibo conducting communication behavior are 1.398 times greater than for a non-user, and odds ratio is even higher in the online communication behavior model. In conclusion, Sina Weibo users are more likely to have communication behavior, especially online.

Concern about public events can promote the communication behavior and online behavior, according to the negative coefficients in the first model and the last sub-model. It reveals that the more internet users concerned about public events, the more they likely to communicate the public events.

Trust factors always influenced the Internet users' communication behaviors in the negative way significantly, no matter offline or online. The lack of trust in information sources leads to decrease of communication behavior, both through online and offline channels. The odds of an Internet user who are lack of trust conducting communication behavior are one half of someone who believes any information sources. Trusting in government of traditional media shows no significant impact on communication behaviors in the above models.

Perception of society played a limited role in Internet users' communication behavior. Only in the online communication behavior model, the negative effect on online communication of the perception of social safety is statistically significant. The negative coefficient reveals that the lower perception of social equity that the internet user has, the higher probability he/she would communicate public events information on the Internet.

Discussion

With the rapid development of Internet in China, Chinese Internet users are not only audience in public events. They express strong interest for involvement in public life. According to survey results, 64.7% Chinese Internet users have communication behaviors in public events. By such discourse participation, Chinese Internet users have been enhancing their civic awareness and public participation nowadays. In addition, the portrait of Chinese Internet users reveals some unique characteristics of public events communication, such as the purposes of communication and topic preferences. But there are also some general universal laws. For example, the most popular channel of public events information is the face-to-face conversation. Similar phenomenon was found among US Internet users by Pew Research Center (2014), showing the majority of Americans reported that they would be willing to join a conversation about the Snowden-NSA revelations, while only less than half of Facebook or Twitter users are willing to join the conversation on SNS.

We've found the influence mechanism that how gender, age, SNS usage, concerns about public events, trust factors, and perception of social identification influencing on Chinese Internet users' communication behaviors, both offline and online. Based on the results, we proposed the following suggestions to help the government and society to guide internet users' behavior and the public opinion.

(1) Since we found that Sina Weibo users have a higher probability of communicating public events information, it is important to keep the information in SNS in order.

(2) Concern about public events and the probability of communicating public events has a positive relationship, which reminds the internet users to pay attention to public events and actively participate in public life.

(3) Lack of trust on information sources in public events is harmful to communication behavior. Meanwhile, Chinese Internet users show low level of trust on social networking sites compared to traditional media. More seriously, blind trust in SNS leads to a higher proportion to rumor spreading on SNS. Combining the above findings, we suggest keeping the credibility of information sources, such as government, traditional media and social media.

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Relationship between Internet Use and Social Identification

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Abstract

The Internet not only provides a new channel to post and obtain information, and it also makes subtle influences on people's psychology, behaviors, and social identification. The study aims to verify whether the Cultivation Theory could be applied to the Internet users. The current study analyzed the relation between Internet using habits and social identification of Chinese netizens on the basis of the telephone survey of 1,080 samples from 36 cities nationwide conducted by the Social Survey Center of Shanghai Jiao Tong University. According to the results, time spent online is negatively correlated to Internet users' social identification. There is no significant difference of social identification among the netizens with different aim for surfing the Internet. Trust is the important factors that affect netizens for social identification. The netizens, who trust positive information on the Internet more, tend to have higher evaluation of social identification. Moreover, the netizens, who trust negative information on the Internet more, tend to have lower evaluation of social identification. The influence of the trust of information on the Internet to social identification is greater than the time spent online.

Keywords: Internet using habits, social identification, trust

Relationship between Internet Use and Social Identification

Since 1930s, the complicated relationship of three realities (Social reality, Symbol reality, and Idea reality) in communication sciences had become a significant subject for scholars in communication field. The Cultivation Theory is a grand achievement, which was proposed by Gerbner. In this theory, it was proposed that people who spend longer time in watching TV, are more likely to approve the symbol reality presented in the TV than the social reality. The influence of the symbol reality on the recognition to the social reality can be defined as the cultivation theory.

The Internet not only provides people new ways to publish and obtain the information, but also changed people's life styles by its psychological, behavioral, and cognitive influences. It is to be certified whether the Cultivation Phenomenon still exists in the Internet context, which is also the core issue of the current study. The study aimed to investigate the Internet using habits and the social identification of Chinese netizens, and to explore whether the Internet using habits would affect the social identification, and in which ways.

Literature Review

Nowadays, the effects of television as a traditional media on people's recognition, judgment, and worldview are confirmed at the theoretical level, Cultivation Theory being one of which. According to this theory, long-time audiences more likely tend to identify social scenes presented on the television than short-time audiences, especially when the content and opinions are identical with the audiences' personal experiences, the more they are, the more obvious the cultivation is. This effect sometimes exceeds that of the length of viewing time. This is the concept of "resonance". (Liao, Jing, & Zhang, 2005) However, Cultivation Theory has been controversial since its suggestion, that present studies cannot prove causality between the view of television and social identification. Some researchers propose a thorough evaluation of factors like gender, age, education, and involvement to discuss the psychological mechanism of cultivation, instead of a sole factor, i.e. the degree of viewing. (Lin, & Li, 2012).

In general, studies on the effects of Internet using habits can be divided into two categories: studies on the effects of netizens' self-perception and studies on the effects of netizens' general social identification. The majority of the first category is studies on the effects of Internet using habits on loneliness and happiness of netizens. For example, Weiser (2001) introduced the aims of Internet use to interpret the relation of Internet using habit (length of use) and netizens' social psychological health. Results indicated that netizens with the aim for social emotion regulation tended to decrease social involvement, thus lower the level of psychological health. Additionally, Zhang et al. (2007) studied the attention bias towards Internet-related cues and negative emotional cues by the emotion strop paradigm. The results indicated that Internet users of an information acquisition motive showed a significant attention bias towards Internet information-acquisition-related

cues, while Internet users of a social affective motive showed a bias towards Internet affective-satisfaction-related cues and negative emotional cues. The study provided experimental evidence for the explanation of the cognitive mechanism of the desire to use the Internet elicited by Internet–related cues and negative emotional cues in Internet users of different motives.

Studies of the second category explored the relation of Internet using habits and social identification mostly among specific groups of people from specific perspectives, while studies aiming at all netizens over the entire country are rare. Liao et al. (2011) explored the effects of media use and social contact on college students' stereotypes of nation. Results indicate that the personal impression of the country was greatly affected by the usage of television and interviewees with heavier usage tended to have a positive evaluation. Zhou (2012) clarified and verified the uniformity and diversity characters of the effects of new media use on users' subjective class identification, and explored the diverse effects of new media use in particular.

Method

Data

The data for the study came from a RDD (random digit dialing) telephone survey conducted in China. A total of 1080 participants responded the survey. The margin error for a random sample of this size is ±3%. Considering the political, economic and cultural influence of each city, 36 cities in China were sampled, and 30 respondents were randomly selected in each city. Each interview lasted about 20 minutes on average. The response rate for the survey was 32% (AAPOR RR3). These cities are representative for the entire nation, for they include the eastern, central and western cities.

The data were weighted according to the sex ratio in the Sixth Chinese National Population Census, to ensure that the sample's composition reflects that of the actual Chinese population. This survey sample structure is illustrated in Table 1-4.

Table 1
Sex Ratio

Gender	Percent	Gender	Percent
Male	67.5%	Female	32.5%

Table 2
Age Distribution

Age	Percent	Age	Percent
<20	9.4%	45-59	9.6%
20-29	47.3%	60-74	2.5%
30-44	31.0%	>=75	0.3%

Table 3
Education Level Distribution

The education level	Percent	The education level	Percent
Elementary school and below	4.3%	Junior college	22.6%
Junior High School	12.4%	Bachelor Degree	34.0%
Senior High School	23.6%	Master degree or above	4.3%

Table 4
Income Level Distribution

Income	Percent	Income	Percent
No Income	18.5%	5001-6000	8.6%
1-1000	3.7%	6001-7000	2.7%
1001-2000	6.6%	7001-8000	2.5%
2001-3000	15.0%	8001-9000	1.1%
3001-4000	18.9%	9001-10000	2.4%
4001-5000	13.3%		

Hypothesis

With the development of Internet, the impacts of Internet on people's daily life cannot be ignored. Domestic and foreign research results showed that three factors impact the audiences' social identification. They are the duration，frequency and the aim of TV watching. Will the using of network also impact on the evaluation of social identification? How does the impact work? Based on the insights gained from the previous literature, the following hypotheses were proposed:

H1: The time spent online would have an impact on the netizens' social identification.

H2: The netizens with different aims for surfing the Internet would have different social identification.

H3: The trust in both positive and negative information on the Internet of the respondents would have an impact on their social identification.

Measures

Dependent variables: social identification. In this research, the dependent variables are the evaluation of social identification. We construct a scale of social identification which is based on the domestic and overseas existing research, to assess the evaluation of social harmony. This scale contains 3 items; the respondents are required to make options about the subjective evaluation of social harmony, fairness and security. Evaluation of harmony/ fairness/ safety were assessed with a 5-point Likert item (" How do you think the harmony/ fairness/ safety level of our society?") with the following response options: 1="disharmony/ unfair/ unsafe", 2="less harmonious/ fair/ safe", 3="harmonious/ fair/ safe", 4="fairly harmonious/ fair/ safe", 5="highly harmonious/ fair/ safe". The scale of social identification demonstrated high internal reliability in the current

study (the Cronbach's Alpha coefficient=0.674). The score of the respondents' social identification is an average of the three items, valuing range from 1 to 5 point.

Independent variables: the Internet using habits, the trust on Internet information.

The measure of the Internet using habits in this study includes the respondents' the time spent online and aims for surfing the Internet.

The time spend online was assessed with a 10-point Likert item ("How long do you surf the Internet one day on average?") with the following response:1="never", 2="0.5-1 hour", 3="1-2 hours", 4="2-3 hours", 5="3-4 hours", 6="4-5 hours", 7="5-6 hours", 8="6-7 hours", 9="7-8 hours", 10="over 8 hours".

This study investigates the use purpose of the Internet. Researchers set a multiple choice question "What's the main purpose of your access to the Internet?" for respondents with nine options including recreation, obtaining information, etc. To facilitate statistical analysis, the study divides the nine options into two categories according to Weiser's theory of motivation of the Internet: information acquisition motive and emotion acquisition motive. Among them, "News acquisition" "Increase experience" "Life information acquisition" and "Professional knowledge acquisition "belong to the information acquisition motivation; "Social need" belongs to the emotions acquisition motivation; the tendency of "Shopping" and "Searching applications" is weak, so they are not included two types of motivation. Based on the categories above, the Internet user respondents can be divided into four types: the Internet users with only information acquisition motive; the Internet users with only emotions acquisition motivation; the Internet users with information & emotion acquisition motive; the Internet users with neither of both.

The level of trust of positive/negative information online was assessed with a 5-point Likert item ("How do you trust of positive/ negative information on the Internet?") with the following response: 1="Distrust", 2="Don't trust so much", 3="Senseless", 4="Partly trust", 5="Highly trust".

Data processing

IBM SPSS Statistics 21 software package will be mainly used in this investigation, combining with the methods of descriptive analysis, mean comparison, chi-square test, and correction analysis.

Results

The results showed that the average social identification of netizens was 3.03.

Hypothesis 1 predicted that the time spent online would significantly influence the evaluation of social identification. The results showed that, this proposition was supported: the time spent online is negatively correlated to Internet users' social identification（Spearman $\rho\square$-0.083，p<0.01）. That is to say, the netizens who spent more time on the Internet tend to have lower evaluation of social identification.

Hypothesis 2 predicted that the different aims for surfing the Internet would also significantly influence the evaluation of social identification. The results showed that the average social identification of netizens with the motive of information acquisitions 3.06, while that of the netizens with the motive of emotion acquisition is 2.97. However this difference does not reach statistical significance(p＝0.426). So the result rejected the hypothesis 2.

Table 5
Mean Scores of Social Identification of Participants with Different Motive

	Information acquisition motive	Emotion acquisition motive	Information & emotion acquisition motive	Neither of both
Social identification	3.06	2.97	3.00	3.05

Hypothesis 3 concerned about the influence of the trust of the positive and negative information on the social identification. The results shows that the degree of trust of positive information is positively correlated to Internet users' social identification(Spearman ρ□0.121，p<0.001), while the degree of trust of negative information is negatively correlated to Internet users' social identification(Spearman ρ□0.121，p<0.05). That is to say, the netizens who trust positive information on the Internet to a greater degree tend to have higher evaluation of social identification, and those who trust negative information on the Internet to a greater extent tend to have lower evaluation of social identification. So, hypothesis 3 was supported.

The regression analyses were performed with three blocks of predictors. The first block contained four demographic variables: age, income, gender, and education. The second block contained four variables characterizing different aspects of Internet using habits: the time spent online, information acquisition motive, emotion acquisition motive, both information and emotion acquisition motive. The third block contained two variables characterizing different aspects of the trust of information online: The trust of positive and negative information.

As shown in Table 6, among the demographic variables of, age (β=0.027,p>0.05), income (β=-0.001,p>0.05), and gender (β=-0.056,p>0.05) does not influence social identification, and education (β=-0.075,p<0.05) has a negative relation to social identification. After controlling for the demographic variables, only the time spent online (β=-0.080,p<0.05) had a significant relationship with social identification, while the Internet use motive factors do not influence social identification evaluation. After controlling for both demographic information and Internet use habits, degree of trust in the positive information (β=0.177,p<0.001) is positively related to social identification evaluation, and degree of trust in the negative information (β=-0.136, p<0.001) is negatively related to

social identification evaluation. The netizens who trust positive information on the Internet more, tend to have higher evaluation of social identification, And those who trust negative information on the Internet more, tend to have lower evaluation of social identification.

Table 6

Multiple Regressions on Social Identification

Factors	β	t	△R²
Block 1:Demographics			
Age	0.027	.706	0.008
Income	-0.001	-.014	
Gender	-0.056	-1.426	
Education	0.075*	2.008	
Block 2:Internet use habits			
time spent online	-0.080*	-2.117	0.008
Information acquisition motive	0.025	0.412	
Emotion acquisition motive	-0.041	-0.967	
both information and emotion acquisition motive	0.028	0.460	
Block 3:trust of online information			
trust of positive information	0.177***	4.618	0.034***
trust of negative information	-0.136***	-3.573	

*p<0.05, **p<0.01, ***p<0.001

Discussions and Conclusion

This study conducted a large-scale telephone survey of Chinese netizens from 36 cities, to analyze the relation between Internet using habits and trust degree of information online and social identification of Chinese netizens.

First, regarding the length of time spent online, it is negatively correlated to Chinese netizens' social identification. That is to say, the netizens who spent more time daily on the Internet tend to have lower evaluation of social identification. Thus, Cultivation Phenomenon does exist in the Internet context, but its effect is on the contrary with that in the traditional mass media context. The cause of this difference can be possibly attributed to the following two aspects, on the one hand, due to our mass media insist the positive principle of report (Liao, Li, & Zhang, 2005), it makes the traditional mass media mainly showing positive symbol; on the other hand, highly interact of the new media represented by the Internet, makes the Internet becoming an important channel for people to vent their dissatisfaction, coupled with large amount of rumors spreading in the web platform, which threat the social harmony and security.

Second, regarding the motive for surfing the Internet, there is no significant difference among the netizens with different motives, but through the analysis of the previous achievements, there have been studies conducted and found that among the

netizens of different motives there were differences in personal and social perception. In fact, there often appears different, even opposite conclusions in the domestic and international existing research about the Internet using habits and the psychology outcomes.

Third, trust degree is the important factor that affects netizens' social identification. The netizens that trust positive information on the Internet more tend to have higher evaluation of social identification. The netizens that trust negative information on the Internet more tend to have lower evaluation of social identification. The time spent online is not the only factor that affects netizens for social identification; trust degree of the different nature of the information on the Internet also affects it largely.

Based on the above analysis, we can draw the following conclusions. The using habits of mass media have important influence on the audiences' social identification, the Internet is an important force affecting netizens' social identification just like the traditional media represented by television. Therefore, to improve the level of social identification, it is important to strengthen the management of network society, create a clearer network space, improve the media literacy of the netizens, and treat information of the Internet scientifically.

In fact, in line with some scholars' critiques on the Cultivation Theory, the simple cross-sectional study cannot reveal the causal relationship of the time spent on TV and social identification. Even some scholars pointed out that the relationship between two variables is probably influenced by a third variable at the same time. Therefore, the variables such as motives for Internet surfing and the trust degree in the current study are trying to reveal the in-depth reasons and the mechanisms between Internet using habits affect social identification. This preliminary study has its limitations, and we need to continuously deepened and improve our future research, and take comprehensive utilization of social research methodology and variables so as to give full consideration to all kinds of factors which possibly influence the perception of the realistic society.

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The Study on the perception of human resource management of personnel AtBoromarajonani College of Nursing,Nakhon Ratchasima in fiscal year 2013

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Abstract

This research is an exploratory research on the perception of human resource management of personnel at *Boromarajonani* College of *Nursing,* Nakhon Ratchasima in fiscal year 2013. The sample groups come from empirical random. There are 76 samples. The data collection is done through perception inquiry and human resource management of personnel management, executive field, College of *Nursing* in fiscal year 2013. The data analysis is done with SPSS pc + for window *Boromarajonani* program and the relation is estimated from chi-square.

According to the research result, it is found that most of the personnel (55 percent) are governmental officials. 51 percent are in academic position, 53 percent graduated from master degree level, and 72 percent do not know the regulations and procedures on royal medal ceremony. 68 percent do not know the regulations and procedures of royal medal transfer. 65 percent have duties on transfer operation, the meaning and the class of royal medals. 62 percent know the regulations and procedures on royal medal ceremony. The education levels and personnel type have relationship with the perception on main duty about human resource management with the significant level of 0.05. However, education level, personnel type, position type and position level have relationship on the perception of career advancement, career promotion, salary promotion and royal medal award with no significant level of 0.05.

This research result shows low human resource management awareness. So, information presentation through training programs, conferences, seminars, human resource management manual distribution should be arranged to reach maximum human resource management efficiency and reduce ambiguity and conflicts which may occur in human resource management.

The Study on the perception of human resource management of personnel AtBoromarajonani College of Nursing,Nakhon Ratchasima in fiscal year 2013

Importance and cause of the research

Boromarajonani College of Nursing Nakhon Ratchasima owns the vision to be an excellence college of Nursing in ASEAN, and also to develop the public health personnel to be skillful in order to meet standard and needs of society and ASEAN. The college also projects to set up an integrated body of knowledge for advantage of society and ASEAN by passing on knowledge and inheriting Thai tradition and public health wisdom from social level to ASEAN as well as supporting personnel to develop their skill and ability in response to graduated nursing student development.

By accomplishing the objectives, organization should possess an appropriate number of professional personnel in corporate with number of tasks. Consequently, Human Resources management is an important factor because employee is the person who both provides and applies the resources such as money, material and management. If the organization consists of good quality of personnel, another advantages will follow. Human resources management is also important to organization development because a personnel is regarded as the most valuable property of the organization. So, they can accomplish the organization's objectives and work in the good environment. Human resources management's principle missions cover planning, designing, task analysis, recruitment, work result evaluation, training arrangement, fringe benefit development and resignation. As a result, all level of directors is responsible to inform and create an awareness of human resources management to their subordinates.

There are several advantages of human resources management but mostly organizational aspect is known. However, Thanya Pholanan (2546:17) discusses that not only organizational aspect but also the employee will also advantage from personnel aspect and social aspect too.

There are three aspects of advantages as follows:

1.Personnel aspect: human resources management facilitates them to find out their ability and to develop themselves for task performing into the maximum level.

2.Organizational aspect: human resources management develops an organization as a result from good quality of employee who can complete his/her task effectively in production and service.

3.Social aspect: human resources management help to establish the stability for nation and society because when organization, one of the social development composition, can grow steadily, this will bring a result to employees that they can earn an income to family and society.

So, the employees' perception of human resource management at Boromarajonani College of Nursing Nakhon Ratchasima can reflect to the organizational development. The related human resources personnel should publish their work responsibility in order that employee can access to what human resources management is doing through advertising

board and electronic media. So, employee can reach their maximum ability in task performing and satisfy in human resources management which brings the coalition to the organization.

Research questions

1. How do employees of Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013 perceive human resources management?

2. Does the relationship between academic level and type of personnel effect to human resources management at Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013?

Purpose of the research

1. To study on the employee's perception of human resources management at Boromarajonani College of Nursing Nakhon Ratchasimain fiscal year2013.

2. To examine whether the relationship between academic level and type of personnel which effects to human resources management at Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013 is valid or not.

Hypotheses

Academic level and type of personnel are related to a perception of human resources management at Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013.

Conceptual framework

Methodology

Survey research is used for employees' perception of human resources management and for relationship between academic levels and type of personnel that effects to perception of human resources management at Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013.

Population and sample group

Population consists of 128 personnel, including government officer and temporary staff at Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013

There are 74 persons for sample group derived from empirical random, academic level and type of personnel from Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013.

Instrumentation

This research for employees' perception of human resources management at Boromarajonani College of Nursing Nakhon Ratchasima is a survey-based research that aims to verify the content validity according to human resources standard by 3 experts.

Survey collection

Researchers explain the study's objectives and ask support from sample group to complete the survey, and then researcher will validate the survey completeness which we receive 74 surveys back or 100% of completeness.

Dada analysis

We use program SPSS/Pc+ to analyze the data as follows:

1.Enumerate frequency and percentage of personnel who works in Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013.

2.Assess the percentage of perception of human resources management at Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013.

3.Find out the relationship between academic level and type of personnel that effect to human resources management at Boromarajonani College of Nursing in Nakhon Ratchasima in fiscal year 2013 by using the descriptive statistics Chi-square (χ^2) with significant level at .05.

Research result

1. Regarding to personnel aspect, employees working in Boromarajonani College of Nursing in Nakhon Ratchasima in fiscal year 2013, there are 39 persons (52.7%) graduated a Bachelor's degree and 35 persons (47.3%) graduated over Master's degree. For type of personnel, there are 40 persons of government officer (54%) and 34 persons of staffs (46%) (Table 1)

Table 1
Information of personnel working at Boromarajonani College of Nursing in Nakhon Ratchasima in fiscal year 2013

Information	person	percentage
Academic level		
Bachelor's degree	39	52.7
Over Master's degree	35	47.3
Total	74	100
Type of Personnel		
Government officer	40	54
Temporary staff	34	46
Total	74	100

2. Personnel who works at Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013 perceives the most at taking leave of absence from human resources management which hold the percentage of 91.9, however; transferring is the least of human resources perception at percentage of 66.2 (Table 2)

Table 2

Personnel's perception of human resources management at Boromarajonani College of Nursing in Nakhon Ratchasima in fiscal year 2013

Human resources management perception	Know		Not know	
	N	%	N	%
1. Main responsibility of department is human resources management and administration	53	71.6	21	28.4
2. Follow the progress of career promotion, salary promotion and royal medal award	59	79.7	15	20.3
3. Career advancement	50	67.6	24	32.4
4. Transferring position	25	33.8	49	66.2
5. Moving to another governmental office	31	41.9	43	58.1
6. Taking leave of absence	68	91.9	6	8.1
7. Evaluating working result for salary promotion	41	55.4	33	44.6
8. Resignation	31	41.9	43	58.1
9. Government pension fund	39	52.7	35	47.3

3. For academic level, it is related to the employees' perception of human resources management at Boromarajonani College of Nursing in NakhonRatchasimawith the statistically significant level at .05, however; the rest are insignificant (Table 3).

Table 3

Relationship between academic level and employees' perception of human resources management at Boromarajonani College of Nursing in Nakhon Ratchasima in fiscal year 2013

Human resources management perception	Academic level				Chi-square
	Bachelor's degree		Over Master's degree		
	Know	Not know	Know	Not know	
	N	N	N	N	
	%	%	%	%	
1. Main responsibility of department is human resources management and administration	21 28.4	14 18.9	33 44.6	6 8.1	.004*
2. Follow the progress of career promotion, salary promotion and royal medal award	28 37.8	7 9.5	32 43.2	7 9.5	.463
3. Career advancement	20 27	10 13.5	31 41.9	13 17.6	.095
4. Transferring position	11 14.9	25 33.8	15 20.3	23 31	.135
5. Moving to another governmental office	13 17.6	22 29.7	18 24.3	21 28.4	.383
6. Taking leave of absence	31 41.8	3 4.1	37 50	3 4.1	.853
7. Evaluating working result for salary promotion	14 18.9	14 18.9	27 36.5	19 25.7	.094
8. Resignation	14 19	20 27	20 27	20 27	.152
9. Government pension fund	18 24.3	16 21.6	24 32.5	16 21.6	.387

*p < . 05

    4. Type of personnel associates to employees' perception of human resources management in terms of career promotion, salary promotion and royal medal award with the statistically significant level at .05, however; the rest are insignificant (Table 4).

Table 4

Relationship between type of personnel and employees' perception of human resources management at Boromarajonani College of Nursing in Nakhon Ratchasima in fiscal year 2013

Human resources management perception	Type of Personal				Chi-square
	Temporary staff		Government officer		
	Know	Not know	Know	Not know	
	N	N	N	N	
	%	%	%	%	
1. Main responsibility of department is human resources management and administration	24 32.4	10 13.5	26 35.1	14 19	.143
2. Follow the progress of career promotion, salary promotion and royal medal award	18 24.3	13 17.6	23 31.1	20 27	.034*
3. Career advancement	26 35.1	10 13.5	27 36.5	11 14.9	.095
4. Transferring position	12 16.2	25 33.8	13 17.6	24 32.4	.036
5. Moving to another governmental office	14 19	26 35.1	16 21.6	18 24.3	.244
6. Taking leave of absence	33 44.6	4 5.4	34 45.9	3 4.1	.676
7. Evaluating working result for salary promotion	20 27	8 10.8	38 51.4	8 10.8	.857
8. Resignation	15 20.3	25 33.8	16 21.6	18 24.3	.034
9. Government pension fund	18 24.3	19 25.7	19 25.7	18 24.3	.222

* $p < .05$

Discussion

1. Most of personnel who works at Boromarajonani College of Nursing in Nakhon Ratchasima in fiscal year 2013, their best known perception of human resources management is about taking leave of absence. The reason is that Boromarajonani College of Nursing in Nakhon Ratchasima is a government organization. Therefore, the regulation is mandatory for every employee to follow and understand especially the leave regulation in 11 categories (Regulation about government officer leave: 8). Every employee needs to clarify the reason why they take leave such as training or another reasons. If they take leave without permission, this can break their governmental discipline rules.
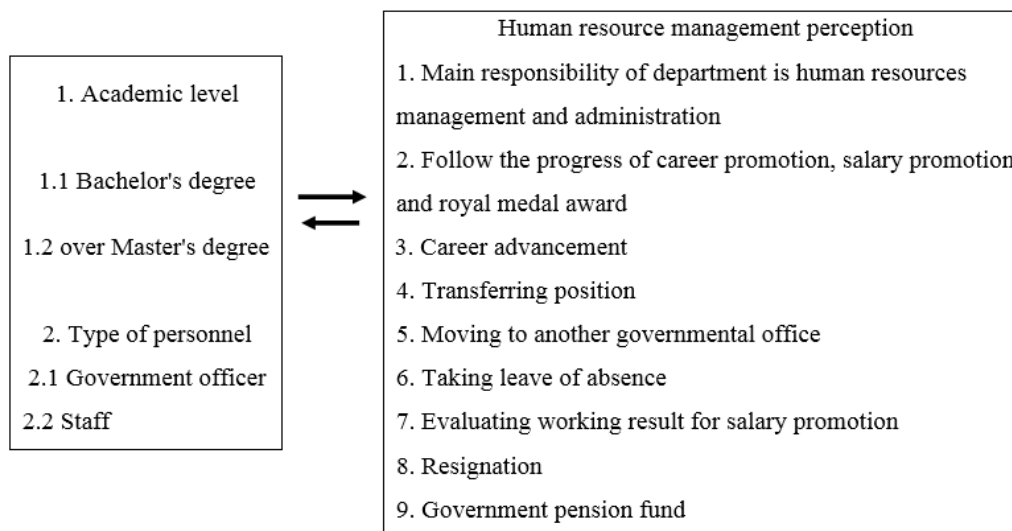
2. Academic level is related to the employees' perception to human resources management at Boromarajonani College of Nursing Nakhon Ratchasima in fiscal year 2013 concerning that main responsibility of department is human resources management and administration with the statistically significant level at .05. We found that 44.6% of personnel with academic level over Master's degree are aware to this perception more than the personnel with Bachelor's degree level whose percentage is 28.4. It is because of personnel with academic level over Master's degree has an opportunity to attend the orientation with the standard from administration group's handbook, and that they can study on the regulation in handbook by themselves (Nuttapun Kejaranun. 130). The orientation is an important process that provides awareness and adapts employees to the organizational regulation. Boromarajonani College of Nursing Nakhon Ratchasima has provided the employee handbook as one of the human resources administration mission.

3. Type of personnel is also associated to human resources management regarding to career promotion, salary promotion and royal medal award with the statistically significant level at .05. The reason is that evaluation period for government officer takes place for career promotion and salary promotion every 6 months; performance 30% and achievement 70%, according to the office of the public sector development commission's promotion indicator that officer should develop them and create a development plan. According to the standard, government officer in academic position is needed to be qualified by Senate regulation (topic 5) indicator 2.1.1 the quality of nursing education (Praboromarajchanok institute for health workforce development: 2013). Government officer will be named a royal medal award when complete 10 years and 20 years of working and when they reach the maximum salary level of specialist position (Handbook to request a royal medal award of 2014, Vocational Education department, Ministry of Education) Therefore, government officer perceives career promotion, salary promotion and royal medal award at the percentage of 31.1 which is higher than staff (percentage of 24.3)

Suggestion

1. College should publish a human resources management handbook in order that personnel can follow the right regulation and prevent them from breaking the rules.

2. There should be a qualitative research for problem and obstacle that personnel from human resources department are facing.

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The Comparison of Two Screening Tests for Depression in Pregnant Women

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Abstract

Antenatal depression is a major health issue but continues to be under recognized in clinical settings. This study aimed to compare two screening instruments for depression in pregnant women; Thai version of the Center for Epidemiological Study Depression check list (CES-D) with Khon Kaen University Depression Inventory (KKU-DI). These two screening tests were performed in 126 pregnant women who attended the antenatal clinic at Maharat Nakhon Ratchasima Hospital. Results showed these two screening tests were significantly correlated. Thirty-two and 37% of participants were screened positive for depression by using CES-D and KKU-DI, respectively. Six of them were reported recognized as having depressive symptoms and all of who met criteria for depression by psychiatrist using M.I.N.I. This finding suggests that screening for depression should be employed in antenatal clinic.

Keywords: *antenatal depression, pregnant women, depression instrument*

The Comparison of Two Screening Tests for Depreesion in Pregnant Women

Background

Depression in young women occurs at a rate twice that of men. Physiologic, psychological, and social phenomena contribute to the development of this multi-factorial disorder. Neuro-endocrine factors, environmental and cognitive factors, social discrimination and the social roles performed by women are those factors may leave women more vulnerable to the onset of depressive disorder[1].

Antenatal depression is a major public health problem because of its high prevalence. A study conducted at King Chulalongkorn Memorial Hospital, Bangkok in 1991 reported a prevalence of antenatal depression of 38.5%. Depression during pregnancy impacts on maternal antenatal care and also on child outcomes including spontaneous premature births, low birth weight, and poor infant growth. Several factors; physiological, psychological, and social aspects, have been reported associated with antenatal depression. Biologically, women exhibiting psychological distress during pregnancy exhibit elevated cortisol levels during midge station that are in turn related to lower fetal weight. Correlation analyses revealed that both maternal psychological (daily hassles, depression, and anxiety) and biochemical (cortisol and norepinephrine) variables were negatively related to fetal biometry measurements and estimated fetal weight. A structural equation model further revealed that when the independent variance of maternal sociodemographic, psychological distress, and biochemistry measures were accounted for, prenatal cortisol was the only significant predictor of fetal weight[2]. Elevated placental corticotropin-releasing hormone (CRH) levels in midpregnancy are positively associated with risk of prenatal depression symptoms but not postpartum depression symptoms[3].

Women were more depressed pretnatally than postnatally, this contributes further evidence to the view that the prenatal period is a separate entity from the postnatal period, with distinctive psychoneuro-endocrine pathways and thus, suggesting different profiles of women's experience[4].

Early detection of depression during pregnancy is critical because depression can adversely affect birth outcomes and neonatal health and, if left untreated, can persist after the birth. Untreated postpartum depression can impair mother-infant attachments and have cognitive, emotional, and behavioral consequences for children[5]. However, depression screening during pregnancy are very difficult because depressive symptoms and uncomfortable symptoms during pregnancy are similar[6].

There are some tools for screening depression during pregnancy such as the Edinburgh Postnatal Depression Scale (EPDS). This is the most widely used screen questionnaires, contains 10 items with cut-off point of 13. The sensitivity and specificity was 82.0 and 65.4%, respectively. This scale, translated into many languages, was suitable to screen depression during pregnancy and within one week postpartum[7]. The Center for

Epidemiologic Studies Depression Scale (CES-D) Thai version[6,9] is another test to detect depression during pregnancy. This test consists of 20-item self-report scale with cut-off point of 16. The sensitivity and specificity was 80.0 and 98.0%, respectively[8]. And there is also the Khon Kaen University Depression Inventory (KKU-DI) scale, the depression-screening test developed for Thai people by Arunpongpaisal S, et al. This instrument is a 30-item self-report scale with cut-off point of 20, and the sensitivity is 88.0% and the specificity is 88.0%[10].

Therefore, the purpose of this study is to compare the CES-D Thai version with the KKU-DI test in depression screening in pregnant women.

Methodology

Study population and instruments

This cross-sectional descriptive research was conducted in pregnant women who attended the antenatal clinic at Maharat Nakhon Ratchasima Hospital, a tertiary care hospital, Nakhon Ratchasima, Thailand from April to June 2006. Convenience sampling was used for participant selection. Pregnant women, regardless of gestational age, parity, and obstetric complication, were screened for enrollment. The aims and procedures of the study were explained to the participants and written consents were obtained. This study protocol was approved by the Institutional Review Board.

The research instruments of this study consisted of 3 tools:

1. The Center for Epidemiologic Studies Depression Scale (CES-D) Thai version[6] The depressive symptoms were measured by using the CES-D Thai version a 20-item self-report scale. This instrument was originally designed by Radloff LS from Center for Epidemiologic Studies National Institute of Mental Health and was translated into Thai version by Kuptniratsaikul V, et al. This scale has been widely used as screening questionnaire for antenatal depression. The score of 16 is the cut-off value to define depressive symptoms. Cronbach's alpha coefficient of the CES-D Thai version in this study was 0.86.

2. Khon Kaen University Depression Inventory (KKU-DI)[9], the depression-screening test develop for Thai people by Arunpongpaisal S, et al was used. This instrument is a 30-item self-report scale. The score of 20 is the cut-off value to define depressive symptoms. Cronbach's alpha coefficient of KKU-DI in this study was 0.89.

3. The Criteria of Diagnostic and Statistic Manual of Mental disorder (DSM-IV) and M.I.N.I.-International Neuropsychiatric Interview was used by psychiatrist to diagnose depression in pregnant women.

Statistical analysis

Descriptive statistics were employed to analyze the demographic data. Furthermore, Spearman's correlation was used to compare the CES-D Thai version with KKU-DI in depression screening.

Results

A total of 155 of pregnant women were screened for enrollment. Twenty-nine women denied participating in the study and six dropouts. Therefore, a total of 120 participants were completed the study. Mean age of study participants was 26.5±0.54 years. Most of the women were living with their spouses (89.2%). Half of them were high school graduate (52.4%) and majority of the women were housewives (45.0%). Nearly half of the study participants had low income (≤ 7,000 THB/month).

These two screening tests were significantly correlated (R = 0.744, p-value = 0.01). Thirty-two and 37% of participants were screened positive for depression by CES-D and KKU-DI, respectively. Six participants were reported recognized as having depressive symptoms and all of whom met the criteria for depression by psychiatrist using M.I.N.I.

Discussion

Identification of the pregnant women who have perinatal depressive symptoms is considered a critical goal of the maternal care system. Early detection of depression during pregnancy is critical because depression can adversely affect birth outcomes and neonatal health and, if left untreated, can persist after the birth. Untreated postpartum depression can impair mother-infant attachments and have cognitive, emotional, and behavioral consequences for children[5].

The aim of the study was to compare the two depression screening tests for pregnant women. The result shows CES-D Thai version correlates with KKU-DI in screening depress pregnant women. However, CES-D Thai version has more consistency in depression screening. The studies of depression during pregnancy in African American women using CES-D with the standard cut-off point (≥16), showed predictive value with estimated reliability = 0.86[11]. And the study in pregnant Mexican women using CES-D showed excellent internal and construct validity[12]. Thus, CES-D is an appropriate instrument for screening depression in pregnant women.

In addition, nurses have role in prevention and treatment of depression by using a biopsychosocial strategic approach. Psychoeducation, physiologic assessment and intervention, and a maintained caring interaction with the client can promote a return to normal mood and effective functioning for most women with affective illness[1].

Summary

Our study highlights the comparison of depression screening tools in pregnant Thai women. There is a need to find a high accurate depression-screening tool for pregnant women at the antenatal department.

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Correlation Between Helping Relationship of Nurses Preceptor and Stress level during Clinical Practice in Labor Room of fourth-year nursing students from class 54th; Boromrajonani College of Nursing, Nakhon Ratchasima.

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Abstract

The objective of this research is to correlation between the helping relationship of nurses preceptor and perceived-stress level of nursing students during clinical practice in labor room. The sample consists of 133 fourth-year nursing students of Boromrajonani College of Nursing, Nakhonratchasima. The instruments using for data gathering and collecting are the assessment form named "Stress Self-assessment Scales for Thai People" constructed by Department of Mental Health; Ministry of Public Health which composes of 20 items and the questionnaire on "Helping Relationship" adopted from the assessment form proposed by Nuchamart Gaewgoontol, composed of 40 items. The validated data is analyzed by using of Percentage, Mean ($\bar{x}$), Standard Deviation (S.D.) and Pearson's Product Moment Correlation Coefficient(r).

The results are summarized as follows:

1. The helping relationship of nurses preceptor as perceived by nursing students during clinical practice in labor room is **moderate** level. ($\bar{x}$ =3.26, S.D.=.70) The factors with highest mean are on Role Model Perspective as high level ($\bar{x}$ =3.63, S.D.=.73) and the factors with lowest mean are on Empathy Perspective as moderate level ($\bar{x}$ = 2.76, S.D.=.87).

2. The stress during clinical practice in labor room of nursing students is **mild** level with mean score of 18.69 ($\bar{x}$ = 18.69, S.D.=10.78)

3. The correlation between helping relationship of nurses preceptor and stress of nursing students during clinical practice in labor room is **negatively low level** (r = -.257) and significance level, p <.01.

Keyword : Helping Relationship,   Nurses Preceptor,   Stress level,   Labor Room

Correlation Between Helping Relationship of Nurses Preceptor
and Stress level during Clinical Practice in Labor Room
of fourth-year nursing students from class 54th;
Boromrajonani College of Nursing, Nakhon Ratchasima.

Background

Nursing is a professional based on practice. Learning nursing will progress if learners are able to transfer their knowledge to practices (Brenan & Hutt, 2001). Clinical nursing practicum is considered the heart of nursing education because it is an integral part of theory and practicum developing nursing skills (Lee, 1996). Nursing practicum is done in authentic situation which learners are able to see, touch, and care a real person. However, clinical practice is experience that is able to stimuli stress of nursing students (Beck et al, 1997; Beck & Srivastava, 1991), especially when they practice in the first clinic or rotate to a new one (Price, 1995). At that critical period, they will face with new environment or unfamiliar, uncertainty situation, they have to learn how to interact with patients and their relatives and health care teams, they may feel lack of knowledge and skills to practices, and they will be closely trained by a nursing instructor or preceptor.

In clinical nursing practice, registered nurses is considered a key factor in being facilitate, support, and participate learning activities or set learning environment to achieve the study goal. Nursing preceptor will work with students closely as a leader of a shift or nursing care team and as a teacher who is ready to help, facilitate, supervise, and give advice. If nursing preceptor look at students as persons valuable for nursing profession and have good relationship with them, the students will develop to be good team members who know how to build good relationship with the others especially patients (DeYoung, 1990). Therefore, helping relationship is important to grow and develop nursing roles of students (Chunhapran, 1991).

Maternal and newborn nursing and midwifery is a course different from other nursing courses because it is about simultaneously caring for two lives. Practicing in the labor room is even more important for the student because it could be their situational crisis. If clinical supervisors, considered the professional helpers, understand that students are nervous, anxious, or stressful during their clinical practices and will to help with understanding, compassion, caring, and acceptance of students as a person, the students will be encouraged and happy. They will develop good attitude to nursing profession and would like to practice in that challenging clinic.

Purpose and aims

The overall purpose of the research is to study helping relationships of nurses preceptor and perceived-stress level of nursing students during clinical practice in labor room. The specific goals are to study level of the helping relationship perceived by nursing

students, to explore stress level of nursing students while practicing in the labor room, and to determine correlation between the helping relationship of the nursing preceptors and perceived-stress level of nursing students.

Research description

This is a descriptive study. The research will be conducted in the labor room of hospitals where nursing students are practicing. The sample will be recruited by using simple random sampling. The instruments using for data gathering and collecting will be the assessment form named "Stress Self-assessment Scales for Thai People" constructed by Department of Mental Health; Ministry of Public Health which composes of 20 itemsandthe questionnaire on "Helping Relationship" adopted from the assessment form proposed by SonsawatChaidaroon ,composed of40 items. The instruments reliability will be tested by using Cronbach's Alpha Coefficient is 0.97. Validated data will be analyzed by using of Percentage, Mean($\bar{x}$), Standard Deviation(S.D.) and Pearson's Product Moment Correlation Coefficient(r).

Ethical considerations

The IRB was approved by committees on human research of Maharat Nakhon Ratchasima Hospital where the researcher collected data for this study. The described purposes and procedures of the project, ask for potential participants' agreement to take part in the study, obtained informed consent, and assure of their confidentiality. All data was kept in disclosed and data analysis was executed and reported on a collective basis.

The results are summarized as follows:

1. The level of helping relationship of nurses' preceptor as perceived by nursing students during clinical practice in labor room is **moderate** level. ($\bar{x}$ =3.26, S.D.=.70) The factors with highest mean are on Role Model Perspective as high level ($\bar{x}$ =3.63, S.D.=.73) and the factors with lowest mean are on Empathy Perspective as moderate level ($\bar{x}$ = 2.76, S.D.=.87).

2. The level of stress during clinical practice in labor room of nursing students is **mild** level with mean score of 18.69.

3. The total helping relationship of nurses preceptor is **negatively low level** of on statistically correlation to levels of stress of nursing students during clinical practice in labor room(r = -.257 and the significance level, p <.01).

Discussion

1. Year four nursing student's perception of helpfulness to their mentor nurses in the maternity ward.

Nursing student's perceived level of helpfulness in their professional relationship of mentor nurses at maternity ward was at moderate ($\bar{x}$ = 3.26, S.D. =.70).This may be due

partly to the fact of the day to day workload of the mentor nurses and the ability to build positive relationships with the students. By having the extra students on top of their day to day workload makes their jobs very intensive. The routine tasks and day to day responsibilities for the nurse are considerable. They have many problems and obstacles to overcome along with being aware of the emotional state of the patients and their relatives as well as being aware of their fellow colleagues. Because of these issues nurses find it difficult to fully take the time out to care for the students because it can potentially take away the quality of care from others (Champuang K, 1995).Along with the studies of Deleu & Neamsakon (1997) who found that the professional mentorship of nurses to their year 4 students at the Boromarajonani College of Nursing, Uttaradit scored a level defined as average. Similar results were had by Ketin (1997), who found that the level of trust the nurses had in the quality of assistance of the nursing students in clinical practice was also at a level defined as moderate.

Maternal newborn nursing and midwifery is a field that cares for two, especially in the labor room. It is considered as a crisis situation and given the highest of priorities. Students are less experienced and need closely monitoring (Champuang K, 1995). Typically teachers have to take care of 6 - 8 students at a time and teachers will only teach clinical practice during their morning shift which are during office hours. The evening and night shifts, a mentor nurses will supervise closely to nursing students. In particular the practice of delivering babies and newborn care art complex skills which draw on professional decision making and experience. As it has been noted there is very little time for a quality professional relationship which may in fact be one of the reasons why the mentors to find their role in helping nursing students at a level defined as moderate. The study by Brammer (1993) found that sympathy, accepting one as a person, and sincerity are the important components of helping relationships.

The helpfulness the nurses played and their ability to be a role model to the student nurses was found to be defined as having the highest average ($\bar{x}$ =3.63, S.D.=.73). The sense of empathy the nurses had in the maternity ward towards the nursing students was defined to have a low average ($\bar{x}$ = 2.76 , S.D.=.87).Nurse mentors are very important people for nursing students as role model(Osman,1987). A good role model takes a leadership role and asked as an incentive for student nurses as well as providing value to the workplace. There is a research to support the power of being a good role model. Studies have found that a good role model can have a social effect of both good and bad behavior (Sarason & Ganzer, 1971). Those who are responsible for the clinical practice of nursing students have to be prepared in every aspect. Quality supervisors must be able to demonstrate how to care of patients in a real situation (Billing & Halstead, 1998:286). Also quality supervisors must have the ability to build interpersonal relationships because students will mirror their actions. Benor & Leviyof (1997:206-211) studied perceived characteristics of effective supervisors of 123 Nursing students in Israel and found that the desirable features is the ability to practice nursing (Pasuput, 1999). Furthermore, mentor nurses also have nursing skills as well as understand patient's needs and problems. Associated with the

study of Deleu & Neamsakon (1997), which investigated the perceived helpfulness to a nursing professional by fourth year nursing students of Boromarajonani College of Nursing, Uttaradit found that to be a role model was defined at the highest average level.

The sense of sharing duties and helpfulness the fourth year nursing students felt while working in the maternity room was in the lowest average level mainly because this was their first experience in the maternity ward and they were not familiar with the environment or the personnel. They had no experience or skills in delivering and caring for newborns. Such skills require both academic and mental strength. To meet the critical and complex conditions virtually all students will experience a higher level of anxiety which can manifest itself both physically and mentally. Physical expressions of anxiety result in symptoms such as headache, abdominal discomfort, diarrhea, shaking hands, cold hands and feet and some people experienced bouts of fainting. Emotional expressions of anxiety result in symptoms such as student's being afraid, frustrated, distracted easily, forgetfulness, cognitive decline, and decision errors. Nursing mentors should be seen as helpful professionals who are sympathetic to the situation the students are involved in and understand the stress they may be under. Nurse mentors were able to communicate with students about feelings, commonsense by listening to the words of the students, expressed their willingness to recognize the situation of the students. Carkhuff (1977) mentioned that without common sense, there is no basis to assist. If nurses are compassionate, help, and encourage students to express their ideas and their ability to practice nursing, it will allow the student to have a greater sense of job satisfaction and enjoy the clinical practice and to develop a good professional manner.

2. Stress level in nursing practice at delivery room of the 4th year nursing students was at average score of 18.69 (x = 18.69, S.D.=10.78) which slightly above normal. This is consistent with a study comparing stress to nursing students during clinical practice and clinical education in the classroom. The study found that distress nursing students felt in clinical practice was more than what they felt in the classroom (Rhead, 1995). Contrary to the findings of Phuntu (2012), who studied the stress and coping model of practicing nursing of nursing students at Boromarajonani College of Nursing, SuphanBuri. The study found that 68.0 percent of year 2 – 4 nursing students had perceived levels of stress from nursing practice and patient care at moderate levels. And the stress level of nursing students while practicing nursing at Roi Et hospital was reported at high level (57.96 percents) and at severe level (42.11%) (Kamsawas, 2008).

It is universally acknowledged that experience inclinical practice is a stressful experience for most students (Beck et al, 1997) especially during nursing practice and patient care for the first time(Admi,1997; Lees and Ellis, 1990; Mahat, 1996,1998) Specific stresses include training in a new environment (Price,1985; Lees and Ellis, 1990), new experiences (Admi,1997; Mahat, 1996,1998), Having to learn to interact with patients, families and staff in the health team (Lees and Ellis, 1990; Mahat, 1996).The department has teaching design for the 4th year nursing students who have to practice at the maternity ward. The teaching design provided incremental learning and including orientation and

providing students with a sufficient amount of information on both the course and each department. These are believed to help prepare students to reduce stress and anxiety. Throughout the four-week practicum course, students are scheduled on morning, afternoon and night shift. Students were assigned to practice two times for the afternoon shift and two times for the nightshift and had 2 - days off for a week. First week, there were orientation activities and nursing demonstrations to be performed by teachers and nurse mentors. Then arrange for all students to perform practical in nursing at the morning shift for two weeks. Arrangements were then made for students to learn and practice their nursing activities so as to be fully prepared for the afternoon and night shifts. Then there was assignment to practice at the afternoon shift and night shift duty in the 3rd and 4th week. Students were assigned their shifts; each shift consisted of 2 students until all the students had completed a shift. Each shift started with pre – conference with nursing advisors prior to nursing implementation and finished with post – conference.

For practice in the morning shift, most students are under the care and supervised by instructors. All nursing practices will be supervised by instructors. However, the ratio of instructors to students is 1:6-7 students, instructors share responsibility for each student during nursing practices. There are some activities that students need to do at the same time and therefore the instructor can only monitor one, it is therefore critical that the help of a nursing mentor is there to guide and regulate the practices of the student. Especially at stage 2 and 3 of labour, the nursing instructors must closely monitor students for nursing practices. The performance of all student activities in the evening shift and night shift are supervised by nursing mentors. Students learn from the mentors who were solely focused on teaching nursing skills. The mentors in each shift may have different nursing skills; therefore, students are mainly under the supervision of instructors. It is possible that instructors and mentors developed close relationships and students did their nursing practice. They supervised practices of students, had good relationships with students, understood students, treated students as a person, and did not blame the students. Some students felt that to be supervised closely resulting in less stress, but some did not. The latter students had few more stress than normal.

3. The relationship between a relationship of facilitation of nursing mentors and stress level in nursing practices in labor room of the 4th year nursing students was found that mentorship of nursing mentors had negative correlation to the stress level. Stress level increased while mentorship from nursing mentors went down. This can be explained that the inner feeling of nursing mentors toward students, giving opportunities for discussion, demonstrating nursing skills proficiency, investigating and clarifying the actual defect, and assignment by taking into account the ability of the students, encouraging students to think for themselves showed good relationship between nursing mentors and nursing students. It can be presented that nursing mentors were ready to help, friendly, and keen understanding, provided aid and counseling and supported students in their learning. As a result, stress reduction in clinical practices of students allowed them to learn better. This is believed to stimulate student learning and improve nursing skills.

Study showed that the relationship scored lowest in the following items; when nursing mentors asked the students how they were feeling while at work, blaming the students in front of other students when mistakes occurred, giving helpful information during meetings, requesting more information when a mistake occurred, encouraging students to problem-solve and keeping student confidentiality. However if these things did not occur or occurred less frequent it would represent a bad working relationship resulting in higher levels of stress, anxiety, and frustration at work. The relationship between the nursing instructor and their students are paramount, if there are any tensions or one did not get along well with each other it is considered as a barrier to student learning (Chonhapan, 1991).

Suggestions

1. Nurses and students should be encouraged to participate in activities prior to their nursing practice which in turn should create positive attitudes and team building.
2. Institutions should develop cognitive and interpersonal skills to help the nurses who are nursing mentors.
3. Institutions should develop sustainable professional relationships between students and nurses to reflect the idea of "Good practice, good discipline, understand humanity, maximum benefit to the community"

Suggestions for further studies

1. Undertake further research consisting of interviewing nursing mentors about how to build your working relationships to assist the nursing students.
2. Create a favorable clinical course which provides proper practice in working together with nurses to nursing students in clinical practice.
3. Should do further study on the observation building proper inter working relationships between nurses and nursing students.

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Political Efficacy among Malaysian Voters: The Role of Traditional and New Media

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Abstract

The technological advancement and political situations have dramatically impacted the way traditional and new media have played their role in society, especially in the political development of the country. The news on current affairs, politics and other social and economic aspects is made available to audience from many different media sources. Since scholars studied media, news media credibility has been a major concern to understand audience perceptions and attitudes towards the media and its role in politics. But little investigation has been conducted on news credibility as perceived by audience members. It is argued that trust in the media leads to trust in the political system and media would do well to instill confidence in the political efficacy among voters.. Scholars argue that media create agreement or disagreement among the audiences towards the political system. This study investigated media credibility among Malaysian voters by examining specifically the extent the voters trusted the traditional and new media. This study also examined how traditional and new media use and trust in the media explained the perceived political efficacy among the voters.

Data were collected by administering the questionnaire on voters nationwide to understand their appreciation of media credibility and its contribution toward the political efficacy. The 2030 respondents were selected through quota-sampling from two parliamentary constituencies in each state. The data, collected in July 2012, were analyzed using SPSS version 17 for both descriptive and inferential statistics to answer the research objectives and test its hypotheses.

The study found that voters perceived the media as credible, with highest trust seen among television users, followed by users of newspapers and radio. Internet was found to be the least credible. The results of hierarchical regression suggested that traditional and new media use (first block) explained 4%, 2%, & 2% of variance in internal political efficacy, external political efficacy, and voter efficacy respectively. The second block of trust variables (personal trust in media, media system trust, and trust in political reporting) explained 15%, 17% & 17% of variance in political efficacy dimensions respectively. In the analysis, internet use was significantly correlated with voter efficacy. Voters are still depending on traditional media rather than on the new media for political efficacy. Implications and recommendations are further discussed.

Introduction

The current study examines the relationship between media use/credibility and political efficacy. Channels of communication have been found to affect greatly on how voters comprehend messages and form their attitude towards the candidates and parties (Kaid & Postelnicu, 2005) . A higher level of political efficacy reflects the stability of a political system (Wu, 2003) with higher political efficacy indicating likelihood of voting and feeling of an effect on the government.

Objectives of the study

This study investigates how use and trust of new and traditional media have an effect on the perceived political efficacy among the Malaysian voters. An analysis will be added on differences by gender and race.

Literature Review

Political efficacy

Political efficacy was originally conceptualized by political scientists Campbell, Gurin, and Miller as "the feeling that individual political action does have, or can have, an impact on the political process. It is the feeling that political and social change is probable, and that the individual citizen can play a part in bringing about this change" (Cited in Caprara, Vecchione, Capanna, & Mebane, 2009, p.1002).

Two broad dimensions emerged namely internal efficacy and external efficacy. The internal political efficacy was defined as "people's beliefs that the political system is amenable to change through individual and collective influence", whereas external political efficacy is defined as "personal beliefs regarding the ability to achieve desired results in the political domain through personal engagement and an efficient use of one's own capacities and resources" (Caprara et al., 2009, p.1003). Another study found political efficacy to have three dimensions: internal, external and epistemic political efficacy (Pingree, 2011). Based on social cognitive theory, Caprara et al. (2009) proposed another concept which is perceived political self-efficacy. All these concepts examined the level of influence a citizen can have on the political systems of a country.

Political efficacy was correlated with several political attitudes and demographic characteristics. Higher level of political engagement and political trust correlated with political efficacy (Wu, 2003). Kaid, McKinney and Tadesco (2007) found that political information efficacy, which is similar to internal political efficacy, correlated with political interest, political knowledge, political cynicism, political awareness and voting likelihood among others.

Demographic profile was also found to contribute to political efficacy. Gender and education were significantly influenced political information efficacy and perceived political self-efficacy (Caprara et al., 2009; Kaid et al., 2007).

With the above literature discussed, the following hypotheses were developed:

H1: Malaysian voters with higher level of education would likely perceive themselves more politically efficacious than those with lower education

H2: Gender would have significant effect on political efficacy with males being more politically efficacious than the females.

Media use and credibility

Majority of studies on media uses and gratifications reported that people are driven by three major motives: entertainment, social and information-seeking (Ancu & Cozma, 2009; Jamal & Melkote, 2008; Kaye & Johnson, 2002).

A recent study (Dhaha, 2014) found Malaysian voters used television most to obtain their political information as against another study (Freeman, 2013). that found young Malaysians preferred to go online to obtain their news.. With contradicting results, the following hypothesis was put forward:

H3: Television exposure is higher than the newspapers, radio and interne exposure

Media credibility has gained increasing attention with the growing media audiences and the convergence of several outlets of communication to track the latest news and political current issues.

There are several reasons concerns about media credibility (Idid & Saodah, 2005) among them are voter dependence on information and news on politics and elections to make their decisions.

Research on media credibility has main two broad areas: source credibility (Golan, 2010; K. a. Johnson & Wiedenbeck, 2009; T. J. Johnson & Kaye, 2010) and medium credibility (Idid & Saodah, 2005, 2006; Jackob, 2010; T. J. Johnson & Fahmy, 2008) which is addressed by the current study.

Mixed results were reported regarding the credibility of television compared to newspapers, (Idid & Saodah, 2005, 2006; Saodah et al., 2011; Zhang, Zhou, & Shen, 2014). Generally online media was perceived to be more credible than its traditional counterpart (T. J. Johnson & Kaye, 2010; Melican & Dixon, 2008).

Idid and Saodah (2006) reported a longitudinal study on media credibility in Malaysia and found that credibility ratings for television and newspaper slightly increased particularly in 1990 and 1995.

Based on the above discussion, this hypothesis is postulated:

H4: Television would be rated as more credible than newspapers, radio, and Internet.

Media use is often correlated with several political behaviors. Kaid et al. (2007) found that television use was positively related to political efficacy and political participation. Similarly, Allen (1991) found a correlation between television use and newspaper use with political efficacy. In other studies, the Internet use was found to have significant impact on internal political efficacy (Kenski & Stroud, 2006; Sweetser & Kaid, 2008). With these discussions, the following hypotheses are posited:

H5: Media use (television, newspaper, radio, and Internet) would have significant prediction on political efficacy.

Kaid et al. (2007) found that young voters' exposure mainstream media such as television had impact on their confidence in participating in political activities such as voting. This denotes the perception of young youth about their effectives in influencing the political system. This is likely to be shaped by the media and the voters' credibility perceptions. Pingree (2011) found that media trust is positively correlated with epistemic political efficacy and external political efficacy, while no correlation between media trust and internal political efficacy is reported. Little is known about the media credibility explanations of political efficacy. It is argued in this study that since the exposure to media influenced the way people perceived efficacy in politics, it is also likely that perceptions of trust and believability in the media will predict the political efficacy. As such, the following hypotheses were formulated:

H6: Media credibility would be a significant predictor of political efficacy.

Methodology

Research design and sample size

A nation-wide quota sampling procedure was used to gather data from the respondents who were Malaysian registered voters aged over 21 years in June 2012. A 45 minute face-to-face interview was conducted.

Measurements

Several variables were used to answer the research questions and test its hypotheses. On media use the respondents were asked how frequently they watched television programmes, listened to radio, read newspapers, and surfed the Internet per week on a seven-point scale ranging from 0 day to 7 days a week.

Political efficacy was measured with fourteen (14) items covering the most predominant dimensions in the literature: internal and external political efficacy. An example item includes "my voice is important to decide the country's future". All those items were measured on four-point scales of (1) strongly disagree, (2) disagree, (3) agree, and (4) strongly agree.

Media systems credibility was asked on use of television, radio, newspapers and internet with the respondents asked to rate their level of believability using four-point scale where 1 denotes highly not trusted and 4 indicate highly trusted.

Respondents were asked how much they believed on the political reports contained in the media, using a five-point scale of (1) totally disagree, (2) Disagree, (3) slightly agree, (4) Agree, (5) totally agree.

Data analysis

The collected data were analyzed using statistical package for social science program (SPSS for windows, version 17.0).

Exploratory factor analysis was conducted for the fourteen items of political efficacy, while Cronbach's Alpha was used to assess the internal consistency of the study's scales.

Findings

Demographic profile

The respondents' demographic background is in Table 1.

Table 1

Demographic profile of the respondents

Demographics	Frequency	Percentage
Gender		
Male	1019	50
Female	1011	50
Total	2030	100.00
Race		
Malay	1245	61
Chinese	547	27
Indian	197	10
Others	41	2
Total	2030	100.00
Religion		
Islam	1257	62
Hindu	185	9
Christian	168	8
Taoist	20	1
Confucius	28	1
Others	8	1
Total	2030	100.00
Age		
21-25 years old	311	10
26-30 years old	209	15
31-35 years old	278	14
36-40 years old	212	10
41-45 years old	263	13
46-50 years old	198	10
51-55 years old	295	15
56-60 years old	208	10
61-65 years old	55	3
Total	2029	100.00
Education		
No formal education	24	2
Primary school	94	5
Form 1-3	213	11
Form 4-5	711	35
Form 6/certificate/diploma	575	29
Degree or higher	367	18
Total	2030	100.00
Family income		
Less than RM1000	202	10
RM1000-1500	213	16
RM1501-2000	332	17
RM2001-2500	194	10
RM2501-3000	282	14
RM3001-3500	225	11
RM3501-4000	144	7
RM4001-4500	124	6
RM4501-5000	97	5
RM5001-5500	22	1
RM5501-6000	30	2
More than RM6001	25	1
Total	1990	100.00

Media use and its credibility

Table 2 showed that television was the first choice to keep respondents updated about political issues and currents news, followed by newspapers), and radio use with the Internet the least preferred. Respondents were exposed to television everyday (42%) as compared to newspaper use (31%) and 18% each for radio use and Internet use.

Table 3 suggested that people are still holding trust in mainstream media. Overall, 85% of the voters trust TV; followed by newspapers, (60%) radio (75%), while Internet (63%).   Reporting of political newspaper on television was rated highest than the other media systems.

Exploratory Factor analysis

An exploratory factor analysis (EFA) was conducted for the political efficacy, using principal components with Varimax rotation (Table 4) with three factors. The factor loadings of all items were above the threshold of .50. Factors loadings ranged from .555 to .783.

The first factor was labeled as "internal efficacy", the second factor, external efficacy, of five items, whereas the third factor (voter efficacy) consisted of three items. The three factors managed to explain about 51% of variance. All the three factors obtained an acceptable Cronbach's alpha coefficients of .746, .654 and .652 respectively.

Table 2:
Media and use among the voters

No. Statements/items Media use	None	Level of use: days per week							Mean	SD*
		Once a week	2 days a week	3 days a week	4 days a week	5 days a week	6 days a week	everyday		
Television use	1%	1%	5%	12%	10%	15%	15%	42%	5.415	1.734
Newspaper use	4%	4%	8%	17%	14%	13%	9%	31%	4.618	2.092
Radio use	12%	4%	11%	13%	15%	13%	13%	18%	3.968	2.277
Internet use	24%	6%	9%	10%	14%	10%	10%	18%	3.40	2.560

Note: * Standard deviation

Table 3
Media systems credibility among the voters

No. Variables Media use	Media systems credibility				Mean	SD
	Highly untrusted	Untrusted	Trusted	Highly trusted		
Television believability	2%	13%	54%	31%	3.142	.7059
Newspaper believability	5%	17%	60%	18%	2.926	.7313
Radio believability	6%	20%	58%	17%	2.846	.7613
Internet believability	13%	24%	48%	15%	2.650	.8857

Table 4

Exploratory Factor analysis for Political efficacy

FACTORS	Item Label	ITEMS	F1	F2	F3	Eigen Value	Alpha (α)
F1: Internal efficacy	EFFIC5.	My vote is important to decide the country's future	.749			2.491	.746
	EFFIC11.	The Malaysian government is determined through election	.740				
	EFFIC4.	The voting is one way for me to express my opinion towards government	.730				
	EFFIC10.	Voters in Malaysia are free go out to vote	.610				
	EFFIC12.	Parliament has a power to enact law	.555				
F2: External efficacy	EFFIC14.	Federal government can still commanded although lacking two thirds seats in parliament		.665		2.131	.654
	EFFIC7.	The government cares about peoples' welfare		.605			
	EFFIC9.	Election (GE & By elections) in Malaysia is handled fairly		.604			
	EFFIC6.	The government officers care about my concerns		.581			
	EFFIC13.	I do not mind who becomes Prime Minister as long as he eligible regardless of race		.578			
F3: Voter efficacy	EFFIC1.	I understand sufficiently country's political issue			.783	2.013	.652
	EFFIC2.	I am confident when I talk about politics and administrative issues			.730		
	EFFIC3.	I am free to voice my concern on government politics			.650		
		% variance explained for each	19.163	16.414	15.482		
		Overall % variance explained					51.055
		Overall Alpha					.790

Note: The scale used for these items rang from totally disagree to totally agree (4-point likert scale)

Table 5

Cronbach's alpha for the constructs of this study

Constructs	No. of items	Cronbach's alpha
Internal efficacy	5	.746
External efficacy	5	.654
Voter efficacy	3	.652
Political reporting trust	4	.706
Attributes of media credibility	5	.846
Media systems credibility	4	.679
Media use	4	.614

Hypotheses Testing

The results supported the first and second hypothesis. Malaysian voters felt they had internal political efficacy (t=103.365, p=.000), external political efficacy (t=57.935, p=.000) and voting efficacy (t=.72.045, p=.000). Malaysian voters were found to have higher internal efficacy. It means that they feel that they have influence on the political system in the country through individual and collective levels.

Table 6

One-sample t-test showing political efficacy dimensions

No	Dimensions	Mean	SD	t	df	p
	Internal efficacy	3.0705	.46629	103.365	2026	.000
	External efficacy	2.7380	.57279	57.935	2021	.000
	Voter efficacy	2.8718	.54427	72.045	2022	.000

On the third hypothesis, the results showed Malaysians dependence on television (M=5.42, SD=1.74) more than the newspapers (M=4.62, SD=2.09), radio (M=3.97, SD=2.28) and Internet (M=3.40, SD=2.56).

Table 7

Paired Sample t-test between television with other media

No.	Variables	Mean	SD	r	p	t	df	p
Pair 1	Television use	5.4167	1.73517	.403	.000	17.040	2027	.000
	Newspaper use	4.6179	2.09150					
Pair 2	Television use	5.4167	1.73517	.309	.000	27.102	2025	.000
	Radio use	3.9679	2.27742					
Pair 3	Television use	5.4167	1.73517	.171	.000	31.969	2027	.000
	Internet use	3.40	2.560					

The Paired Sample t-test also supported the fourth hypothesis (H4). The television was the most credible source among the Malaysians (M=3.14, SD=.706) followed by newspapers (M=2.93, SD=.731) and radio (M=2.85, SD=.759). The Internet was the least trusted media among the respondents (M=2.65, SD=.886).

Table 8

Paired t-test between television believability with other media

No.	Variables	Mean	SD	r	p	t	df	p
Pair 1	Television believability	3.1424	.70641	.561	.000	14.386	2022	.000
	Newspaper believability	2.9268	.73123					
Pair 2	Television believability	3.1424	.70641	.476	.000	17.653	2025	.000
	Radio believability	2.8475	.75943					
Pair 3	Television believability	3.1424	.70641	.138	.000	20.914	2014	.000
	Internet believability	2.6496	.88590					

For the rest of the hypotheses, Hierarchical regression analysis (HRA) was conducted. As shown in table 9, demographics (gender and education level), media use indicators and trust variables were regressed on political efficacy dimensions: internal efficacy, external efficacy, and voter efficacy. Demographic variables did not contribute to internal efficacy and external efficacy. However, they were predictors of voter efficacy with gender (β=.067, p <.05) and education level (β=.050, p <.05). It means that males and highly educated voters had more political efficacy than females and less educated ones.

The results also suggested that television use (β=-.096, p<.001) and radio use (β=.059, p <.05) only negatively contributed to internal efficacy. It means that the higher the television and radio use, the less their internal efficacy will be. In addition, Internet use (β=.047, p<.05) positively predicted voter efficacy, while newspaper use positively predicted all political efficacy dimensions, namely internal efficacy (β=.165, p<.001), external efficacy (β=.062, p<.05) and voter efficacy (β=.091, p<.001). All the media use indicators collectively explained about 4%, 2% and 2% of variance in internal efficacy, external efficacy, and voter efficacy respectively, while demographic variables contributed minimal variance.

Table 9
Results of the hierarchical regression analysis

Predictors	Dependent variables		
	Internal efficacy	External efficacy	Voter efficacy
Demographics			
Gender	-.009	.029	.067*
education	.025	-.024	.050*
R Square	**.005 (1%)**	**.001 (0%)**	**.017 (2%)**
F-change (sig.)	4.690 (Sig=.009)	1.218(Sig=.296)	17.741 (Sig=.000)
Media use:			
Television use	-.096**	.008	-.003
Newspaper use	.165**	.062*	.091**
Radio use	-.059*	.021	-.019
Internet use	-.025	.042	. .047*
R² change	**.035(4%)**	**.015 (2%)**	**.014 (2%)**
F-change (sig.)	18.384 (Sig=.000)	7.754 (Sig=.000)	7.499 (Sig=.000)
Trust variables:			
Attributes of media credibility	.289**	.367**	.362**
Media systems credibility	.142**	.033	.050
Trust in political reporting	.023	.070*	.036
R² change	**.143 (15%)**	**.172 (17%)**	**.160 (16%)**
F-change (sig.)	117.631 (Sig=.000)	142.650 (Sig=.000)	133.477 (Sig=.000)
R² total	**.182 (18%)**	**.188 (19%)**	**.192 (19%)**

Note: ** p<.001, * p<.05, values are standardized beta coefficients.

The trust variables explained higher percentage as compared to demographic variables and media use indicators, with variance of 15%, 17%, and 16% in internal efficacy, external efficacy, and voter efficacy respectively. The results revealed that attributes of media credibility significantly and positively predicted internal efficacy (β=.289, p<.001), external efficacy (β=.367, p<.001) and voter efficacy (β.362, p<.001). Media systems credibility only positively predicted internal efficacy (β=.142, p<.001), while trust in political reporting only explained external efficacy (β=.070, p<.05).

Discussion and conclusion

The results found television as the most preferable media followed by newspapers, radio and the Internet when seeking information and news. Previous studies (Dhaha, 2014; Saodah et al., 2011), found that Malaysians prefer television over other media outlets.

Television was found to be the most credible among the media but with significant relationship with other media believability with varying degrees.

Malaysian voters were politically efficacious on three dimensions: internal, external and voter efficacy Political efficacy dimensions were predicted by several dimensions.

Media use was correlated with political efficacy dimensions. Television use and radio use were negative predictors of internal political efficacy. Internet use was found to have significant impact only on voter efficacy.

Media credibility measures contributed the highest towards political efficacy. Among the media credibility measures, attributes of media credibility contributed higher percentages compared to media systems credibility and trust in political reporting.

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The Handicapped Elderly Care Taking at Home by Community Network

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Abstract

Background: A number of the older adults in Thailand were 7 million or 11.5 percent of the country's population. It is found that the handicapped and the elderly care taking is mostly the burden of family members and public health personnel. The community and network members still little take part in this incident.

Objectives: The objective of this study was to investigate a guideline for the handicapped elderly care taking at home by the community network, Chalermphrakiat district, Nakhonratchasima.

Methods: An action research and development study was conducted among the personnel public health agencies, the older adults/care takers in Chalermphrakiat district. Data were obtained through focus group discussion and participatory observation.

Findings: Chalermphrakiat district consisted of 6 sub-districts. There were 167 handicapped elderlies and about 116 persons (69.46%) who obtained an ADL score at score at serious dependence. Results of the meeting to find a guideline for the handicapped elderly care taking at home by network members in the community could be concluded as follows: Provision of knowledge, Home visit, Coordination about data of the handicapped elderlies with network members, Holistic care taking, Participation and help mobilization. The handicapped elderly care taking needs to be dependent on participation of network members. Besides, it needs coordination among the health promotion sub-district hospital, assistance team, village volunteers, and public health station in the community.

The Handicapped Elderly Care Taking at Home
by Community Network

Introduction

Based on an analysis of the structure of Thailand in 2010, it was found that the structure of the country was like a big water jar shape in which the base (children) was narrow and the upper part wide. In other words, a number of the elderlies in the country were 7 million or 11.5 percent of the country's population. It is expected that a number of the older adults will reach 9 million in 2020 (Sriwanitchakorn as cited in Dumrikarnlert, 2012: p. 11).

Thailand places the importance of a long-term national policy planning on the older adults. In other words, the older adults are the target groups who usually have intervening problems when they are chronically sick. Hence, the infirmity lasts for a long time and results in limitations of daily life activities. It is found that the handicapped and the elderly care taking is mostly the burden of family members and public health personnel. The community and network members still little take part in this incident. Besides, concerned public agencies lack of connection or integration in the handicapped and the elderly care taking.

Therefore, having a guideline for the handicapped elderly care taking at home by network members in the community can help develop quality of life of the handicapped elderlies. The researcher had selected Chalermphrakiat district of Nakhon Ratchasima province as local of the Study and results of the study were spreader to public health agencies in the province as guideline for the handicapped elderly care taking. It aimed to develop knowledge and understanding of the handicapped elderlies so that they could manage their physical and mental health. Also, they could appropriately participate in community activities based on their potential.

Conceptual Framework and Related Literature

The researcher investigated related literature about the handicapped and the older adults as well as a guideline for the handicapped and the elderly care taking.
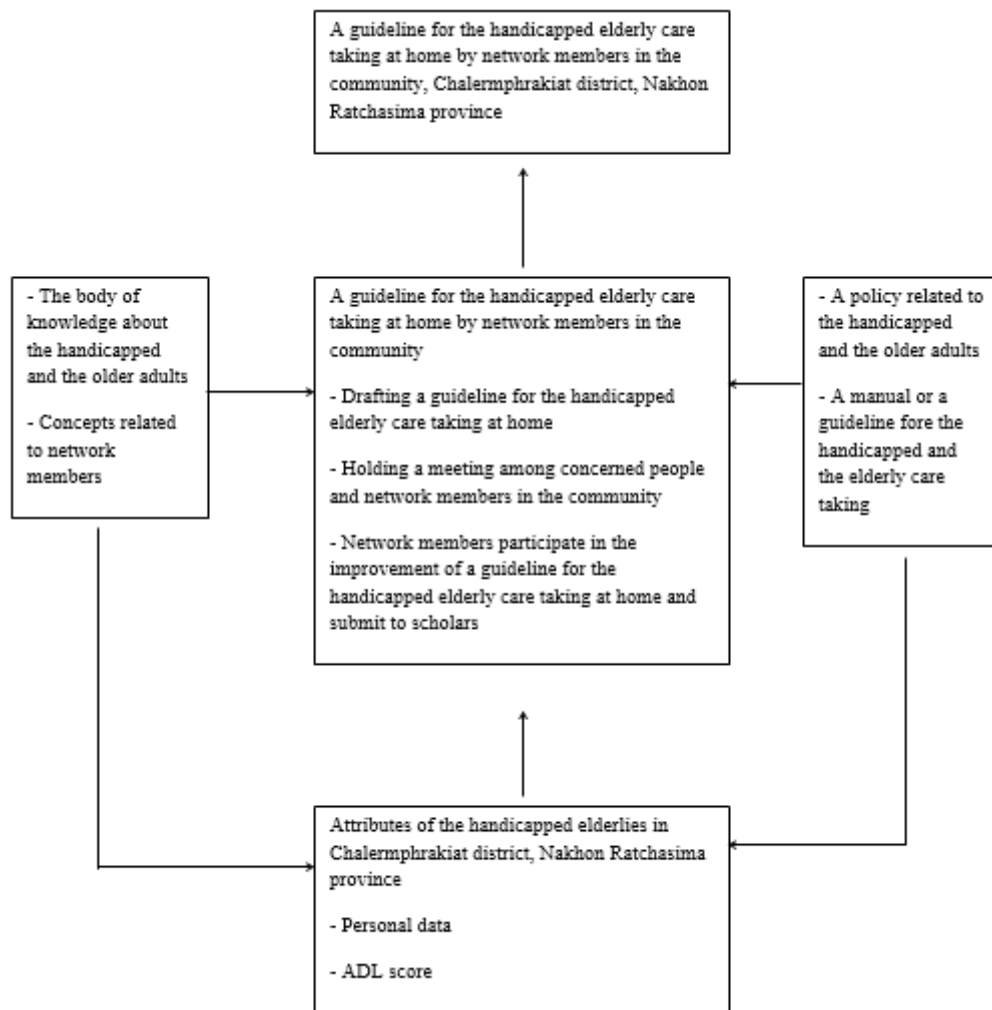
Figure 1
Conceptual framework

Objectives

1. To investigate attributes of the handicapped elderlies in Chalermphrakiat district, Nakhon Ratchasima province;

2. To investigate a guideline for the handicapped elderly care taking at home by network members in the community, Chalermphrakiat district, Nakhon Ratchasima province; and

3. To propose a guideline for the handicapped elderly care taking at home by network members in the community, Chalermphrakiat district, Nakhon Ratchasima province.

Methodology

     This qualitative study is and action research and development. Data were obtained through focus group discussion and participatory observation.

Population and sample group

     1.Personnel of public health agencies and concerned agencies i.e. health promotion sub-district hospital, community hospital, public health district office, local administrative organization, community leaders, village volunteers for public health, representatives of the handicapped and the elderlies (62 persons)

     2.The older adults/care takers and concerned personnel i.e. representatives of the elderlies and the care takers (18 persons)

Research instruments used for data collection

     1.A data recording form for the handicapped elderlies consisting of 2 parts:

          Part 1. Personal attributes i.e. sex, age, and competency in reading and writing

          Part 2. Results of ADL assessment of the handicapped elderlies approved by 3 scholars

     2.A participatory observation form designed by the researcher approved by 3 scholars

Research procedures

     1.The researcher collected data of the handicapped elderlies by using the data recording form.

     2.Obtained data were analyzed in order to design a guideline for the handicapped elderly care taking in which network members participated in the analysis and design.

     3.Making a draft on a guideline for the handicapped elderly care taking at home in which network members participated in the draft making.

     4.Holding a meeting among concerned personnel and network members for the determination of activities for the handicapped elderly care taking at home. The participatory observation form was used.

     5.The researcher brought results of the meeting to improve a guideline for the handicapped elderly care taking at home and submitted to 3 scholars to check it.

Research Ethics

     This study had been approved by the ethics committee of Boromrajchonni Nursing College, Nakhon Ratchasima province. In the network members meeting, the researcher informed objectives of the study and its benefits to network members. Besides, the researcher asked for permission to bring results of the meeting to be presented which would not have any effect on the network members.

Results of the Study

Attributes of the handicapped elderlies in Chalermphrakiat district, Nakhon Ratchasima province. Chalermphrakiat district consisted of 6 sub-districts. It had 167 handicapped elderlies who were 60 years old and above. Most of them (125 persons or 74.85%) were female. There were 89 persons had age range of 71-80 years (53.29%). There were 114 persons (68.26%) who were literate. There were 116 persons (69.46%) who obtained an ADL score at score at serious dependence (Table 1).

Table 1
A number and percentage of the handicapped elderlies in Chalermphrakiat district, Nakhon Ratchasima province which was classified based on attributes of the handicapped elderlies

Personal data	N=167	%
Sex		
- Male	42	25.15
- Female	125	74.85
Age		
61-70	17	10.18
71-80	89	53.29
81-90	50	29.94
91 and above	11	6.59
An average age=79.04 years (The youngest was 61 and the oldest was 101 years old)		
Competency in reading and writing		
- Can read and write	114	68.26
- Cannot read but can write	49	29.34
- Cannot read and write	4	2.40
ADL level		
Score		
0-4 (absolute dependence)	0	0
5-8 (serious dependence)	116	69.64
9-11 (moderate dependence)	51	30.54
12-20 (no dependence)	0	0

A guideline for the handicapped elderly care taking at home by network members in the community, Chalermphrakiat district, Nakhon Ratchasima province. Results of the meeting to find a guideline for the handicapped elderly care taking at home by network members in the community could be concluded as follows:

Service on knowledge provision: It was found that personnel of the health promotion sub-district hospital and the community hospital held training activities on potential development of caretakers. This conformed to needs of the handicapped and the older adults who wanted to gain suggestions about knowledge on health care taking, food, physical therapy, exercises, etc.

Service on home visit: It was found that personnel of the health promotion sub-district hospital and the community hospital held activities on home visit once a month with Thai traditional medicine service. This conformed to needs of the handicapped and the older adults.

Service on care taking coordination with network members: It was found that personnel of the health promotion sub-district hospital and the community hospital had coordination about data of new-handicapped elderlies. Village volunteers conducted a survey and submitted name list to the health promotion sub-district hospital to coordinate with the sub-district administrative organization for issuing a handicapped I.D. card. This conformed to needs for convenience facilitation of the handicapped, the older adults, and village volunteers.

Service on holistic care taking: It was found that personnel of the health promotion sub-district hospital and the community hospital held activities covering 4 aspects as follows:

Health promotion: There was health condition sorting by using the ADL assessment form. The elderly groups were classified based on results of the assessment and then they were taken care based on problems and necessity of each group.

Disease prevention: There were activities providing knowledge about disease prevention and health promotion for the handicapped elderlies.

Healing: Healing service was offered both in the service place and at home.

Rehabilitation: There was a rehabilitation center at supported by the Provincial Administrative Organization. The rehabilitation center was at the health promotion sub-district hospital. This conformed to needs for exercise equipment of the handicapped and the older adults.

Service on participation and help mobilization: It was found that personnel of the health promotion sub-district hospital and the community hospital had established an elderly club having committee and the club fund. Network members of some sub-districts visited old patients and handed over wreath in the cremation ceremony. This conformed to needs of the handicapped, the older adults, and village volunteers.

Details of a guideline for the handicapped elderly care taking at home by network members in the community are show in Table 2.

Table 2

A guideline for the handicapped elderly care taking at home by network members in the community

Service	Service Activities	
	By personnel of the health promotion sub-district hospital and the community hospital	By the handicapped, the elderlies and village volunteers
1. Provision of knowledge	- Training on potential development of care takers	Give suggestions and provide knowledge to the handicapped elderlies on: - physical theraphy - health care - exercise - food - etc.
2. Home visit	- Home visit team included the following: 1. Physical therapist 2. Nurse 3. Doctor of Thai traditional medicine 4. Personnel of sub-district administrative organization 5. Community leader 6. Village volunteer 7. President of handicapped club 8. Monk 9. Public minded person	Home visit was done once month with a gift for morale support
3. Coordination about data of the handicapped elderlies with network members	There was coordination about data of the new handicapped elderlies. Village volunteer made a survey and submitted name list to the health promotion sub-district hospital to coordinate with the sub-district administrative organization for issuing an I.D. card	Need for assistance on car service of old handicapped patients
4. Holistic care taking 1) Health promotion	- Health condition sorting by using the ADL assessment form (depressed condition) - Classifying the elderly groups based on results of the assessment for care taking based on problems and necessity	
2) Disease prevention	- Provision of knowledge about disease prevention and heath promotion for the handicapped elderlies	
3) Healing	- Offering service on healing to old handicapped patients	

Service	Service Activities	
	By personnel of the health promotion sub-district hospital and the community hospital	By the handicapped, the elderlies and village volunteers
4) Rehabilitation	- Having a rehabilitation center supported by the Provincial Administrative Organization (Budget of the Provincial Administrative Organization was spent for the rehabilitation equipment)	
Participation and help mobilization	- Establishment of an elderly club having the committee and club fund	- Having a public minded group and village volunteers - Training on patient care taking - Car service of a public health agency

A guideline for the handicapped elderly care taking at home by network members in the community, Chalermphrakiat district, Nakhon Ratchasima province. Based on review of a guideline for care taking of the handicapped and the elderlies and the meeting for finding participation of network members, the researcher had determined a guideline for the handicapped elderly care taking at home. Details are shown in Table 3.

Main activities	Sub-activities	Proponent
1. Provision of knowledge - Training - Home visit	- Provision of knowledge about: 1. Food, exercise, emotion, sanitary 2. Brain, environment, rights 3. Medicine	Home visit team
	- Enrichment of power to increase potential in self-care taking of the handicapped elderlies for the reduction of reliance and increased confidence of care takers	Physical therapist
2. Home visit	- Assessment of the handicapped elderlies - Visiting the handicapped elderlies at home and Thai traditional medicine contact - Preparing a gift for morale support	Home visit team
	Care takers - Activities for the handicapped elderly care taking by public minded network - Perception of problems of care takers to reduce their tension	Public minded network

Main activities	Sub-activities	Proponent
3. Coordination about care taking with network members	- The health promotion sub-district hospital coordinated with network members to offer services for the handicapped elderlies - Potential development of village volunteers and public minded network - Services on healing and health assessment - Disabled prevention and management - Counselling - Developing care taking system	The health promotion sub-district hospital
	The community/sub-district administrative organization did the following: - Establishment of a day time care taking center and a physical center - Providing equipment for assistance and exercise equipment - Providing car service	The health promotion sub-district hospital
4. Holistic care taking 4.1 Health promotion	- Health promotion and disease prevention - Physical and mental sorting - Healing and controlling chronic disease	Home visit team
4.2 Prevention	- Preventing intervening problems - Preventing health deterioration - Management of appropriate environmental conditions of the handicapped elderlies - Preventing tension condition of the handicapped elderlies	Home visit team
4.3 Healing	- Healing based on problem conditions of an individual	Home visit team
4.4 Rehabilitation	- Promoting family/community participation - Supporting a place for physical theraphy in the community - Supporting equipment for elevating quality of life	Home visit teamh
Participation and help mobilization	- Elderly network in the community - The handicapped elderly care taking supported by budget of sub-district administrative organization	- Elder club - Sub-district administrative organization

Discussions

Chalermphrakiat district has 167 handicapped elderlies. This is the consequence of progress in medical technology and public health making people have a long life. However, it is found that the handicapped elderlies have a moderate/serious dependence burden. Obviously, it has an effect on their quality of life and tension of caretakers. This conforms to a study of (Pimolvitayakit, 2007) implies that many older people will experience longer periods of poor health with disability and dependency, and an increased need for care over the next fifty years.

The handicapped elderly care taking needs to be dependent on participation of network members. Besides, it needs coordination among the health promotion sub-district hospital, assistance team, village volunteers, and public health station in the community. A guideline for the handicapped elderly care taking conforms to needs of the handicapped elderlies and caretaker. Effective care taking must be in the form of specific individual care taking.

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Causal Analysis on Garbage Dumping Behavior and People's Environmental Consciousness

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Abstract

      Garbage problem becomes an increasingly serious problem in rural China. It stems from the introduction of modern mode of urban life style. However, People's consciousness and behavior in local area are worsening the situation. This paper tries to examine the underlying reasons for garbage dumping behavior in rural area from a perspective of environmental consciousness. Fieldwork was conducted in 51 villages of Shandong province of China in 2014, and 508 samples were collected. Survey data gathered from the villagers indicates that garbage-dumping behavior is related to people's value orientation, individual prediction on other's behavior, and also the influencing of traditional concepts in rural area. The trade-off between environmental orientations and egoistic value orientation is the root of garbage dumping behavior. The negative prediction on other's behavior directly caused the garbage dumping behavior. And the concepts of the traditional life in rural area also contributed to the happening of such behavior. The causal effect of each influencing factor that derived from data analysis is discussed in this paper. Base on the clarification and analysis of the causal factors to garbage dumping behavior proposal were proposed to improve the situation.

Keywords: Rural society, Dominant social paradigm, Behavior prediction, Self-efficacy

Causal Analysis on Garbage Dumping Behavior
and People's Environmental Consciousness

Household waste becomes an increasingly serious issue in rural China. In the past, due to the small amount and simple composition of the waste in rural area, most of the household waste can be returned to the nature by composting, simple landfill or rotting. Frugality and hard work have been hallmarks of the peasants. Resources are recycled and reused in rural area. With the development of rural economy and the introduction of urban life style, household waste has become one of the most serious issues that needed to be resolved. Garbage is abandoned everywhere, behind the house, on the streets, and around the river. In order to improve the situation, local governments made policies and constructed facilities to collect and dispose the garbage.

One of the phenomena that arouse author's attention is that most villagers still dumped the garbage carelessly even curbside pickups is available. Take *Beichen* village, one of villages that we surveyed, as an example. In April 2013, several big dustbins which made of cement were located in the main areas of village in order to collect the household waste. Villagers began to dump their household waste to the nearest dustbins around them. However, most of the garbage is dumped around of the dustbins, instead of inside of dustbins.

How does garbage go out from the dustbins? What are the underlying reasons for such waste dumping behaviors? Based on the survey data, the main purpose of this paper is to clarify the following questions: (1) how can this kind of un-normative behavior exist in a rural society. (2) What are the causal factors for individuals to dump the garbage carelessly?

Research Area

The area we chose for the research is the 51 villages which located in Shandong province of China. When refer to villages in China, some labels will arise immediately, such as lower economic development, lower educational level and different lifestyle and production ways from cities. Except the above commons, several points need to be emphasized for our research area.

First, village is a relatively enclosed community characterized by it's being an aggregate of households on a compact residential area. Inside of the community is an "acquaintances society" where has intensive interaction while little shared activities are conducted with other similar units and external world.

Second, traditional values, attitudes and beliefs are still constructing the "dominant social paradigm (DSP)" while environmental consciousness and behavior, which advocated by "new environmental paradigm (NEP)", has germinated on the background of tradition paradigm. With the spreading of serious environmental issues, villagers began to realize the importance of environment. However, constrained by the socioeconomic and educational status, environmental consciousness is developing in a slow pace.

Third, socioeconomic status is undeveloped. People still face the task of improving life quality.

Theory and Literature Review

People who live in the same local area share common interests which lead to birth of common social norms to guide people's behavior. The local people will condemn the violation of the rules. Social norms are supposed have a big influence on people's behavior. This is particularly true in small and enclosed village. Because inside of the village, "people grow up among does acquaintance" and "people who work together see each other every single day" (Fei, 1992). Many sociologists such as Tilly (1978), Fireman and Gamson (1977), Granovetter (1973, 1982), and Snow etal (1980) stress the importance of social ties for collective action (Pamela Oliver, 1984).

People dump the garbage outside the dustbins instead of behaving in proper way that just need a few steps more. Villagers know this is unreasonable but no one would like to do something to change it. From our theoretical understanding of this phenomenon, three general factors should be discussed in order to find the underlying reasons. The first factor is rural society's basic worldview. If the belief of environmental conservation has not become one part of the social norm and hasn't been lifted into the society's basic worldview system, public scrutiny for the environmental irresponsible behavior will not be formed. The second factor is the prediction of other's behavior from the individuals. It is commonly assumed that people will behave normatively if they believe that others will do so. If no public scrutiny from the social context, and no positive prediction on other people's behavior, it seems the behaver "has no choice but to perform the environmentally irresponsible act" (Weyant, 1986). The third factor is self-efficacy. Self-efficacy belief can influence choice of activities, preparation for an activity, effort expended during performance, as well as thought patterns and emotional reactions (Bandura, 1982, 1991; Ajzen, 2005). If the behaver doesn't think his behavior can change anything, the regulation to the behavior will also decrease.

Rural Society's Basic Worldview

Numerous writers argued that environmental problems stem in large part from the traditional values, attitudes and beliefs prevalent within our society (e.g., Disch, 1970). Some researchers (Pirages, 1977) use the concept of DSP (Dominant Social Paradigm) to summarize all of these "common values, beliefs, and shared wisdom about the physical and social environments" which constitute a society's basic "worldview". Compare to the modernization and openness of the city, rural area in China is described as traditional and backward. A different set of thoughts and behavior mode continue in rural area. Take the belief of frugality as example. Frugality is one basic part of the rural life and hence become an important part of rural society's worldview. Frugal consciousness is a rational choice when facing the scarcity and helplessness of the life and is handed down from generation to generation. Frugality, together with other similar beliefs, such the concept of procreation and harmonious neighborhood, formed the rural society's dominant social paradigm. The violation of dominant social norms will cause huge social pressure and moral condemnation.

To which extent do the belief of environmental conservation is accepted by the villagers decide the intensity of public scrutiny from the rural society.

Prediction of other's behavior

According to Schwartz (1977), a norm is defined as an expectation held by an individual about how he or she ought to act in a particular social situation. "We expect others to act in the morally proper way, and they in turn expect the same of us". Social norms are adopted by each of us on a personal level and hence become personal norms (Hopper, Nielsen, 1991). Subjective norm that proposed as one of the three independent determinants of intention in the theory of planned behavior is similar to the concept of personal norm. It refers to the perceived social pressure to perform or not to perform the behavior (Ajzen, 1991). People's behavior is formed in the background of social context and based on the prediction of other's behavior. Positive social pressures might enhance community performance (e.g. Hopper & Nielsen, 1991; Everett & Peirce, 1992) while negative influences within a group could prevent behavior even when individual altitudes are favorable (Spaccarelli et al., 1989; Hopper & Nielsen, 1991). Social pressure and subjective norm will reduce if they feel "nobody preforming in the normative way either" and they have no choice but to follow the majority.

Self-efficacy

Geller (1995a) predicted that self-efficacy empowers individuals into a state of actively caring that facilitates environmentally responsible behavior. Bandura's (1977, 1982) concept of perceived self-efficacy is "concerned with judgments of how well one can execute courses of action required to deal with prospective situations". Other similar conceptions in the form of "facilitating factors" (Triandis, 1977), "the context of opportunity" (Sarver, 1983), "resources" (Liska, 1984), or "action control" (Kuhl, 1985) has also been discussed in the previous research. In this paper, self-efficacy factor is used to measure individual's subjective evaluation to themselves instead of objective social and economic resources that they occupied. People's behavior is strongly influenced by their confidence in their ability to perform.

Results

The data we used in this paper comes from the social survey which we conducted in June, 2014. 51 villagers of Shandong province in China were selected. Multistage sampling method was adopted and villagers (18 years or older) were randomly selected and interviewed by face-to-face method. 508 valid questionnaires were collected.

Stable "Acquaintances Society"

As we described, one of the characteristic of rural society is its isolation. Inside of the society people have intensive interaction while little shared activities are conducted with the external world. The isolation of the village contributes to the frequently communication among the villagers. "This is a society without strangers". In our survey, the respondents were asked to tell how many villagers in their village they know and choose their answer from four options that they know "Overwhelming majority", "Majority", "Minority", or "Tiny minority" of the people in their villages. The result can be seen from table 1.

Table 1
The degree of familiarity among villagers

	Frequency	Percent	Valid Percent
Overwhelming majority	175	34.4	34.4
Majority	243	47.7	47.8
Minority	81	15.9	15.9
Tiny minority	9	1.8	1.8
Total	508	99.8	100.0

From the table we can see that in total 82% of the villagers indicated that they know most of the people in their village (34% of the villager said that they know the overwhelming majority and 48% said that they know majority of the people in their village) . In the survey, we often heard the answer that "except some new brides who just married and moved into the village, I know almost all of the people in this village." 82% is a very big percentage which proves that even until nowadays rural China still is an "acquaintances society" which *Fei* (1948) call it as "face to face" group. In the city, it is not surprising that someone even don't know their neighbor who live in the same building and live door to door every day.

Another characteristic of rural society is its stationary. Such stationary stems from the farming work which stuck in the soil. "It is normal for farmers to settle in one spot of generation; it would be abnormal for them to migrate". In our survey we also investigate the stationary of the village. Villagers were asked "How many years have you been living in your current village?" With the information of their age, we can analyze one's stationary in one village. If the year they live in one village equals to their age, we can say the stationary of this person is very high.
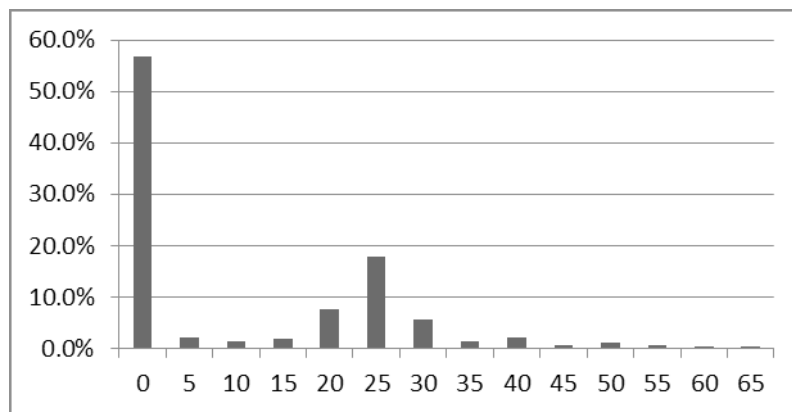
Figure 1
The stationary of the village

From Figure 1, we can see that, more than half (57%) of the village lives in the same place after birth. Another peak from the figure is 20~30 years which can be explained by the fact that there are a considerable part of women moved to and live in another village after they get married. During our survey, we also found that, with the process of urbanization, new village or community were constructed and some village moved into the new place. Such information indicated that the stationary of the village couldn't be calculated only by the people who live in their village all the time after they were born. The Women who live in the current village after get married and the villagers moved together to another place should also be added into the category of stationary of the village. At present we cannot give the specific influences of above situations, however, it is obviously the stationary of the village will much bigger than the data (57%) we gave now. From the above analyze, the second characteristic of rural society, stationary, has been generally proved.

The second characteristic, stationary, can be used to explain the first characteristic, acquaintances society, of rural area. Together these two characteristics of rural area formed a set of social norm and its supervision system which is different from city. That is every one of the villages can play the role of the supervisor for the village. In our survey, we also investigated villagers' supervisory consciousness for their village. The villagers were asked "If you see someone who living inside or outside of this village, doing something that pollutes the environment, such as throw the garbage carelessly or slash-cut. Will you interpose such business?" 66% of the villagers indicated that they would try to stop this kind of behavior by persuading or telling other villagers or village committees (See Figure 2)
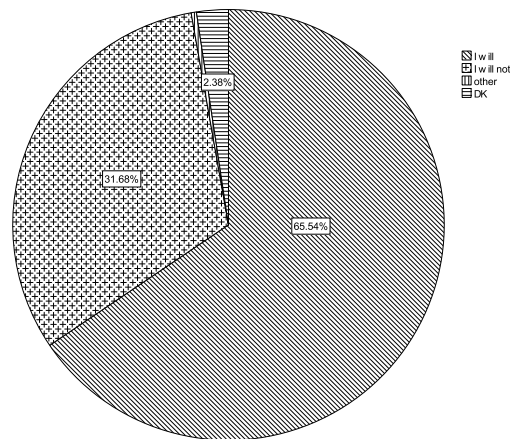
Figure 2

The supervisory consciousness of the villagers

In a stable society where people familiar with each other and more than half of the people indicated that they would act to prevent the improper behavior, there should be strong public scrutiny for the society operation. So how does garbage go out from the dustbins? And how does the improper garbage dumping behavior exist in such a social context. After clarifying the reality of the rural society we come back to the initial questions. Now we try to answer these questions.

Rural Society's Basic Worldview

Nodaway's rural China is facing two sets of relationships, tradition & modernization, and economic development & environmental conservation. For the first relationship, we want to know whether environmental conservation belief has been lifted to the category of rural society's dominant social paradigm (see Figure 3). For the second relationship, we want to know how the villagers weigh the importance of economic and environment (see Figure 4).
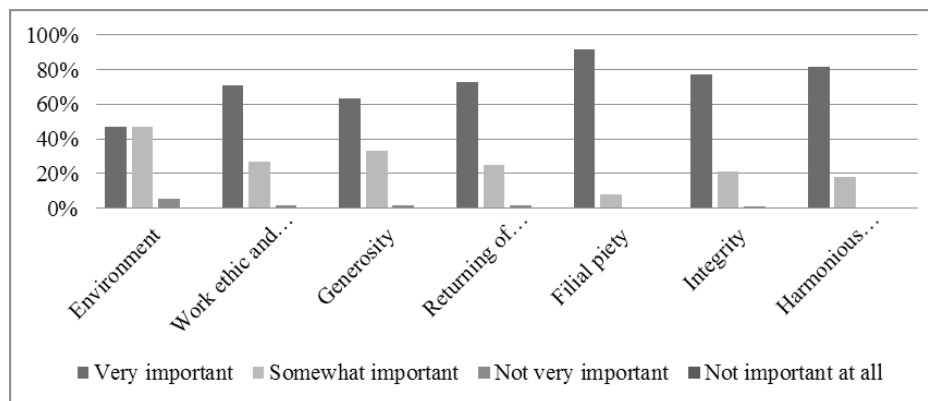
Figure 3

The importance of environment and other traditional beliefs

In order to clarify the position of environment in villagers' opinion, we compare the importance of environment with several traditional beliefs, such as work ethic and frugality, generosity, returning of favors and obligations, filial piety, integrity (avoiding deception and keeping words), and harmonious neighborhood. From Figure 3, we can see the value of environment has already got considerable part of people's attention. It represents the acceptance of new environmental paradigm in rural society. However, compare to the acceptance of other traditional beliefs, the rate is not high enough. The extent that the villagers accept the belief of environmental conservation decides the intensity of public scrutiny from the rural society. From the data, we get the conclusion that the public scrutiny for the violation of environmental conservation is not as big as for the violation of the traditional beliefs, because that environmental conservation belief hasn't been one part of rural society's dominant social paradigm.
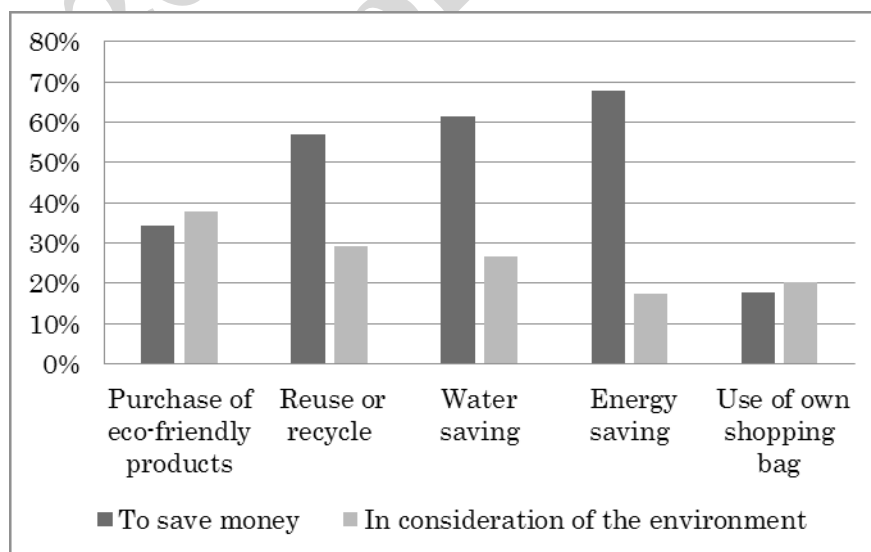
Figure 4

The motivations of villager's behaviors

In our survey, we also investigated people's motivations of some several activities that they could be doing at the level of daily life. The results show that villagers' behaviors have more economic motivated feature. This also showed the position of environment in their worldview system. For one side, environmental conservation hasn't been lifted into the category of rural society's dominant social paradigm, hence cannot get enough public scrutiny from the society; for the other side, villager's behaviors are economic motivated, the existing of improper environmental behavior got somewhat explained.

Prediction of other's behavior

It is commonly assumed that people are more willing to behave well if they believe that others will behave so. Negative prediction of other's behavior will decrease the social pressure of the behaver and give individuals more excuses to behavior improperly. On the problem of garbage dumping behavior, the negative prediction of other's, was supposed to be one of the import reasons to behave improperly. In order to test this assumption, villagers were asked to predict the behaviors of themselves' and others' when facing the same situation. The survey question is "Suppose you are in a public place where no garbage bins has, and you want to throw away some garbage, such as fruit peel or food packet. What would you do on this occasion". The results showed the distrust on others' behavior. (See Figure 5 and Table 2)
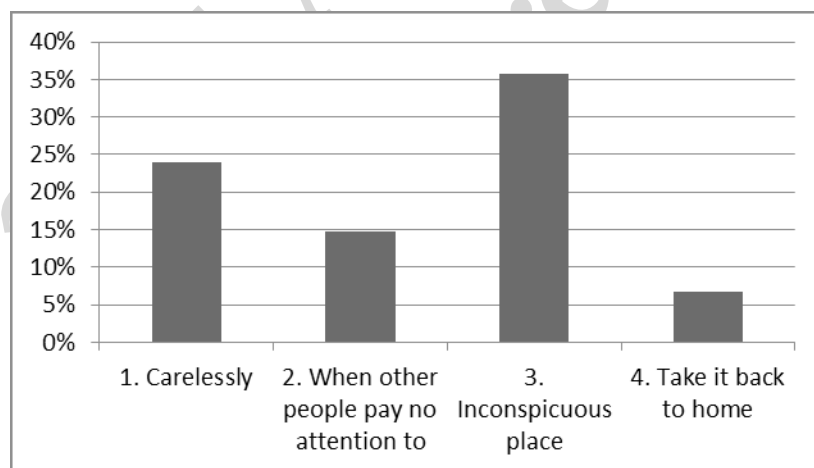
Figure 5
The prediction on other's behavior

Table 2

The comparison of predictions on one's own and other's behavior

		The prediction on one's own behavior				
		Carelessly	When other people pay no attention to	Inconspicuous place	Take it back to home	Total
The prediction on other's behvior	Carelessly	56.3%	21.9%	18.8%	3.1%	100.0%
	When other people pay no attention to	47.4%	31.6%	10.5%	10.5%	100.0%
	Inconspicuous place	24.4%	17.8%	57.8%		100.0%
	Take it back to home	28.5%	17.1%	31.7%	22.8%	100.0%
Total		29.3%	18.5%	44.4%	7.8%	100.0%

From Figure 5 we can see only 7% of the respondents believe other villagers will take the garbage back home, more 90% of the villagers predicted others would deal with the garbage in an improper way. The negative prediction of other's behavior has been proved. From table 2, we can get the tendency that people are inclined to predict other's behavior is same with or worse than their own behavior. If we take the four options as ordinal data, as with the increase of the number (from the 1st option to the 4th), the behavior becomes better, then 46% of the respondents believe others will behave same with themselves. Among the left respondents, 92% of the people believe others will behave worse than themselves. As we described before, if the individuals feel that most of other people are performing a bad or worse behavior, they themselves seem have no choice but to perform improperly.

Self-efficacy

In this section, we will analyze the influence of self-efficacy factor to one's behavior. In the survey we used the question "Do you think your personal endeavor and behavior is important to the improvement of the environment" to examine people's self-efficacy. Respondents were asked to choose their answer from "Very important", "Somewhat important", "Somewhat unimportant", and "Unimportant". The assumption is that people with less confidence on their behavior are inclined to let their behavior unchecked. The relationship between self-efficacy factor and garbage disposal behavior is shown in Figure 6.
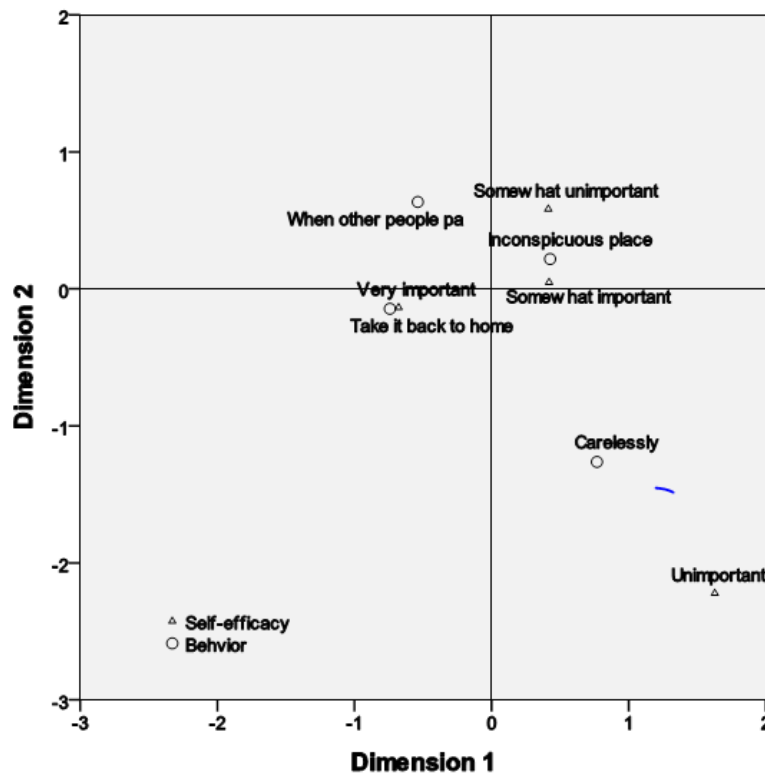
Figure 6

The relationship between self-efficacy factor and behavior

From Figure 6, we can get the conclusion that people's self-efficacy is positively related with better behavior. People who think their behaviors are very important to the environment inclined to regulate their behavior more by taking the garbage back home. The people who think their behaviors are unimportant to the environment inclined to throw the garbage carelessly. The low self-efficacy also contributes the existing of improper behavior.

Conclusion

The main purpose of this paper is to analyze the underline reasons for garbage dumping behavior. From the analyze we found that, from the perspective of society, environmental conservation hasn't become one part of rural society's dominant worldview, hence cannot get enough public scrutiny from the society; and from the perspective of individual, the negative prediction on other's behavior and on self-efficacy make the behavior cannot get enough self-regulation from themselves. These make the garbage dumping behavior inevitable. From the analysis we also get the conclusion that rural China is still an acquaintance society and has the characteristics of stationary. Such a conclusion is exciting since we believe that once people realize the really value of environment the public scrutiny of the society can be expected.

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Research on Credibility of Government's New Media Platform: Based on the Survey of Students From 13 Colleges in Shanghai

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Abstract

With the rapid development of new media and gradually expanding of new media user groups, the government's new media platform has become an important intermediary of disclosing government information and chief interactive. For the government, the effective use of new media platform is conducive to enhancing governing ability, constructing a positive image and improving intervention capacity in unexpected public events. The credibility of government's new media platform is an important criterion for measuring the implementation and dissemination effect of the E-government, and it has a crucial influence on the construction and development of government's new media platform as well as the public opinion. This research adopts the questionnaire method, bases on the sample survey of students from 13 colleges in Shanghai, it understands the trust status on government's new media platform of college students as well as the influencing factors that might affect its credibility.

Keywords: media trust, new media platform, credibility, media use

Research on Credibility of Government's New Media Platform: Based on the Survey of Students From 13 Colleges in Shanghai

Literature Review

The research on media trust originated in the 1980s, and the credibility of media went down to the bottom in Watergate Scandal, Vietnam War, etc. which caused the attention of academia on the research of media trust. Meanwhile, the emergence and development of new media also made the scholars concern about new media trust (Flanagin& Metzger[2], 2000; 2007[3]; Johnson & Kaye[4], 2004). Flanagin Metzger（2007）[5] points out that the new media trust is relative lack of the information gathering of professional gatekeepers, such as the integration of large amount of advertising and information, the creation of many Websites that lack credibility, all these are all very easy to be believed and difficult to find. As a result, the comparative study on traditional media trust and new media trust is included in the vision of scholars. Some of these survey results show that new media trust is lower than traditional media trust, for example: the survey results Ye Hengfen (2000) and Luo Wen-hui (2002) on media trust in Taiwan show that new media trust is lower than traditional media trust. While some researchers indicate that there is no significant difference between traditional media trust and new media trust, for example: Flanagin and Metzger (2000) find that the credibility of newspaper is the highest and the credibility of television, radio, magazines and new media is just about right. If the result shows that new media trust is higher, it usually belongs to Western researches, for example: through the investigating the internet users who are interested in politics, Johnson & Kaye [6] (1998) inspect the discrepancy of online media trust and traditional media trust and find that for investigators, their trust in new media is slightly higher than traditional media, however, the trust in these two medias are both in a "somewhat credible" state. In the trust researches on government's new media platform, there are a lot of comparative studies on the credibility between different communication channels or new media platforms of media agency, and the trust studies that aim at government's new media platform individually is relatively less.

While analysis on the factors that influence media trust is constantly steering and improving in the process of research and the early analysis on the factors that influence media trust focused on researching the credibility of media information sources. Source credibility refers to the perception of professionalism and credibility of information sources (Sternthal, Phillips, Dholakia, 1978[7]) and it has also become the main direction in media trust research areas in the following twenty years. While with the revolution of technology dissemination and entire communication context brought by the emergence of new media, the research on the factors that influence media trust is unable to follow past research mode any more, and the scholars also transfer their attentions to the users of mew media and the researches that regard audience as the core receive increasing attention. Westley &Severin (1964) first regard the demographic characteristics of the audience and other variables as

the factors that affect media trust and do researches, it includes the age, gender, education level, place of residence, socioeconomic status, occupation, income, social mobility and party property, etc. Besides these, their media using habits, media dependence and other factors are also incorporated into the research field. After that, Greenberg (1966) makes interactive multi-variable correlation analysis between gender, age, education level, media use and other variable and "media credibility" and further confirms the research results of Westley &Severin. Research on the audience is more detailed to the 1980s and 1990s, except demographic variables, trust status of the audience (APMEA, 1985；ASNE, 1985；Johnson, 1993；Fitzsimon&Mcgill, 1995); media types that the audience contact (Salmon & Lee, 1983); participatory of the audience(Gaziano& McGrath, 1987b；Gunther, 1992) and other variables gradually become the mainly inspected object of factors that might affect the media trust for scholars.

As a result, this research selects the trust degree of government's new media platform as the research subject, inspects the trust status of college students on government's new media platform through the questionnaire survey of college students in Shanghai. Besides, it also analyzes the influencing factors that might affect the trust evaluation of government's new media platform. Based on the above literature, this research proposes the following hypothesis:

H1: the demographic variables may affect the trust degree on government's new media platform of college students: there has a positive correlation between gender, age, ethnic, professional, education background and their trust degree to government's new media platform.

H2: there exists a positive correlation between the interpersonal trust of respondents and their trust degree to government's new media platform; there exists a positive correlation between political trust status of respondents and their trust degree to government's new media platform; there exists a positive correlation between the overall social trust status of respondents and their trust degree to government's new media platform.

H3: there exists a positive correlation between the utilization rate of interviewed college students of government's new media platform and their trust degree to government's new media platform.

In research literature about media credibility, except the demographic amount, media use is the most commonly used predictor variables. Most researches show that there is a positive correlation between media use and media credibility, that is to say, the more often you use a certain kind of media, the more reliable you tend to believe (Westley &Severin，1964；Carter & Greenberg，1965；Cobbey，1980). The research carried out by Luo Wen-hui and Chen Shimin (1993) in Taiwan region also find that the usage of newspapers is the significant variables that used to predict the credibility of newspapers, and the usage of television news is also the significant variables that used to predict the credibility of television news.

H4: there exists a positive correlation between government satisfactions of interviewed college students and their trust degree to government's new media platform.

The government satisfaction refers to the evaluation on whether public is satisfied with governmental administrative capability, service level and other aspects. Government's new media platform is a part of government agencies as well as the "spokesman" of government in cyberspace. The trust evaluation on government's new media platform from the public and its evaluation of government satisfaction are complementary, if the public feel satisfied with the government, they will naturally believe the remarks from government. Once this trust relationship is established, the government will be able to better serve the public through new media platform and construct a good government image.

Research method

Data collection

In order to learn the trust degree of government's new media platform and the influencing factors that may affect its credibility, this research uses the questionnaire method. We sent out questionnaires to the college students in 13 universities in Shanghai, each school randomly distributed 200 questionnaires and we totally recovered 2467 valid questionnaires. The contents of this questionnaire include media trust situation, media usage situation, social perception situation, government satisfaction and other questions. The respondents are generally college students in China who have Internet experience, aged between 18-30 years old and use the Internet. Female accounts for 57.4% of all respondents and male accounts for 42.6%; respondents aged 20 years old accounts for the highest proportion; respondents who have a bachelor degree accounts for the highest proportion (81.3%); the non-agricultural household accounts for 57.4% of all respondents and agricultural household accounts for 25.4%; Han nationality accounts for 94.7% of all respondents and ethnic minorities accounts for 5.3%; respondents who have no religion accounts for 91.5% and respondents who have religion accounts for 8.5%. After recovering questionnaire, we will input the date into SPSS17.0 make statistical analysis.

Variable operation

The independent variables in this research and the main indicator include:

Demographic variables: it includes gender, age, ethnic, professional, education background and other information.

Trust status: interpersonal trust (trust evaluation to friends and family, ordinary people, experts and scholars, stars, netizens, etc. and the measurement method ranges from 1--very distrust to 5--very trust); political trust (trust evaluation to government agencies, central government, local government, The National People's Congress, the Chinese people's political consultative conference, people's procuratorate, the courts, public security departments, etc. and the measurement method ranges from 1--very distrust to 5--very trust) and the overall social trust (the measurement method ranges from 1--very distrust to 5--very trust).

The utilization rate of government's new media platform: utilization rate of government official website (the measurement method ranges from 1--totally no to 4--usually), utilization rate of government micro blogging (the measurement method ranges from 1--totally no to 4--usually) and utilization rate of chief micro-channel (the measurement method ranges from 1--totally no to 4--usually).

Government satisfaction: central government satisfaction (rate from 1 to 10), local government satisfaction (rate from 1 to 10).

Because the dependent variable is the trust degree of government's new media platform, according to the literature review, the measurement of trust degree of government's new media platform mainly investigate trust status to local government official website, government news sites and government micro blogging of the respondents in this research, and the measurement method ranges from 1--very distrust to 5--very trust.

Research results

The trust degree of respondents on government's new media platform is "somewhat trust".

In terms of the trust status of the interviewed college students on local government website, 44.2% choose general, 28.0% choose somewhat trust, while very trust and very distrust accounts for 4.1% and 3.8% respectively. In terms of the government news website, 38.6% of the respondents say that they comparatively trust the government news website which accounts for the largest proportion; secondly, 38.1% of the respondents chose "general". In terms of the trust degree of government micro blogging, the respondents that choose "somewhat trust" has the largest proportion which occupies 36.8%, wherein, 33.8% of the respondents say it is general. For trust degree on the local government official website, trust degree of government news website and trust degree of government micro blogging, they are assigned values from 1 to 5 according to the options, from very distrust to very trust and take t-tests respectively. The result shows that the average trust degree on the local government website of the respondents is 3.20 (T=176.077，P<0.001), the average trust degree on the government news website is 3.41 (T=190.224，P<0.001) and the average trust degree on the government micro blogging is 3.30 (T=176.774，P<0.001). This shows that the trust degree of interviewed college students to local government website, government news website and government micro blogging is higher than the general level and stay in a state of "somewhat trust".

The trust degree on government's new media platform of male is significantly lower than female, and there is a negative correlation between the education background and the trust degree of government's new media platform.

This research analyzes the influence situation of demographic variables of interviewed college students on the trust degree of government's new media platform. To test this hypothesis, this research uses a hierarchical regression analysis method. Input gender, age, education, household location, ethnic and other demographic variables in the first layer of regression analysis; input trust status in the second layer, such as: interpersonal

trust, political trust and the overall trust degree of the society; input the utilization rate of government's new media platform in the third layer, which means the utilization rate of government official website, government micro blogging and chief micro-channel; input government satisfaction in the last layer, which includes central government satisfaction and local government satisfaction. Through analysis, the result shows that after controlling other variables, part variables in demographic factors have an impact on the trust degree of government's new media platform which verifies the first hypothesis. While, in terms of population structure, there is no significant difference between the interviewed college students, only gender and education in demographic variables have a significant correlation with the trust degree of government's new media platform. Specifically, in terms of the local government website, the proportion that female choose somewhat trusting local government official website is significantly higher than male, while the proportion that male choose very distrusting and distrusting is higher than female. The trust degree to government news website and government micro blogging also follows the rule (shown in table 1), generally speaking, the trust degree on government's new media platform of male is significantly lower than female. While there is a negative correlation between the education background of respondents and their trust degree to government's new media platform, that is to say, the higher education background the respondent has, the lower trust degree to government's new media platform he has.

Table 1
trust degree comparison on the local government official website of different genders

Gender	Trust degree on the local government official website					Total
	Very distrust	Distrust	General	Somewhat trust	Very trust	
Male	6.5%	14.8%	46.9%	27.1%	4.8%	100.0%
Female	2.6%	9.4%	49.6%	33.8%	4.6%	100.0%
Trust degree of government news website						
Male	5.5%	10.6%	40.4%	36.5%	7.0%	100.0%
Female	1.6%	6.7%	39.5%	44.2%	8.0%	100.0%
Trust degree of government micro blogging						
Male	5.1%	15.1%	39.1%	36.1%	4.6%	100.0%
Female	2.5%	10.9%	36.8%	45.1%	4.7%	100.0%

There is a positive correlation between the political trust, interpersonal trust of the respondents and their trust degree to government's new media platform, and there is no significant correlation between the overall trust degree of the society and government's new media platform.

The trust status of respondents can affect the trust evaluation, and it is also the important factor of the trust degree of government's new media platform, the connection between the two is also the main focus of this study. In term of interpersonal trust situation, the t-test result shows that the evaluation value differences on five different interpersonal

trust evaluation from respondents all meet the level of statistical signification. Wherein, the interviewed college students have the highest trust degree to their relatives and friends and the mean value is 3.52, while their trust degree to the entertainment stars and netizens is the lowest. In term of political trust, the t-test result shows that the evaluation value differences on the trust evaluations, such as: central government, local government and The National People's Congress (NPC), etc. from respondents all meet the level of statistical signification. Wherein, the interviewed college students have the highest trust degree to the central government and the mean value is 3.66, while their trust degree to the local government is the lowest and the mean value is 3.14. In term of the overall situation of social trust, the overall trust evaluation of interviewed college students in current society is "comparative trust" and the mean value is 3.19. In order to explore the influence of trust status of respondents on the credibility of the government's new media platform, this research uses the hierarchical regression analysis method. The research result shows that in trust situations, interpersonal trust, political trust, overall social trust and trust degree of government's new media platform have a positive correlation, that is to say, the higher evaluation the respondents have on interpersonal trust, political trust and overall social trust, the higher trust degree the government's new media platform has. In terms of correlation coefficient, the correlation between the political trust of respondents and the trust degree of government's new media platform is greater than interpersonal trust and the overall society trust.

There is a positive correlation between the utilization rate of government's new media platform and its trust degree, in which, the correlation between the utilization rate of government micro blogging and the trust degree of government's new media platform is the strongest.

In order to explore the relationship between the utilization rate of government's new media platform and its trust degree, this research uses a hierarchical regression method. The results find that although government's new media platform is closely related to the use of Internet, there is no significant correlation between the utilization rate of Internet and the trust degree of government's new media platform. Utilization rates of government micro blogging, chief micro-channel and local government official website all have a positive correlation with the trust degree of government's new media platform. In the view of correlation coefficient, the predictive power of government micro blogging is higher than local government official website and chief micro-channel. In terms of the form of government's new media platform, compared with other platforms, the construction of government micro blogging is more mature

and the utilization rate is also higher. In the several important public opinion events occurred in the past, the role of government micro blogging has been more significant. This shows that the utilization rate of government's new media platform can predict its trust degree very well which verifies the third hypothesis.

There is a positive correlation between government satisfaction of the respondents and government's new media platform.

In order to inspect the relationship between government satisfaction and its new media platform, this research uses a hierarchical regression analysis. The results show that under the case of controlling other variables, government satisfaction of the respondents still has a significant effect on the trust degree of government's new media platform. It has verified the forth hypothesis, from the perspective of the influence of central government satisfaction and local government satisfaction, the central government satisfaction has a higher correlation coefficient with the trust degree of government's new media platform. There is a positive correlation between government satisfaction of the respondents and government's new media platform, the more satisfied they feel to the central and local governments, the higher trust degree they have to government's new media platform.

Conclusion

The verification on this research hypothesis of the analysis results indicate that due to the difference between gender and education, personal interpersonal trust and political trust status, differences in utilization rate of government's new media platform and satisfaction to government, their trust degree to government's new media platform also shows different levels of difference. Taken together, political trust status, utilization rate of government's new media platform and government satisfaction are the main factors that affect trust degree.

First, from the perspective of demographic variables, this research finds that although the interviewed college students belong to the same social group and are similar in multiple aspects of demographic characteristics, different genders have significant differences in trust degree to government's new media platform. Wherein, the trust degree of girls is obviously higher than boys; the higher educated respondents have lower trust degree to government's new media platform. In the group of college students, under the case of classifying in accordance with demographic characteristics, evaluations of trust degree appear differences and it provides inspirations to government's new media platform. When constructing the new media platform, it needs to give full consideration to the requirements of different usage populations, transfer from mass media to focus media and analyze the needs of different groups to build the mutual trust mechanism.

Second, from the perspective of the trust status of respondents, political trust is the main factor that affects the trust degree on government's new media platform, and interpersonal trust is the second factor. Accordingly, to perfect trust mechanism in society today is still a heavy responsibility. Political trust occupies an important position in the trust system; the establishment of political trust mechanism depends on government actions. Currently, our society is in transition and there still exists a certain gap between government management capacity, service level and public expectations. And when some administrative misconducts occur, contradictions and conflicts between government and citizens will arise, as a result, it has a seriously effect on the government image and it is difficult to establish political trust. At the same time, for public, both political trust and media trust are kinds of trust to others and have a large difference with Chinese traditional trust that

based on relatives. Therefore, in order to improve the trust degree of the new government media, to improve the whole social and networking trust environment are the issues that must be faced. For government's new media platform, we should open the information channels, public available information, give full play to the advantages of new media when facing with unexpected events and promptly resolve public confusion and suspicion. The construction of government's new media platform should include legitimate expression of public, respecting and encouraging people to express interest demands within the framework of law, building communication channel for the interaction between officials and the public and contributing to a force for solving social conflicts.

Third, the penetration rate of government's new media platform needs to be improved. The utilization rate of platform is an important indicator to measure the trust degree. Through the results of this study, we can fond that the utilization rate of government's new media platform is closely related to its trust degree. Specifically, the trust degree of respondents from government's new media platform, which has a higher utilization rate, is higher. While, through the investigation we can find that the utilization rate of current government's new media platform is relatively low, which includes government official website, government micro blogging and chief micro-channel, all these ask government's new media platform strengthen its communication capacity and influence, expand the influence by grasping every opportunity and fight for more users. Take two relatively successful government micro blogging -- "Shanghai Release" and "Safe Beijing" for example: an important feature of these two government micro blogging is actively participating in all major events, actively guiding public opinion, interactive communicating with the public and relieving the pressure of public mood and media.

Forth, government's new media platform requires specialized construction. Although government's new media platform is the "spokesman", it also the media. American Published Liberty Commission issued "a free and responsible newspaper industry" in 1947 and established a media professional standard. Since then, of journalistic professionalism has become the main professional norms abide by Western journalists. According to the literature, both authenticity and reliability of the information released by media are important factors that affect the credibility. Operation of government's new media platform should also follow the requirements to the media of journalistic professionalism: serve the public interest, report the facts,

judge the authenticity of facts through scientific rationality and subject to the highest authority -- the fact. In summary, it needs to ensure the truth of information, communication channels (independent of the other powers) and information sources. It also asks the operators of government's new media platform receive training of journalism concepts and skills. From a professional point of view, the requirements for government's new media practitioners should be higher than traditional media practitioners or other journalists. First of all, they should have the ability to collect and integrate the required information in the vast amounts of information, identify true and false information in the virtual world and determine whether the information is suitable for online publishing, etc. Meanwhile, they also need to have a high political literacy.

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How parental discipline influence violent behavior in Thai adolescents?

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Abstract

Adolescent violence has become a national concern in Thailand. The findings from a national survey showed that more than 30 percent of Thai children and adolescents have behaved violently, particularly physical violence such as physical fighting, theft, and destroying public property. The family is an important factor influencing violent behavior in adolescents.

Aim of the study

This study was to explore how parental discipline influence violent behavior in Thai adolescents.

Method

A qualitative descriptive design was used to collect the data, including semi-structured interviews and focus groups. The participants included 12 parents of adolescents who aged between 15-18 years, 5 nurses who have experienced working with the family and adolescents, and 5 teaching professionals who were teaching in high school or technical college. Thematic analysis was selected to identify and report the themes.

Results

The results showed that the ways in which parents raise their children are perceived as important. Parents who lack child rearing knowledge and experience, undertake inappropriate discipline, and do not teach or give their children advice may encourage adolescents to use violence. Also, poor parent-child relationships and low or over monitoring of adolescent's behavior would lead children behave violently. In contrast, parents who have knowledge and experience, provide appropriate ways to discipline may help to prevent violence and develop children to be well behaved. Moreover, adolescents would solve their problems in appropriate ways without using violence if their parents helped them learn social skills, problem solving and managing negative emotions. Teaching children about responsible behavior towards the media and its effects also were mentioned as a positive way to raise their children.

Discussion incl. Conclusion

This study contributes significant findings relating to Thai family life and examines how parental discipline effect on adolescent violence in Thailand. The results suggest that adolescents who have practical parental support and a close relationship with the family were less likely to admit violent behavior. Therefore, the quality of positive parenting practices should be strengthened. The family needs to change and adapt to prepare their children for life in contemporary Thailand.

Keywords: Parental discipline, violent behavior, Thai adolescents

How parental discipline influence violent behavior in Thai adolescents?

Introduction

Adolescent violence has become a national concern in Thailand. There has been increasing concern about violent behavior in adolescents as one of the significant social problems in Thai society. A report by the Department of Juvenile Observation and Protection (2008) showed that the number of juvenile offenders increased from 36,080 in 2005 to 51,128 in 2007 and most offences involved violent behavior. Also, the findings from a national survey showed that more than 30 per cent of Thai children and adolescents have behaved violently, particularly with physical violence such as physical fighting, theft, and destroying public property (Prasert & Phetdee, 2009).

The high incidence of violent behavior in adolescents prompts questions about contemporary Thai society, such as why are some adolescents violent. An extensive review of the literature related to factors associated with violent behavior in adolescents demonstrated that one of the important factors influencing violent behavior may be the family. Many studies revealed that poor parent-child relationships, inadequate parental supervision, low or over monitoring of adolescent's activities, low parental involvement, parental violence were identified as factors resulting in adolescent violence (Rodniam, 2006; Laeheem *et al.*, 2009; Ruangkanchanasetr *et al.*, 2005; Isaranurug *et al.*, 2001). Whereas, warm and supportive relationships between a child and parents (Shetgiri *et al.*, 2010; Pradubmook-Sherer, 2009), appropriate monitoring or supervision of children's activities (Kliewer *et al.*, 2006; Bacchini *et al.*, 2011; Frey *et al.*, 2009; Rhuchareonpornnich, 2010) have been shown preventing violent behavior.

Conclusion, it seems that the family was an important factor influencing violent behavior in adolescents not only in developed countries but also in developing countries, including Thailand. However, there is little evidence identifying parental discipline influencing adolescent violence. Identifying and understanding how parental discipline influencing adolescent violence is as important to preventing and reducing adolescent violence.

Aim

To explore how parental discipline influence violent behavior in Thai adolescents

Methods

Research design

A qualitative descriptive design was used, including semi-structured interviews and focus groups to explore how parental discipline influencing violent behavior.

Participants and Setting

The participants included 12 parents of adolescents who aged between 15-18 years, 5 nurses who have experienced working with the family and adolescents, and 5 teaching professionals who were teaching in high school or technical college. The study was conducted in Chiang Mai province, Thailand.

Instruments

The demographic questionnaire included gender, age, education level, number of a child, occupation, and number of experience. A semi-structured interview and focus group guide was developed to examine how parental discipline influence violent behavior.

Data collection

The individual interviews were used to examine the views of the parents of adolescents whereas the focus group interviews examined the views from the nurses and teachers.

Ethical issues

The study was approved by the Faculty of Health Research Ethics Committee, University of East Anglia, UK, and a hospital was given.

Data Analysis

Qualitative thematic analysis identified by Braun and Clarke (2006) was used to examine the data identifying parental discipline influencing violent behavior. The data collected by in-depth interviews was analyzed in the same way as the data collected using focus groups. The thematic analytic process consists of 6 phases, namely familiarizing myself with my data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the report.

Results

The data showed that parental discipline, which is the ways in which parents raise their adolescents, is perceived as the most important risk and protective factors.

Risk factors

When the participants were asked about parental discipline which would encourage adolescent to behave violently, providing negative ways to discipline their adolescents was perceived as a risk factor.

In families where parents lack child rearing knowledge and experience, this may encourage adolescents to use violence. Some parents and teachers mentioned that parents who lack knowledge and experience in child rearing and get angry and violent with their adolescents may not realize that the adverse consequences of their behavior may directly affect their children. As a result, the children may learn and imitate violent behavior from their parents and then it may become a habit.

'...some parents are not mentally ready to care for the child...particularly, inexperienced parents...they do not know how to take care of their adolescents appropriately. The adolescents may behave badly...When the parents had bad temple could not control and then transfer to the adolescents. Consequently, the adolescents will absorb that feeling...They will behave that way towards their friends or others.' (MT1_8-9)

Undertaking inappropriate discipline, such as overindulgence, was perceived as a factor influencing violence in adolescents. Some parents, teachers, and nurses revealed that where parents give their adolescents anything they want without a word of contradiction, and allow them to do as they please, this may encourage adolescents to be attention seeking adolescents. They may behave violently towards their parents to get things they want.

'Adolescents are more violent as parents spoil them. When the adolescents want something, the parents always give what the adolescents want...the parents give them as much as their adolescents want.' (MT3_9)
'...adolescents behave violently as their parents treat them like a prince or a king; they spoil the adolescents.' (TC1_9)

Additionally, some parents and nurses perceived that where parents do not teach and give adolescents advice, particularly about the consequences of behavior, this may encourage adolescents to misbehave all the time as they do not know their actions are violent.

'Parents did not teach their adolescents what they should do or what they should not do, what is right or what is wrong, and what happens if they behave violently. When they always behave badly, it may become habit' (MY6_12)
'...parents do not teach adolescents about appropriate behaviors, so they do not know that they shouldn't hit adults. They used to hit parents, so they thought they can hit others.' (N5_3)

Poor relationships with parents may lead to violent behavior. Some mothers perceived that where parents use inappropriate ways to communicate in the family, such as not listening to what the child is saying and telling the child off all the time, this would lead them to feel like their autonomy was denied. The adolescents may behave violently to release their negative feelings.

'Some parents never ask their adolescents what happens…they scold them (adolescents) over little things… they (adolescents) will be suppressed and follow up with behaving badly.' (MT3_7)

Low or over monitoring of adolescent's behavior would lead children to behave violently. Some parents and nurses perceived that parents who are less likely to monitor their adolescent's behavior and sometimes leave their adolescents unsupervised with TV/ video or video games the adolescents may learn to imitate violent behavior.

'They (parents) left their adolescents with media—internet and video games… they let adolescents watch T.V. and then went to work. Parents never stay with or monitor their adolescents. Adolescents might learn bad behavior.' (MY7_15)
'…adolescent who behave violently…their parents never pay attention to monitor adolescent's activities.' (N1_8)

Some mothers and teachers also mentioned that spending too much time to monitor adolescent's behavior may encourage adolescents to behave violently. The adolescent may feel like they are being controlled and have no autonomy. They may then misbehave and use violence to relieve their frustration.

'…most teenagers are suppressed because their parents control and restrict them. There's no freedom. Most adolescents who skip school…they (parents) made them bored because they (adolescents) couldn't go to wherever they want.' (MY6_1-2)

Protective factors
When the participants were asked about parental discipline which would help to prevent adolescent violence, providing positive ways to discipline their adolescents was perceived as preventing it.

Some parents and teachers as helping parents to raise their adolescents appropriately according to the child's development perceived having knowledge about child rearing. They would provide their adolescents with practical advice and guidance on how to behave well.

*'**…**parents know a proper way to raise a child at each age. It can help adolescents to be a good person.' (TS3_14)*
'…After the marriage, a couple begins to plan how to raise their child and who could be involved in raising a child…It will be good for adolescents to behave well…' (MT1_5-6)

Some parents, teachers, and nurses believed that parents who teach their adolescents about how to behave well and the consequences of negative behavior would offer their adolescents opportunities to be responsible for their own behavior.

> *'If adolescents behave badly, parents have to remind and give them some advice, so adolescents are less likely to behave violently.' (FY11_12)*
>
> *'...parents should raise adolescents...teach them what behavior is right or wrong (violent or non- violent).' (N2_13)*

Moreover, some parents believed that adolescents would solve their problems in appropriate ways without using violence if their parents helped them learn social skills, problem solving and managing negative emotions.

> *'The parents always advise their adolescents and help them get through problems... when the adolescents are mature enough, the parents have to start letting them deal with the problems themselves.' (MT1_4)*
>
> *'If their adolescents have got problems, parents should use some techniques to find out as much detail as possible. Parents have to help their adolescents solve the problems.' (FT4_13)*

Teaching adolescents about responsible behavior towards the media and its effects also were mentioned as a positive way to raise their adolescents. This would help adolescents recognize when they use the media and prevent them from learning to use violent behavior. Some parents highlighted this point as follows:

> *'...family who gives their adolescents advice, care for, and need to be with/ supervise their adolescents when adolescents consume the media.' (MY7_17-18)*

Discussion

This study provides evidence that lack of parenting knowledge and experience regarding childrearing and child development can be linked to adolescents at risk of becoming violent. The parent and teacher participants perceived that parents who lack child rearing knowledge and experience may behave inappropriately in front of their children and sometimes they may behave violently towards their children when they felt angry. This is supported by Diekstra, *et al.* (2009) who found that parents who lack knowledge about childrearing might misjudge the way to act towards their children. Panyanandamunee (2000) stated that the example set by parents always has an influence on children's behavior. This is supported by Social learning theory, which says children learn to behave by observing others, including parents (Bandura, 1986; Laeheem *et al.*,

2009). It seems that a lack of parenting knowledge and experience means that parents may not realize that their behavior affects their children.

Parents who do not discipline their children, including using overindulgence, was perceived as a factor influencing violent behavior in adolescents. The participants perceived that where parents give their children anything they want, and allow them to do as they please this may encourage children to be self-willed and think that they can have everything. When this does not happen, they may behave violently towards their parents. This is consistent with a western study by Miller, Dilorio & Dudley (2002) that found that adolescents who described their mother as using a permissive or indulgent parenting style were more likely to demonstrate a tendency to anticipate a more violent response to a hypothetical situation. It seems that parents who give their children anything they wish for are more likely to engender a lack of self-control in their children and consequently their use of violence if thwarted. It can be concluded that lack of parental discipline including overindulgence may encourage adolescents to develop the idea that they are entitled to get what they want and then may use violence to get it.

Lack of teaching and giving children advice about the consequence of negative behavior was perceived by the participants as leading to violence in adolescents as they do not know their actions are wrong. This is consistent with a longitudinal study by Herrenkohl *et al.* (2000) who found that poor family supervision significantly increased the risk of self-reported violence in youths aged 18 years. Poulou & Matsagourus (2007, p.1) stated that parents were perceived as "guardians" for children. The children learn to behave through their parents' teaching and advice about right or wrong, and if they do not do this, the children do not judge behavior as right or wrong and then will behave badly. Social learning theorists suggest that children learn moral behavior from their parents and then they may put them on the same side as their mentors (Berryman *et al.*, 1992). This means that if parents do not teach their children about right or wrong, children do not learn the patterns of pro-social behavior.

Additionally, lack of parental monitoring, which means parents do not spend enough time with their children, may encourage adolescents to learn negative behavior from others. Some participants mentioned that if parents are less interested in their children's behavior, and leave them alone, the adolescents tend to learn negative behavior by watching TV/ video or video games without supervision. The findings about parents corroborate and extend previous research documenting an increased prevalence of violent behavior among adolescents with lower parental monitoring. A longitudinal study in the U.S.A by Herrenkohl *et al.* (2006) found that youths from families with less time for supervision (or discipline) were more likely to engage in violence. A study by DiClemente *et al.* (2001) found that adolescents who perceived less parental monitoring were more likely to engage in fights. Bacchini *et al.* (2011) affirmed that a low level of parental monitoring predicted a higher involvement in antisocial behavior in adolescents. Banyard & Modecki (2006) also found that family factors, such as low parental monitoring and low social support, were associated with self-reported use of physical violence. It can be concluded from this study that a lack

of parental monitoring might place adolescents at a higher risk for violent behavior. They may be more likely to use violence possibly learnt from violence in the media or others.

Moreover, over monitoring children's behavior was perceived as encouraging adolescents to behave violently. The participants perceived that adolescents may feel unhappy about being controlled and then behave badly. This is similar to two U.S.A studies by Patock-Peckham & Morgan-Lopez (2006) and Bronte-Tinkew, Moore & Carrano (2006) who found that adolescents whose parents used an authoritarian parenting style had an increased risk for drinking, smoking, and/or using drugs, which may lead to violent behavior. It could be because adolescents are developing their self-identity and autonomy and if they feel that they are over controlled they may behave violently towards their parents or use violence to get respect from others.

Poor relationships with parents, such as poor communication between parents and adolescent children, were perceived as leading to violence in adolescents. The participants perceived that where parents avoid listening to their children's feelings this may encourage adolescents to lack control and then behave violently to get respect. Moreover, some participants perceived that parents who do not communicate effectively with their children may encourage them to share their problems with their friends rather than them, and they may receive inappropriate advice from their friends. This concurs with Kee *et al.* (2003) who found that youths involved in street corner gangs had experienced less open communication with their families and higher levels of over-control by their mother. This supports the finding from Madden-Derdich *et al.* (2002) who explored youths' and parents' perceptions of family interaction processes in inner-city families with delinquent youths and found that poor communication within the family and interpersonal conflicts were identified as family factors contributing to problems in an adolescent's development. It could be concluded that poor communication within the family may make it difficult for adolescents to trust and respect their parents. The adolescents prefer to take advice from their friends instead and they may give poor advice, such as using violence, to solve their problems.

However, the study suggests that providing positive parental discipline by teaching and giving children advice about positive social skills can help children to recognize their behavior, learn pro-social behavior, and avoid using violence. The findings showed that having child rearing knowledge and experience and preparing both physically and emotionally to care for their children was perceived as preventing violent behavior in adolescents. An explanation of this evidence is that the parents who have knowledge about child rearing are more likely to implement positive parenting methods to discipline their children and provide their children examples of pro-social behavior. The children then are less likely to witness and learn violent behavior from their parents.

Moreover, the study provides evidence that it can help to prevent violent behavior in adolescents if parents have taught and given their children advice about the consequences of negative behavior, and how to deal with their problems and control their negative emotions. It appears that providing effective ways of disciplining their children, including

teaching and giving children advice and rewarding good behavior (instead of only punishing bad behavior) may prevent adolescents from using violence by developing their autonomy and self-discipline. This is consistent with the findings from a study in Thailand by Rhucharoenpornpanich *et al.* (2010), which investigated parenting practices and reported sexual and delinquent behaviors among adolescents. They found that in the family who raised their children in a disciplined positive way, such as setting rules, and supervising them then the adolescents were less likely to develop delinquent behaviors. Colman *et al.* (2009) suggested that good social support from the family could help protect adolescents against emotional and behavioral problems, including violence. It can be explained that parents who provide effective care can help their children to gain self-confidence, and learn to care for themselves effectively.

Conclusion

Parental discipline has been identified as important influence on violent behaviour in Thai adolescents, in both positive and negative ways. The participants perceived that ineffective parental discipline influencing violent behavior included parents who lack child rearing knowledge and experience, undertake inappropriate discipline, and do not teach or give their children advice. Also, poor parent-child relationships and low or over monitoring of adolescent's behaviour would lead children behave violently. Whereas, providing effective discipline, such as parents use their knowledge and experience to care for and express love for their adolescent children in appropriate ways, try to understand their children, and use appropriate ways to discipline them, may prevent violent behaviour in adolescents. Adolescents would receive support and clear boundaries from their parents and learn self-discipline. These ideas are potentially useful for nurses who work with children, adolescents, and the family however they would need further training and education to develop their skills.

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How to Earn Public Trust in Risk Communication:
Factors Specifying Trust in Japanese Government Concerning the Nuclear Power Plant

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Abstract

Recent studies indicate that it is important for risk managers to acquire public trust. Public trust influences decreasing risk perception and enhancing risk acceptance. Thus it facilitates social activities of risk managers. The present study examines public trust for the Japanese government as a risk manager in the problem of whether nuclear power plants should be continued or abolished, especially concentrating on a degree of interest for the risk issue, competence, and fairness. Competence and fairness are separated into the following perspectives: decision making about risk issues (decision maker) and resolving risk issues (resolver). About four hundred students participated in a questionnaire. The data was conducted by statistical analysis. As a result, in the high interest group, salient value similarity and competence as a decision maker especially influence trust. On the other hand, in the low interest group, salient value similarity and competence as a resolver particularly affect trust. Salient value similarity is the most coherent predictor regardless of a degree of interest. These outcomes imply that the high-interest group considers processes to reach a solution is more important than the realization of a solution. In contrast, the low-interest group thinks the realization of a solution is more important than the process to reach a solution. Implication of these results for practical risk communication is discussed. If salient value similarity strongly specifies trust, it may be impossible to acquire trust from whole public. Although thinking about practical risk communication, communicators have potential to propose other strategies or messages based on the dispositions of public, for instance, the degree of interest for risk issues. The individual resources except the degree of interest will be investigated by future studies.

Keywords: risk communication, trust, SVS model

How to Earn Public Trust in Risk Communication:
Factors Specifying Trust in Japanese Government
Concerning the Nuclear Power Plant

Introduction

Governments all over the world have rethought about how to manage nuclear power stations since the accident at Fukushima Daiichi Nuclear Power Station. Some governments, such as Germany and Switzerland, have decided to revoke nuclear power plants. Others including Japan have decided to continue operations of nuclear power stations. Even if governments come to an agreement on whether nuclear power stations should be abolished or continued, active discussions, which are how governments meet electricity demands, are still in progress. This is because governments have not determined alternative electrical powers in place of nuclear powers, if governments decided the policy to abandon nuclear power plants. In addition, governments have not been sure "how safe is safe enough" to manage atomic power stations. This refers to how the government should calculate risks, uncertainties, and costs to prevent disasters caused by nuclear powers.

Active discussions about nuclear power stations have extended as well as in Japan. Although the previous government until 2012 argued for the policy to abolish nuclear power stations, the present government decided on the new Strategic Energy Plan, indicated to maintain atomic power plants as a basic power supply, on April 2014. Even now, there are not any nuclear power stations which have restarted. Considering the Japanese citizens' thought, Japanese people apparently have negative attitudes toward nuclear powers. According to a survey conducted by NHK Broadcasting Culture Research Institute, respondents who answered, "All the plants should be decommissioned" increased from 20 % to 30% in 2011. Respondents who agreed with the restart of nuclear power plants were 11%. Results of the survey showed that the government and Japanese citizens have different attitudes toward nuclear powers.

Aside from whether atomic power stations should be continued or abolished, the government should make the public understand atomic power stations. This is because the risks have great impacts for public life if accidents occur. Risk management organizations need to encourage discussions on risks for attaining public decision-making. Current studies have focused on public trust in risk managers in the field of risk management studies because trust contributes to decreased perceived risks and gained perceived benefits on risk issues (Slovic, 1999; Earle & Cvetkovich, 1995; Siegrist, 2000), which means that if people can trust the government's the policy on nuclear power plants, they are more likely to accept the risk of nuclear power stations. Furthermore, if people cannot trust the government, they are less likely to accept the risk of atomic power stations. Hence, not only for the public, but also for risk-managing institutes, to earn public trust is beneficial.

Theoretical background: predictors of trust

Definition of trust

The definition of trust has not been agreed on among researchers yet. There are numerous studies about trust among interdisciplinary fields, such as sociology, psychology, management, and so on. Rousseau et al. (1998) overviewed various studies of trust and pointed the agreement of trusts' definition. That is "trust is a psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behavior of another" (Rousseau et al., 1998, p.395). The point of these interpretations strongly suggests that trust comes out under a vulnerable state, thus trust does not occur under a secure state. The present study basically has adopted the definition of trust asserted by Rousseau et al. This definition should be applied because the present study would discuss trust in the context of risk management. The present study defines that trust is a psychological state which consists of the intention to accept vulnerability based upon positive expectations of the intentions or behavior of risk managers.

Traditional predictors of trust

As with the definitions of trust, there are numerous studies about predictors of trust. They have not been corresponded among researchers. Hovland et al. (1953) suggested in their study about persuasive communication influential communication for people is constructed from expertise and reliability. The perception of expertise is constructed from people's technical knowledge and competence, while the perception of reliability is based on honesty and fairness. The results of this study could be considered representative because this conclusion corresponded with other empirical studies on trust. For instance, Luhman (1973) and Barber (1983) have argued that determinants of trust are the expectation of technical competence and the expectation of fiduciary responsibility. Yamagishi (1998) arranged that the anticipants of trust are the expectation of competence and the expectation of intention.

Salient value similarity model

Other researchers have taken the discovery approach of what causes trust rather than attempting to clarify applicable characteristics of trustees. The Salient value similarity (SVS) model is one such approach. Value similarity approach assumes of trust as a psychological state of willingness to rely on or cooperate with another based on two context-specific judgments regarding assessments of moral character. The first judgment estimates saliency of values pertinent to problems at hand. The public can attribute different abstract values. Those values that are active in the person's mind during a particular contention influence trust, choices, and behaviors. The second judgment assesses the perceived settlement or similarity between self and the other person about what is important,

which is salient value similarity. Many experimental studies have shown that risk managers could be trusted when they are perceived as having shared values. Nevertheless, there are some studies which have concluded that perceived value similarity is not a primary factor in anticipating trust (Poortinga & Pidgeon, 2003). Other studies have found perceived value similarity to precede the trust predictors of fairness and competence that have emphasized traditional approaches (Earle, 2004; Allum, 2007).

Research design

The present study explored how the degree of interest of nuclear power plants influences the antecedents of public trust in the Japanese government on the basis of the integrated model of the SVS view and traditional view of trust by Nakayachi & Cvetkovich (2008). The research question and hypotheses are as below:

RQ: The predictors of public trust in the Japan government, which is the risk managing organization of nuclear power plants, are different depending on the degree of interest of nuclear power plants.

The technical issues such as nuclear power stations must have required competency or fairness to manage risk even though some empirical studies have shown salient value similarity could be a primary factor if the public have interests on the risk issues (Cvetkovich and Nakayachi, 2007; 2008; 2010). This is because citizens would not agree to the agreement with risk managers if risk-regulating institutes did not have enough ability to conduct risk, or do have a certain purpose to utilize the technology. Furthermore, thinking about practical procedures in risk management, there are two phases to reach a realization: to determine a policy dealing with risk, and to realize the policy. Value similarity strongly influences public trust among people who have high-interest in the risk, the present study assumed that competence and fairness would be stronger indicators practically to realize shared value than just to build policy. The hypothesized relationships are proposed as below:

H1: SVS is the strongest predictor of trust in a high-interest cluster.

H2: Competence and fairness to realize the policy that the government builds for dealing with nuclear power stations are stronger predictors than competence and fairness to build the policy in the high-interest group.

H3: Competence and fairness to build the policy and to realize the policy are stronger predictors of public trust than SVS in the low-interest group.

Hypothesized model of the present study is shown in Figure 1. The model referred to Nakayachi & Cvetkovich (2008) and changed by the authors of present study.
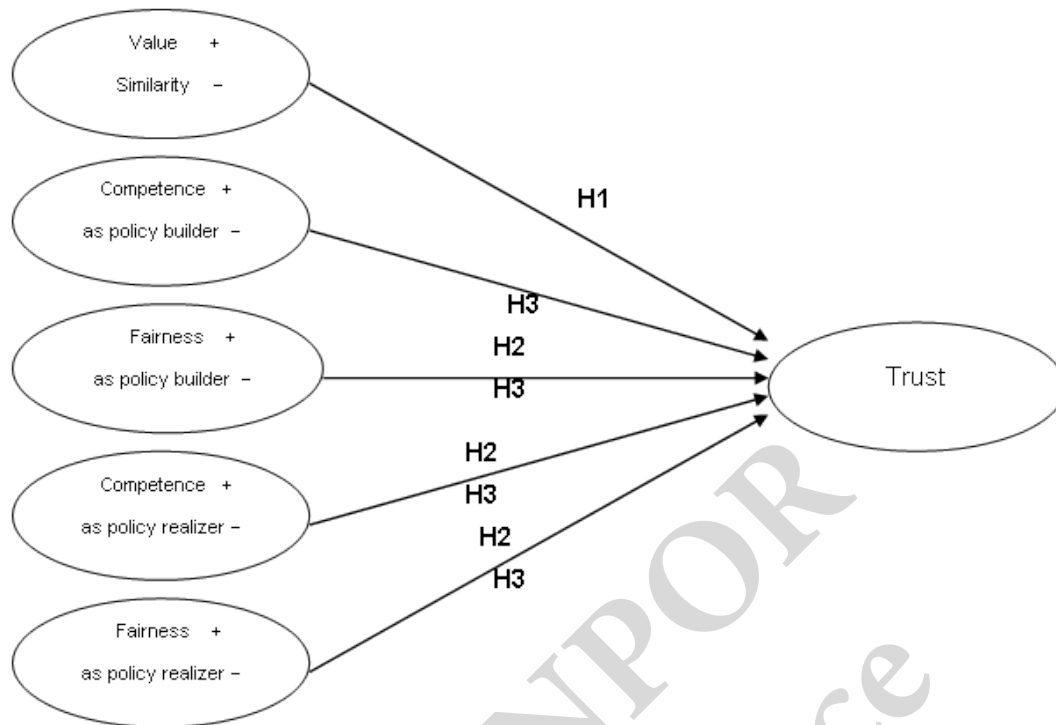
Figure 1
Hypothesized model how the predictors influence trust mediating the degree of interest
in nuclear power plants

Notes: Each + / − indicates the degree of interest for whether nuclear power plants
should be continued or abolished.

Method

Procedure and participants

Data was collected during Sep. 25 to Oct. 3 2012 from undergraduate students in Hokusei Gakuen University. Of a total sample size of 450 people, 90.4 % (N=399) participated in the survey. Thirty-one percent (N=122) of the participants were male, and 69% (N=276) were female. The mean age was 19.3 (SD=1.22).

Respondents were given simple explanations that Japanese people currently discuss, whether atomic power plants should be maintained or abolished. Both positive and negative viewpoints on atomic powers were presented to respondents at the top of the present questionnaire. Respondents were also given the other simple explanation for the issue to make sure the distinction between the above policy builder and the following policy materializer.

Instruments

Instruments of the present study referred to Nakayachi & Cvetkovich (2008). Each questionnaire is indicated in Table 1.

Degree of interest

Degree of interest was measured by 1 item asking the participants how much interest does he / she have in the issues which nuclear power plants should be continued or abolished. This item was rated on a 4-point scale (1=not at all and 4=extremely).

Value similarity with Japanese government

Value similarity with Japanese government was measured by 3 items asking the participants to what extent the government shared the same values, feelings, attitudes toward nuclear power plants as him /her. All 3 items were rated on a 5-point scale (1=not at all and 4=extremely).

Trust in the Japanese government

Trust in the Japanese government was measured by 3 items asking the participants to what extent he / she relies on, trusts, and assures the government to regulate nuclear power plants. All 3 items were rated on a 5-point scale (1=not at all and 4=extremely).

Government competency as building the policy

Government competency as building the policy was measured by 3 items asking the participants to what extent the government has regarding expertise knowledge, ability, and affluent knowledge to build the policy for nuclear power plants. All the 3 items were rated on a 5-point scale (1=not at all and 4=extremely).

Government fairness as building the policy

Government fairness as building the policy was measured by 1 item asking the participants to what extent how fair the government is to build the policy for nuclear power plants. An item was rated on 5-point scale (1=not at all and 4=extremely).

Government competency as materializing the policy

Government competency as materializing the policy was measured by 3 items asking the participants to what extent the government has regarding expertise knowledge, ability, and affluent knowledge to realize the policy for nuclear power plants. All the 3 items were rated on a 5-point scale (1=not at all and 4=extremely).

Government fairness as materializing the policy

Government fairness as materializing the policy was measured by 1 item asking the participants to what extent how fair the government is to materialize the policy for nuclear power plants. An item was rated on a 5-point scale (1=not at all and 4=extremely).

Table 1

Construct and Indicator of Each Question

Construct	Indicator	M	SD
the degree of interest in nuclear power plants	he/she has an interest in nuclear power plants	2.95	0.81
shared value similarity with the government	the government has same values with him/her	2.10	0.87
	the government shares feelings with his/hers	1.94	0.8
	the government has same attitudes toward nuclear power plants with him/her	2.35	0.84
trust in the government	he/she can trust the government	1.98	0.82
	the government is reliable for him/her	2.06	0.82
	he/she assures that the government can manage nuclear power plants	1.99	0.78
the government competency as building the policy for nuclear power plants	the government has expertise knowledge to build the policy for nuclear power plants	2.21	0.95
	the government has abilities to build the policy for nuclear power plants	2.15	0.82
	the government has affluent knowledge to build the policy for nuclear power plants	2.14	0.88
the government fairness as building the policy for nuclear power plants	the government is fair to build the policy for nuclear power plants	2.23	0.70
the government competency as materializing the policy for nuclear power plants	the government has expertise knowledge to materialize the policy for nuclear power plants	2.34	0.93
	the government has abilities to materialize the policy for nuclear power plants	2.15	0.81
	the government has affluent knowledge to materialize the policy for nuclear power plants	2.33	0.85
the government fairness as materializing the policy for nuclear power plants	the government is fair to materialize the policy for nuclear power plants	2.37	0.79

Results

Level of interest in nuclear power plants

The results of the each question, mean, and *SD* are indicated in Table 1. Rating scale span of 1-4 scaled the degree of interest for nuclear powers. 5.01% of the respondents (*N*=20) indicated a level 1, 20.3% of the respondents (*N*=81) indicated a level 2, 49.37% of the respondents (*N*=197) indicated level 3, and 25.31% of the respondents (*N*=101) indicated level 4. For the comparison between the high-interest cluster and the low-interest cluster, we indicated a level 1 and a level 2 as a low-interest group, indicated a level 3 and level 4 as a high-interest group.

Value Similarity, Competency, and Fairness as Antecedents of Trust

Table 2 shows the high-interest/low-interest cluster's result of multiple regression analysis for predicting levels of trust based on assessments of value similarity, competency as a policy builder, fairness as a policy builder, competency as a policy materializer, and fairness as a policy materializer. For both the high-interest group and the low-interest group, the beta coefficients for five predictors were significant. These results indicated that perceived competence and perceived fairness and perceived value similarity are primary factors that independently determine trust. Of these five variables, the beta coefficient of

value similarity was the highest on both high/low-interest groups. The hypothesis 1 was supported, though hypothesis 3 was not supported by the present results. On the high-interest group, competence as a policy builder was a stronger predictor than competence and fairness to materialize the policy at variance with our hypothesis 2. The possibilities of multicollinearity among each determinant were low because the ranges of *VIF* were enough low. The range of VIF was 1.36-2-20 in the low-interest group, the range of *VIF* was 1.24-2.47 in the high-interest group.

Table 2

Results of Multiple Regression Analysis Predicting Trust

	Unstandardised Coefficiets-β	Standardized Coefficients-β	*t*	Adj. R^2	*N*
High-interest group					
Constant	.470		3.123**		
Value similarity	.238	.237	4.313***		
Competency as a policy builder	.209	.217	2.988**	.281	298
Fairness as a policy builder	.147	.142	2.234*		
Competency as a policy realizer	-.039	-.041	-0.525		
Fairness as a policy realizer	.142	.158	2.322*		
Low-interest group					
Constant	.045		0.212		
Value similarity	.323	.310	3.650***		
Competency as a policy builder	-.073	-.072	-.664	.469	101
Fairness as a policy builder	.190	.210	2.148*		
Competency as a policy realizer	.312	.286	2.645*		
Fairness as a policy realizer	.155	.170	1.718		

Discussion

Results of the present study partly support the prediction that value similarity heavily influences trust in a high-interest group. This result is the same as the results of Nakayachi & Cvetkovich (2008; 2010). In a low-interest group, results of the present survey indicated value similarity as the strongest influence as well as a high-interest group. This consequence apparently contradicts the notion of Nakayachi & Cvetkovich (2008, 2010) that value similarity does not have a heavy influence to trust among low-interest people. Despite of the degree of interest in risk issues, we can conceive value similarity is a dominant factor to predict public trust.

The present study has aimed to define how the different roles of risk manager between decision maker and materializer could influence public trust. The high-concern cluster anticipated trust in the government because of its competence as a decision maker, which is the second strongest antecedent of trust. In addition, the low-concern cluster predicted trust in government because of its competence as materializer, which is the second strongest antecedent of trust. These results involve people who have a strong interest in risk issues to judge risk issues focusing on a procedure to reach public decision-making. If citizens have strong interests in nuclear power, they might care further about how the

government will decide about the risk to attain their value shared with the government. In contrast, people who have a weak interest in risk issues do not want to suffer the costs of judging risk issues. They focus on how risk-managing organizations realize their policy.

Implication for risk communication

These results of the present study showed that value similarity is the crucial determinant factor on trust. Thus, if institutions regulating a risk could not share their values with the public, it seems that they explicitly will not be able to earn public support. We strongly suggest that communicators regarding risk should not give up earning trust from people who disagree with the directions of risk-managers. This is because there may be values that people commonly share, such as safety, health, and fairness. Risk-regulating institutes are able to earn trust through conveying messages which tend to be shared by most people. Furthermore, results of the present study indicated that the predictors, except value similarity, still have influence on public trust. This consequence implies that risk-managing organizations could communicate effectively with the public to arrange the message depending on the communication objects' degree of interest. For instance, risk-managing organizations can tell more processes about how to build policy dealing with the risks if people do not have interests in the risk issues. However, if people do have interests in the risk issues, risk-regulating institutes can tell their visions on how to realize their policy dealing with risks. Lastly, the concept of value similarity is still an unstable idea. Value similarity includes both social aspects, such as involvement with risks, and psychological aspects, such as human emotions (Sato & Ohnuma, 2012). Even though value similarity has strong influences to both low and high interest clusters, risk-managing organizations will not earn enough public trust without competence and fairness.

Limitation of the present study and implications for future studies

There are some limitations of the present survey. Only perceptions of students were investigated. Future studies have to state the question whether the proposed model explains the perceptions of the general public as well. A further limitation is that the reliability and validity of measurements of the present survey were not enough because of the space of the questionnaire.

The period of the present investigation would influence the results. Investigating the data before and after the Fukushima disaster, Visschers and Siegrist (2013) illuminated that the nuclear power plant accident decreased acceptance of nuclear power stations. Also, the accident at the Fukushima atomic power plant reduced trust in the risk manager. In the same manner, Japanese people estimated the low level of trust in TEPCO and Nuclear and Industrial Safety Agency. In addition, anxieties of risk and trust in risk-managing organizations are correlated (Nakayachi, 2011). Those empirical studies imply that even after more than a year, the accident at the Fukushima nuclear power plant would increase risk acceptance of nuclear power and decrease public trust in the government. Thus, the

period of the survey may influence results of the present study during which the level of public trust in the government was low.

The weak public trust in the government would cause the strong influence of value similarity on the low-interest cluster. The current studies have submitted that value similarity stronger predicts trust in institutes acquiring weak public trust (Nakayachi, 2011; Nakayachi et al, 2014). The present study only examined nuclear power plants, though the level of trust in the government was low (1.98~2.00 on a 5 pt scale). The strong influence of SVS would be caused by a low level of public trust in the government. The future studies should examine how predictors affect public trust in risk managers if risk managers have a high-level of trust.

The present study has just addressed trust in organizations which are responsible for regulating the technology, however the current studies discuss social trust in risk managers in the context of the risk acceptance. For instance, Trust-Confidence-Cooperation (TCC) model was suggested by Siegrist et al. (2003), which explained risk acceptance consists of both social trust and confidence. All in all, the present results should be re-tested in future studies, adding the examination of how risk acceptance connects with social trust.

Social trust causes risk perception that the present study assumed, while some studies have taken a position against it. Sjöberg (2001) asserted social trust weakly correlates with perceived risk on one hand. On the other hand, the causal relationship between social trust and risk perception contradicts, which is that risk perception causes social trust (Poortinga & Pidgeon, 2005). The variance of claims about the relationship between risk perception and trust might be led by the difference of collected samples. Those samples were collected in other countries, thus there may appear different consequences between each country.

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The Satisfaction to The Facilities That are Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhonratchasima Year 2556.

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Abstract

This research study the satisfaction to the facilities that are conducive to learning of student nurses Year 2556 in Boromarajonani College of Nursing Nakhonratchasima Thailand. Collecting data is by using the .93 alpha coefficient reliability questionnaires of satisfaction to the facilities with 662 students who studying in year one to four. Data is analyzed by using basic statistics and One Way Analysis of variance to compare between the years classes of students. The results showed that satisfaction with the facilities that are conducive to student learning is high satisfied (average = 3.6, SD = .34). The highest satisfied is "The security & Pubic utility" (average = 3.7, SD = .50). The comparison founds the differences in satisfaction levels according to the year class at statistically significant at .05 level. Results of this research indicate a different level of satisfaction with the facilities that are conducive to learning of nursing students in the different grade. The supplier of college should provide a concrete environment to support the maximum benefit for students to learn and have fun in college on the environment that cause students identities desirable.

The Satisfaction to The Facilities That are Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhonratchasima Year 2556.

Background and Significance of the Study

Nursing Education aims to produce the Healthcare Professionals on quality of Occupational Standard and Professional Qualifications and social requirements for healthcare. It's actually necessary to make the educational plan to match with public health requirements, which are always changing and alerting in Educational Quality. School of Nursing must preserve the best quality of student nurses. Boromarajonani College of Nursing Nakhon Ratchasima has the policy to produce the graduates who have the Desired Characteristics and Effective Operations. Nowadays, it's the period of information and communication technology. This leads to many competitions, requirements and expectation of healthcare service users. This means that people requires and expects to high quality of healthcare services and requires the skillful nurses. The nurses should give the right information about healthcare, have good personality, make any decisions by themselves and lastly provide the correct healthcare.

In 2013, Boromarajonani College of Nursing Nakhon Ratchasima has committed to produce nursing graduates to with professional identity in response to the desirable characteristics as follows. 1) Ability to perform nursing duties. 2) Skill to perform the professional operations and provide the healthcare services, which base on nursing theories and sanitary science including Disease Prevention, Rehabilitation or any medical treatments meeting the needs of healthcare service users. However, these are focused on potential development of Self-preservation. 3) Good vision to follow the profession, persist in professional ethics and respect in human rights. 4) Maintenance of morality and responsibility to society. 5) Good model and cooperation with others healthcare staffs. 6) Development of healthcare services and medical management to being updated for the progress of sciences and technologies which meet the needs of society. 7) Production of research and results to improve nursing quality. 8) Good leader and follower skills. 9) Ability to teach and supervision their staffs. 10) Good health and mind to live happily in the society. According to these attributes, the institute facilitates learning of nursing students in order to meet the standard no. 2.5 "Learning environment" in Educational Quality Assurance.

This research is to study the Satisfaction to the Facilities that are Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhon Ratchasima in 2013 for 4 points as follows: Food Distribution, Learning Environment, Health Fitness Center and Security and Public Utility. These points support learning of nursing student. The satisfaction data of Learning Environment is an indicator for Educational Quality Assurance of Office for National Education Standards and Quality Assessment (ONESQA) and Office of the Higher Education Commission (OHEC).

Statement of research objectives

1. To study the Satisfaction to the Facilities that is Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhon Ratchasima.

2. To test the differences of Satisfaction to the Facilities that is Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhon Ratchasima a in each college year.

Conceptual Framework

Year of nursing educators in 2013	Satisfaction to the Facilities those are Conducive to Learning
• Year 1	• Food Distribution
• Year 2	• Learning Environment
• Year 3	• Health Fitness Center
• Year 4	• Security and Public Utility
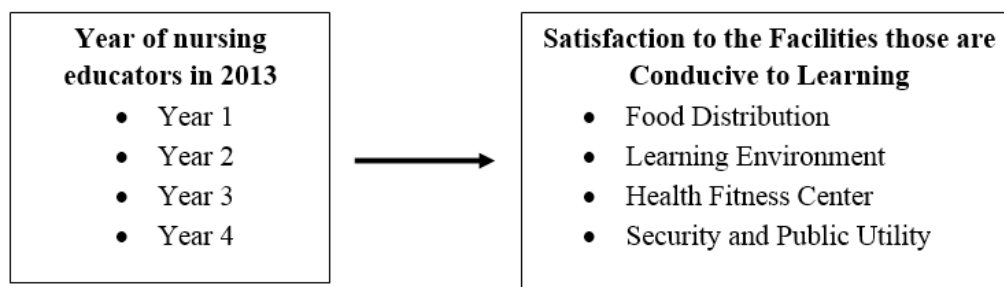
Methodology

This research is survey research. This work aims to study the Satisfaction to the Facilities that is Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhon Ratchasima and test the differences of Satisfaction to the Facilities that are Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhon Ratchasima in each college year.

Population

The population of this research is 662 nursing students of Boromarajonani College of Nursing Nakhon Ratchasima in 2013.

Sample

The sample of this research is 662 nursing students, who submitted only 603 questionnaires (91.08%).

Variables

Independent variable is college year of nursing educators in 2013. Dependent variable is the Satisfaction to the Facilities that is Conducive to Learning of class year 1-4 nursing educators in Boromarajonani College of Nursing Nakhon Ratchasima in 2013 for 4 points as follows: Food Distribution, Learning Environment, Health Fitness Center and Security and Public Utility.

Experimental Tool

Experimental Tool of this research is the questionnaire of Satisfaction to the Facilities that is Conducive to Learning of nursing educators, which is already examined Content validity by three experts and Reliability with 30 nursing student of Boromarajoni of Nursing Surin by Cronbach Alpha Coefficient. The Reliability is 0.98.

Data Collection

The researchers meet nursing educators in each class year for informing the objectives of this research and completing the questionnaire. The students have 5 days to complete this questionnaire. These questionnaires are checked for completion and collected the data of Satisfaction to the Facilities that are Conducive to Learning of 4 years nursing educators in Boromarajonani College of Nursing Nakhon Ratchasima in 2013. Then, this data collection can answer the Quality Assurance (QA), the standard no. 2.5 (library, educational equipment and learning environment in 4 points as follows: Food Distribution, Learning Environment, Health Fitness Center and Security and Public Utility.

Data Analysis

Data is analyzed by using program SPSS/Pc+ for Frequency Distributions, Percentage of nursing student year 1 to 4 in Boromarajonani College of Nursing Nakhon Ratchasima in 2013, Average and Standard Deviation of nursing student year 1 to 4 in Boromarajonani College of Nursing Nakhon Ratchasima in 2013. Moreover, this data is compared the Satisfaction to the Facilities that is Conducive to Learning of class year 1-4 nursing educators by using basic statistics and One Way Analysis of variance (F-test) and tested the differences of each pairs by the way of Scheffe with Statistical Significance Level at .05.

Results

According to Nursing Educators year 1-4 in Boromarajonani College of Nursing Nakhon Ratchasima in 2013, the percentage of year 1 is 25.2, year 2 is 35.8, year 3 is 18.1 and year 4 is 20.9.

1. Overview of Satisfaction to the Facilities that are Conducive to Learning of nursing educators in Boromarajonani College of Nursing Nakhon Ratchasima is in the high level (X=3.61, SD= .34). Relating to Food Distribution, it is in the high level (X=3.53, SD= .42), Learning Environment in the high level (X=3.59, SD= .40) Health Fitness Center in the high level (X= 3.61, SD= .47) and finally Security and Public Utility in the high level (X=3.70, SD=.50). (Table 1)

Table 1

Average (X) and Standard Deviation (SD) of Satisfaction to the Facilities that are Conducive to Learning of nursing educators in Boromarajonani College of Nursing Nakhon Ratchasima in 2013.

Satisfaction to the Facilities that are Conducive to Learning	X	SD	Level
1.Food Distribution	3.53	.42	High
2.Learning Environment	3.59	.40	High
3.Health Fitness Center	3.61	.47	High
4.Security and Public Utility	3.70	.50	High
Total	3.61	.34	High

2. According to the differences of Satisfaction to the Facilities that are Conducive to Learning of nursing educators in Boromarajonani College of Nursing Nakhon Ratchasima between the class years of students, we can see generally that Food Distribution, Learning Environment and Health Fitness Center are different with Statistical Significance Level at .05. (Table 2)

Table 2

Differences of Satisfaction to the Facilities that are Conducive to Learning of nursing educators in Boromarajonani College of Nursing Nakhon Ratchasima

Facilities that are Conducive to Learning of nursing educators	Source of Variance	df	SS	MS	F	p
1. Food Distribution	Between Group	3	49.867	16.622	170.693	.000
	Inside Group	599	58.331	.097		
	Total	602	108.198			
2. Learning Environment	Between Group	3	24.001	8.000	67.215	.000
	Inside Group	599	71.295	.119		
	Total	602	95.296			
3. Health Fitness Center	Between Group	3	20.830	6.943	37.079	.000
	Inside Group	599	112.164	.187		
	Total	602	132.993			

Facilities that are Conducive to Learning of nursing educators	Source of Variance	df	SS	MS	F	p
4. Security and Public Utility	Between Group	3	1.848	.616	2.466	.061
	Inside Group	599	149.612	.250		
	Total	602	151.459			
Total	Between Group	3	12.092	4.031	41.605	.000
	Inside Group	599	58.032	.097		
	Total	602	70.124			

*Statistical Significance Level at .05

3. Relating to differences in pairs of average towards Satisfaction to the Facilities that are Conducive to Learning of nursing educators in Boromarajonani College of Nursing Nakhon Ratchasima   between the class years of students, we found that4 year nursing students are satisfied to the Facilities that are Conducive to Learning in the point of Food Distribution and Learning Environment. This is different from year 1 and 2 with Statistical Significance Level at .05. However, it's not different in year 3. For Health Fitness Center, 4 years students have the Satisfaction to the Facilities that are Conducive to Learning which is different from year 1, 2 and 3 students with Statistical Significance Level at .05. (Table 3)

Table 3

Differences in pairs of average towards Satisfaction to the Facilities that are Conducive to Learning of nursing educators in Boromarajonani College of Nursing Nakhon Ratchasima between the class years of students

Facilities that are Conducive to Learning of nursing educators	Year	Average	Y1 3.66	Y2 3.82	Y3 3.21	Y4 3.16
Food Distribution	Y1	3.66	-	0.16*	0.45*	0.50*
	Y2	3.83	-	-	0.62*	0.67*
	Y3	3.21	-	-	-	0.05
	Y4	3.16	-	-	-	-
		Average	Y1 3.35	Y2 3.85	Y3 3.51	Y4 3.52
Learning Environment	Y1	3.35	-	0.30*	0.16*	0.17*
	Y2	3.85	-	-	0.34*	0.33*
	Y3	3.51	-	-	-	0.01
	Y4	3.52	-	-	-	-

		Y1	**Y2**	**Y3**	**Y4**
	Average	**3.31**	**3.75**	**3.76**	**3.59**
Health Fitness Center	Y1 **3.31**	-	0.44*	0.45*	0.28*
	Y2 **3.75**	-	-	0.01	0.16*
	Y3 **3.76**	-	-	-	0.17*
	Y4 **3.59**	-	-	-	-
		Y1	**Y2**	**Y3**	**Y4**
	Average	**3.62**	**3.76**	**3.73**	**3.69**
Security and Public Utility	Y1 **3.62**	-	0.14	0.11	0.07
	Y2 **3.76**	-	-	0.03	0.07
	Y3 **3.73**	-	-	-	0.04
	Y4 **3.69**	-	-	-	-
		Y1	**Y2**	**Y3**	**Y4**
	Average	**3.48**	**3.80**	**3.55**	**3.50**
Total	Y1 **3.48**	-	0.32*	0.07	0.02
	Y2 **3.80**	-	-	0.25*	0.30*
	Y3 **3.55**	-	-	-	0.05
	Y4 **3.49**	-	-	-	-

* Statistical Significance Level at .05.

Discussion

1. According to Satisfaction to the Facilities that is Conducive to Learning of Student Nurses in Boromarajonani College of Nursing Nakhon Ratchasima for the point of Health Fitness Center, it is in the highest level (X=3.61) because the school provides all of Facilities that is Conducive to Learning in various fields as the requirements of students. The school provides Health Fitness Center in various types such as outdoor stadium (Basketball), Hall opened until 10 p.m. (Aerobic, Badminton or Table tennis) and 6 outdoor sport equipment. This meets the word of Kowit Machima (2007: 82) in terms of good learning environment; it can facilitate all of educators to get the best educational outcome and to live happily in the society.

2. Year 4 nursing students have the satisfaction on the Facilities that is Conducive to Learning in terms of Health Fitness Center. This is different from 1, 2 and 3 student with Statistical Significance Level at .05 because they live in dormitory for long time. Furthermore, they always know the development of Health Fitness Center. Moreover, they can develop their good personality. This meets the opinion of Narong Kanchananon (1993: 25) who said that good environment including suitable Health Fitness Center is the important variable towards the best educational outcome including best morality of students.

Suggestions

   1. Supplies Section and Administration of Boromarajonani College of Nursing Nakhon Ratchasima should provide concretely all of Facilities that is Conducive to Learning of first year Student Nurses in Boromarajonani College of Nursing Nakhon Ratchasima in 2013.

   2. The school should study about the requirement of Facilities that is Conducive to Learning in others fields and provide all of this in the next semester.

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Knowledge and Factors Related to Tobacco Smoking of Undergraduate students InNakhonRatchasima ,Thailand

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Abstract

The purposes of this cross-sectional survey research was 1) to evaluate level regarding smoking of bachelor degree students studying in the universities of Nakhon Ratchasima province in northeast Thailand and 2) to determine relationship between personal data and smoking behavior of this participants. Purposive sampling technique was used to include 437 participants. Personal data questionnaires and smoking data questionnaires was use to correct data. 3 experts approved validity of questionnaires. Cronbach's alpha coefficient of smoking data questionnaire was .62. Data correction between June – September 2013. Descriptive statistic, T-test and Chi-square test was used to data analysis.

The results showed that the majority of participants was nonsmoker (n=322 ; 73.7 %). Their knowledge regarding smoking was at good level ($x̃$=8.97; SD= 1.11). The average score of knowledge regarding smoking of female ($x̃$9.27=; SD=. 72) was statistically significant higher than male ($x̃$= 8.88; SD=1.18)(p <. 05). The average score of knowledge regarding smoking of non-smoker group ($x̃$=9.04; SD=. 98) was statistically significant higher than smoker group ($x̃$=8.77; SD=1.38) (p <. 05). There were statistically significant relationships between gender, residence, income and smoking behavior of relationship (p<. 05), respectively.

Interventions or activities regarding smoking should be set up for male smoker group to improve their knowledge regarding the dangerous of smoking and harmful dangerous for the second hand smokers in their families.

Keywords: knowledge, tobacco smoking, students

Introduction

Smoking has not only an effect on smokers but also to surrounding people. It causes many severe symptoms such as cancer, heart disease, and respiratory disease. However, these symptoms can be preventable by quitting smoking (US Surgeon general report, 2004). Thai health promotion foundation supports that tobacco is ranked at the third largest factor of Thai people's death rate next to sexually transmitted disease, which is the second and drinking alcohol at the first biggest cause. Each year, there are Thai people dying from smoking 42,000 – 52,000 persons, from lung cancer 9,979 persons, from esophageal cancer 2,396 persons, from other types of cancer 3,944 persons, from cardiovascular disease 7,907 persons, from emphysema 10,427 persons, from respiratory tract disease 2,400 persons, and from other symptoms caused by smoking 4,130 persons. Smokers are considered to be short-lived in average 12 years less than non-smokers and suffer their severe stage of disease approximately 1.7 years before death (Thai health promotion foundation, 2008).

According to the Institute for population and social research of Mahidol University, the research follows up the effects of tobacco control policy. They collect the data from sample group consisting of male teenagers at 53.1% and female teenagers at 46.9%, average age of 16.6 years old, living in countryside 63.5% while 36.5% living in the city. The research shows that 18.3% of teenagers from sample group are smokers who smoke everyday at 52.2% and 6.5% of them reach 20 rolls per day (Bupphasirirussamee, 2010). As a result, we can say that smoking is a critical problem in a country level.

From the context above regarding the current situation and effect of smoking to health, we would like to study on the smoking situation from undergraduate students in Nakhon Ratchasima since they will be, in the future, an important workforce who drives the country. We will evaluate their smoking knowledge and the relationship between personal factors for their smoking behavior. We aim to obtain the undergraduate students' perception towards smoking and also their characteristics in several aspects including demographic, social, cultural and economic aspects, as well as their personal factors leading them to smoke. We hope that this research can be useful for institute of education in Nakhon Ratchasima to do the planning and to formulate a policy in order to prevent and control smoking among undergraduate students. The result might follow consecutively as a decrease of illness caused by smoking.

Purpose of the research

1. To evaluate knowledge of undergraduate students in Nakhon Ratchasima towards smoking

2. To study on the related factors for smoking behavior of undergraduate students in Nakhon Ratchasima

Methodology

This research "the study of smoking situation of undergraduate students in Nakhon Ratchasima" is a descriptive research projected to compare the smoking knowledge and the related factors for smoking behavior of undergraduatestudents in Nakhon Ratchasima. Therefore, researcher determines sample group and instrumentation for data collection and analysis as follows:

Population and sample group

Population is undergraduate students approximately 45,000 persons from university in the network in Nakhon Ratchasima.

Sample group is calculated according to formula of Taro Yamane (1973) and then receives 400 persons from undergraduate students' academic year 2012 from university in the network in Nakhon Ratchasima. Method to select the sample group is purposive or judgmental sampling. Therefore, we select sample group 100 persons from each 4 universities, spare reserved at the percentage of 10. So, the total of sample group is 440 persons.

Specific characteristic of sample group is undergraduate students' academic year 2012 from university in the network in Nakhon Ratchasima with the age between 16 and 30 years.

Instrumentation

We have reviewed the literature and presented a draft of survey questionnaire to 3 experts for content validity. Also, we have validated the quality of survey questionnaire by test-collecting the data from 30 undergraduate students whose characteristic is similar to sample group and receive Cronbach's Alpha Coefficient = .62.

Questionnaire consists of three parts which are;

Part 1 Personal information of sample group: age, gender, monthly income, current accommodation, and smoking environment in the family of respondent.

Part 2 Smoking behavior

Part 3 Smoking knowledge about its disadvantage and related legal matter

Data Collection Methods

Data were collected by research assistants who were trained for proper data collection procedures. First, the request letters from The Boromarajonani College of Nursing, Nakhon Ratchasima, were sent to the presidents and the deans of the four target universities for the permission to collect data. Then, 440 copies of the questionnaire were sent to the undergraduate students, and 437 were returned completed.

The Right Protection for the Samples

The researchers submitted the research proposal to the Research Ethic Committee of Boromarajonani College of Nursing, Nakhon Ratchasima, in order to get approval for not abusing the samples' rights. Additionally, the researchers informed the researcher objectives to the samples as well as the right to or not to participate in the survey.

Results

From the research, we find that 338 or 77.3% of undergraduate students are male and 115 undergraduate students or 26.3% out of 437 undergraduate students from sample group smoke while 322 undergraduate students or 73.7% do not smoke. There are 265 or 60.6% of smoking members in undergraduate students 's house while 172 or 39.4 % no smoking members in their house. About the income, the researchshowsthat 136 persons or 31.1 % of undergraduate students get about 3001 – 4500 bath a month and 113 persons or 25.9 % get 1501 – 3000 bath a month. About the residential, the research showsthat there are 214 undergraduate students or 49.0 % live in privative accommodations and 108 or 24.7 % live in campus accommodations.

Table 1
Demographicof undergraduate students (N = 437)

Variable	N	Percent (%)
Gender		
Male	338	77.3
Female	99	22.7
Smoking status		
Smoking	115	26.3
Non smoking	322	73.7
Smoking member in household		
Yes	172	39.4
No	265	60.6
Income		
Under 1,500	49	11.2
1,501 – 3,000	113	25.9
3,001 – 4,500	136	31.1
4,501 – 6,000	86	19.7
More than 6,000	53	12.1
Residential		
Parent'shome	88	20.1
Relative's home	27	6.2
Private accommodation	214	49.0
Campus accommodation	108	24.7

Knowledge about smoking for the awareness of smoking effect, the result shows that most of undergraduate students and the smokers know an effect of smoking at good level.

Table 2
Knowledge about smoking. (N = 437)

N (%)	Mean	SD
Gender		
Male338(77.3)	8.88	1.18
Female 99(22.7)	9.27	.72
Smoking status		
Smoking115(26.3)	8.77	1.38
Non smoking322 (73.7)	9.04	.98

According to the association between knowledge and gender, smoking status of undergraduate students, the research shows that female undergraduate students own a smoking knowledge better than male undergraduate student with statistically significant level at .05. Non-smokers have a smoking knowledge better than smokers with statistically significant level at .05.

Table 3
Association between knowledge and gender, smoking status of undergraduate students. (N = 437)

Variable	Mean	SD	T -test	df	p-value (2-tailed)
Gender					
Male	8.88	1.18	-4.046	264.200	.002*
Female	9.27	.72			
Smoking status					
Smoking	8.77	1.38	2.193	435	.029*
Non smoking	9.04	.98			

*p-value<.05

Analyzing the related factors for smoking behavior of sample group, we discover that demographic factor is related to smoking behavior with statistically significant level at .05. This demographic factor includes age (p < .05), current accommodation (p < .05), income (p < .05), and smoking environment in the family (p < .05).

Table 4

Association between smoking status of undergraduate students and selected variables. (N = 437)

Variable	Smoking Status		X^2	p-value
	Smoker n (%)	Non Smoker n (%)		
Gender				
Male	184 (54.4)	154(45.6)	58.17	.000*
Female	11 (11.1)	88(88.9)		
Smoking member in household				
Yes	94 (54.7)	78 (45.3)	7.28	.007*
No	101 (38.1)	164 (61.9)		
Income				
under 1,500	14 (28.6)	35 (71.4)	11.80	.019*
1,501 – 3,000	56 (49.6)	57 (50.4)		
3,001 – 4,500	54 (39.7)	82 (60.3)		
4,501 – 6,000	40 (46.5)	46 (53.5)		
More than 6,000	31 (58.5)	22 (41.5)		
Residential				
Parent'shome	42 (47.7)	46 (52.3)	11.30	.010*
Relative's home	16 (59.3)	11 (40.7)		
Private accommodation	103 (48.1)	111 (51.9)		
Campus accommodation	34 (31.5)	74 (68.5)		

*p-value<.05

Discussion

According to the analysis, the result shows that demographic factor is related to smoking behavior with statistically significant level at .05 including gender (p < .05), current accommodation (p < .05), income (p < .05), and smoking member the family (p < .05). This finding is valid in the research of Surattana Pornwiwattanachai (2008) in terms that smoking teenagers whose family member is non-smoker holds the percentage of 14.6 while those smoking teenagers whose more than 3 persons of their family members also smoke possess the percentage of 24.1. Consequently, the more family members smoke, the more chance that teenagers become smokers (Surattana Pornwiwattanachai, 2008).

For the perception of smoking effect, most of smokers know the effect of smoking at good level. So, it might be not enough to set up activities to inform smoking knowledge or to raise " No Tobacco Campaign" to stop people from smoking. There should be some

more activities that reinforce and inspire a vision to quit smoking, as well as the cooperation from society, institute of education and especially from families.   This study show that, interventions or activities regarding smoking should be set up for male smoker group to improve their knowledge regarding the dangerous of smoking and any harmful to the second hand smokers in their families.

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Socio-cultural change with obesity problems in Thailand

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Abstract

The incidence of obesity in Thailand ranks in the top five of Asia-Pacific nations. In 2005-2007 obesity rates increased from 10 million to 17 million in many demographic groups, both urban and rural areas. The mix method of this survey research had objective to study their life style, knowledge, attitude, practice, and socio cultural change concerned with obesity in Thailand. The data had been collected from 972 samples by using multi stage stratified random sampling in five regions of Thailand both male and female age between 21-45 years old. Qualitative research with in- depth interview 87 samples was made. The results showed obesity are from; 1) cultural change that had impact on their food diet and behaviors, from simple to modern life style and sedentary life style caused to less activities, food cultural cringe from media, advertisement with all fast food, western snacks, and soft drink, besides the increase of fondness of sweet and salty food and snacks; 2) social change shift from rural to cities, increase cost of living, time constrained, changed from household cooking to buying processed food, ready cooked food, and fast food from market that some are oily food, less vegetable (such as fried chicken, fish, stirred fry food) instead of Thai traditional food that much less oil and more vegetable(fresh, steam and boil). 3) The sample with 95% had good food knowledge but in their daily life healthy food diet only 9.70% do it every time, 45% of them do it sometime, 11.15 % seldom to do it, and 4.18-9.66 % never do it with many reasons such as time constrain (the most reason), price, fashion, taste, and convenient. This research recommend; 1) the public health policy for "healthy food for life" and attention to the market for "healthy food product" to reduce obesity population and NCDs (non-communicable disease), the impacts from being obesity. 2) Social media policy to accelerate campaigns and set the priority of healthy food diet. 3) The creation of prompt law for "safety food". 4) Promote health education about food and nutrition to general public.

Keywords: *Socio-cultural, obesity, Thailand*

Introduction

The incidence of obesity in Thailand ranks in the top five of Asia-Pacific nations. In 2005-2007 obesity rates increased from 10 million to 17 million in many demographic groups, both urban and rural areas. (Bruce Bickerstaff, 2013). In the past 5 years, Thailand's Ministry of Public Health had report the percentage of pre- school obese rose from 5.8 per cent up to 7.9 per cent, and school age rose from 5.8 per cent up to 6.7 per cent. These figures represent obesity growth rates of 36 per cent (pre-school age) and 15 per cent (school age). For those Thailand young adults (20 to 29 age range) the obesity rate over the same period increased by 36 per cent among men and 47 per cent among women. The same as causal factors in western countries, such as poor diet, sedentary life style, also the additional socio-cultural, economic, and environmental factors are contributing to the obesity problems. Eating out in Thailand is as popular as ever according to the finding of the study on "Factor Affecting Household's expenditure on food away from home" (Pravilada, W. & Visit, L., 2013). Nowadays, obesity is one of the important causes factors of non-communicable disease such as cardio vascular disease, diabetes type II, hypertension, etc., not only in Thailand but all over the world. Tasty, nutritional food adds years to life but the burden of disease associated with poor nutrition continues to grow in the regions (WHO, 2013). The rise in obesity, the epidemic reflects changes in eating patterns and levels of physical activity. We live in an environment that encourages and promotes high-energy intake. Poor diet, overweight, and obesity contribute to a large proportion of non-communicable diseases and cancer. National surveys in most countries indicated excessive fat intake, low fruit and vegetable intake and an increasing problem of obesity, all of which not only shorten life expectancy, but also harm the quality of life.

Objective: To study life style, knowledge, attitude, practice, and socio cultural change concerned with obesity in Thailand.

Method: Mix method research with quantitative method of multi stage random sampling, 972 responses for questionnaires (N=64,076,033, e=0.045, 1-α=0.95) from five regions in Thailand and using descriptive statistic to explain research result. Qualitative method, using 87 samples from 8 occupations, with in-depth interview and content analysis for research results

Results: Quantitative research: results of 972 samples by multi stratified random sampling, the samples were 470 male, and 502 female, age between 21-45 years old from five regions of Thailand, living in showed that;

1) The knowledge of food diet and eating habit, 95% of samples had food knowledge, but only 39.6% of samples choose to eat food for health, 56.6 % of samples not often or seldom to choose food for health, 3.8 % of samples of samples never concern food with health. Only 88.19 % of samples knew that they shouldn't have high sugar beverages but only 25% of samples always had no high sugar beverages and functional

drink, 35 % of samples always had high sugar beverages and functional drink, and the same percentage of samples that having snacks between meals. Only 46.42 % of samples had half amount of their meals with vegetables and fruits, 15.32% of samples were never concern that half amount of their meals they should have vegetables and fruits.

2) For home cooking; 21.36 % of samples have no home cooking, 20.84 % of samples were very seldom to cook. 31.73 % of samples were seldom to cook. Only 26.07% of samples consistency did home cooking.

3) Samples' daily exercise showed that 67.89 % of samples never been to fitness center, 32.11% of samples exercised in fitness center, frequency of exercise, 38.72 % of samples exercised once a week, 35.21 of samples exercised 2-3 times a week, the rest did more than 4-5 times a week. Exercise in public parks, 43.12 % of samples never do exercise in the park, 56.88% of samples exercised in a park, 33.81% did it once a week, 43.20% did 2-3 times a week. Exercise at home, 43.31% of samples never do it, 56.69% of samples exercised at home, 25.16% of samples exercised once a week, 46.58% of samples exercised 2-3 times a week. Exercises by walking 30 minutes/day, 46.44% of samples never do it.

4) **Swinging arm exercise 30 minutes/day**: 60.51 % of samples never did it, 39.49 % of samples did by 26.88 % of swinging arm exercise group did once a week, 35.18 % of swinging arm exercise did 2-3 times/week, 22.77 % of swinging arm exercise group did 4-5 times/week, and 15.16 % of swinging arm exercise did 6-7 times/week
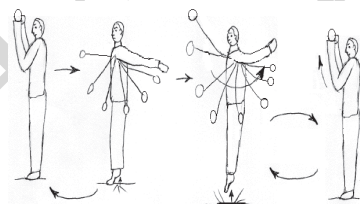
Figure1
Swinging arm exercise

5) The obstacles of having healthy food were; 23.7 % of samples having time constraint, 17.6% of samples having economic constraint because of higher price of healthy food, 10.5% of samples thought the healthy food not tasty, 8.3%of samples said healthy food not general available, it's not convenient to buy, 6.2% of samples had no intention to buy, 4.9% of samples have less knowledge about healthy food, 4.9% of samples had no information about the place to buy, and 2.5% of samples said it's not important to have healthy food, order respectively, and only 8.2% of s have no obstacles of having healthy food.

6) The obstacles of daily exercise were; 38.4%of samples said because of time constraint, 11.1% of samples had no space to exercise, and no fitness tools, 11.1% of samples had no intention to do exercise, 5.8% of samples don't know how to exercise, and only 11.1% of samples said that they have no obstacle.

7) Knowledge about food, exercise, with obesity and health problem; 34.1% of samples didn't know that overweight and obesity ranges could be determined by using waist circumference (WC) by height in centimeter divided by two or using weight and height to calculate the "body mass index" (BMI= weight in kilograms divided by the square of the height in meters), 23.4% of samples didn't know that 1/ 3 of Thai people is over weight or obesity, 15.9% of samples didn't know that the overweight or obese people are at risk of cardio-vascular disease, diabetes type II, and hypertension, 18.6% of sample didn't know that if having deep fried food, all kind of fried food increased high calories intake.

Qualitative research: resulted by in-depth interview and content analysis with 87 samples from 8 occupations (students in school and university, government officers, employees, merchants, house-keepers, factory workers, and general workers) revealed that;

1) Individual factor: most of the samples had food diet knowledge but the cause of their misconduct for the food consumption were combination of time constraint, financial problems, cultural and environment factors that convinced them to buy ready food, fast food from the market that most of the ready food contained more processed food, oily, fried, deep fried food such as fried chicken, sausages, fried vegetable, deep fried small fish and shrimps, that more tasty and added with fashions' beverages or functional drinks such as bottled ice tea and instant caned coffee. This kind of the food becomes their favorite food. The other benefits of this type of food can be kept longer and cheaper than fresh or natural food. Most of students, their favorite food diet were deep fried food, ready cooked food, type of food as convenient, also they had misunderstood about nutrition such as the food that have high calories (fat) only are, deep fried food and part of meet with fat, not from fried vegetable or other fried food. If they ate fruits it can replace those of vegetables. (Actually fruits have more sugar than vegetable). If they would like to reduce weight, they will have fewer amounts of carbohydrate (rice), fat (meat), or deep fried food but not for yogurt, ice –coffee, tea, and sweet ice green tea that become their daily life soft drink and eating habit.

2) Socio-cultural and environment factor: Social change, because of urbanization, huge amount of people migrated from rural to cities that cause traffic difficulties and time consumed, the higher cause of living, to buy ready cook food is their choices, because the price is cheaper and is considered more delicious. The other reasons for the ready food boomed were the commercialization with advertisement that inspired people for having functional drinks, western snacks for sheers and joyful time that both the sellers and buyers concerned the most were the taste and price, not for healthy food. Some Thai food centric culture combined with a fondness for sweetness; The Thai approach food and eating is social and relaxed at irregular time of the day and night, and the fondness of sweet, the Thai added more sugar in many popular recipes. The way of cooking food also changed from home cooking with traditional cooked style that favor herb from fresh and natural resources to ready cooked meal with fried and processed food especially the ready meal in the local and Sunday Market.

Figure 2
Traditional Thai dishes.

Figure 3
Thai traditional snacks

Figure 4
Deep fried vegetables and processed food in local and Sunday market

The advertisement and mass media convinced and socialized young children, people to the modernity and westernized snacks by having food and beverages as in the media that most of those food contained high calories of fat, starch, and salt. The uptake of both processed food and fast food is being accelerated by "cultural cringe" for "Modernity", and "Fashion". And also a perception of chubby as healthy in children that they would continue eating habit since then.

Discussion and Recommendation

Globalization is also tied up with modernity and caused socio-cultural hybridization and convergence through food diet, life style, eating behavior, increasing office employment, urbanization, family composition, and changing of household structure, etc., that caused fatness. As the increased of obesity population because of the energy intake from the dietary patterns and physical activity behaviors for energy expenditure in Thai population with the rise number of chronic NCDs and unhealthy population in Thailand (www.ncbi.nlm.nih.gov/pubmed/). While individual can take action on issue such as diet, exercise, buying food, snacks and beverages they can only do so in the context of the socio-economic and cultural environment that affects their decisions. In these decades, cultural and economic factors play critical roles in the etiology of obesity and obesity prevalence. **Culture** refers to the learned patterns of behavior and thought characteristics of a social group such as increased consumption of sugar-sweetened beverages, snacks, more meals consumed or purchased away from home, more exposure to advertising that encourages food consumption and unhealthy food. Limiting access to safe, convenient recreation facilities or walking areas and less time for daily physical activity. Culture forms the context of people's lives, and to a large extent that context is beyond an individual's control. Culture includes material aspects, such as diet and activity patterns that are directly causal to fat deposition and the obesity. The cultural and economic context, historical shaped by powerful socioeconomic forces like corporations, and daily life of "normal" people towards modernity, fashions, event, and advertising. Thailand like the others country with crowded people and less public space to do exercise, sedentary life with office work, game, computers, cars, helping machines etc. that make difficult to against the current of cultural forces that lead to fatness or culturally constructed " obesogenic environment" (Food research and Action center, 2010) (Food research and Action center, 2010). We can say that social and cultural changed from rural to urban lives, time constraint, sedentary life style, influenced from media and advertisement, less option of healthy food in the market, food pricing, the cooking style changed to all those processed and modernity food. All these factors reflect changes in eating patterns, dietary option, and levels of physical activity that caused the rise in obesity (Michael Marmot, 2011). For example, from cultural diffusion with deep fried, some Thai traditional food has been change from fresh vegetables eat with Thai chilies paste to deep fried vegetable instead, local food market also cooked much more oily food than ever before because it's easy to cook, to preserve, and more tasty. Food corporation use mathematical formulas to find particular combinations of salt, sugar, and fat for their

products that people perceived as pleasurable and relaxation without awareness of wreak havoc on human bodies. Food buying patterns are guided by corporations' relentless, targeted marketing campaigns, in advertising for fun, happy, "cool" products directed at children and adolescence (Ivy Ken, 2014). The industrial food system therefore changes culture that can be found dual economic and cultural phenomenon in the area of fast foods and convenience foods. In addition, shelf space for food products at large retailers is allocated not on the basis of any comparative assessment of which foods contribute most to a healthy, sustainable local products or healthy families but rather on the basis of fees and involvement of corporation to the food system. (Ken, 2012). The most caloric foods product such as snacks, candy, and soft drink purchased by or for the average child always available and affordable for everyone contrasted with the traditional Thai food that consisted of good nutrients with Thai herbs, fresh vegetables, rich taste from natural ingredients and less cooking oil quite more expensive and not available as convenience foods. After the socio-cultural change with modernity, material culture of globalization that affected the change of eating pattern to ready and convenient food from local market and convenient stores that added up more starch, oil, sweeter, saltier and less vegetables. Also the daily beverages and soft drink changed from just water to be sweeten ice tea-coffee with cream on top (sweet and creamy). This research recommends promoting " Social event to decrease obesity with good eating habit and exercise". While the affect of socio-cultural influenced different group in society still unclear, there seems little doubt that they do play an important role in influencing eating, physical activity, and sedentary behaviors, and thus risk of obesity. The holistic approach with policy makers, public health, corporate and community to save people from their own bad choices by taking some amount of harmful ingredients out of these products and convincing the public that obesity is a problem. Empower and develop capacity of community, local food sellers, food producers and commercial food products regarding obesity prevention by increasing awareness of preparing safety ingredients of healthy food for children, family. Encouraging kids, people to do more exercises with supporting available public space, exercise equipment's for community. Accelerate effective healthy food regulations or laws to enforce in general. Continuing using mass media to campaign for lower calories food intake and regular exercise for every group of age to combat "Obesity" and NCDS.

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Health promotion behaviors of elderly in Banpong District, Ratchaburi Province

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Abstract

Backgrounds: Health promoting behaviors are crucial for elderly to prevent early dependence. However, results from the national survey revealed that the elderly were less likely to Health promoting behaviors when compared to the adults.

Objectives: The objective of this research is to examine the health promoting behaviors of elderly in Banpong District, Ratchaburi, Thailand.

Methods: A descriptive research, surveying, was used in this study. 380 elderly people who met inclusion criteria were recruited to the study. Then participants were asked to answer three questionnaires, including personal characteristics and health promotion behaviors of the elderly. After finishing data collection, means and standard deviations were used for analyzing data.

Results: The study revealed that health-promoting behaviors that older people practiced was at the moderate level. An average score of health promoting behaviors was 3.52 and SD=0.84. The detail of 6 aspects of health promoting behaviors included responsibility of health, interrelationship, exercises, nutrition, spiritual factors and stress management. Average scores of each aspect were at moderate level. The highest average score was nutritional aspect, in particularly, mean equates to 3.80 and SD equates to 0.80. At the same time, the lowest score were exercise aspect (M=3.43, SD=0.86), stress management aspect (M=3.56, SD=0.60) and interrelationship aspect (M=3.58, SD=0.72)

Conclusion and recommendations: Results of this study showed that the health promoting behaviors of older people was at moderate level, especially the exercise aspect that was the lowest scores. Therefore, health profession may need to refine the health education program or campaign to raise awareness and encourage older people to increase their health promoting behaviors in the future.

Keywords: Health promotion behaviors, Elderly

Background

Structure of population have been dramatically changed, in particular, a significant increase of ageing population plus a proportion of adults and older adults is decreasing. Currently, the largest groups of elderly are in Asia (54%) and Europe (24%) (WHO, 2003). In particular, Thailand already has 5.5 million people and tends to reach 22 million people in 2050. So, from this situation, Thailand becomes an ageing society (Aussuntachai, P., 2009). When getting older, some physical changes such as sarcopenia, delayed responses of immune system or gastrointestinal system are appeared. These changes may increase risk of chronic illness in the future. However, some health promotion behaviors such as nutrition and exercise may be helpful to increase strength and prevent the elderly from other disease or reduce the impact from these changes.

Health promoting behavior is an activity that a person or groups of people committed to enhance the well-being leads to good health avoid illness (Pender, 1996). Pender divided into the detail of 6 aspects of health promoting behaviors include responsibility of health, interrelationship, exercises, nutrition, spiritual factors and stress management. Health promoting behaviors are crucial for elderly to prevent early dependence. The health promoting behaviors because it can maintain physical fitness, increase muscle strength and keep balance, in particular, for the elderly. Health promoting behaviors is recognised as the benefit for the elderly in terms of it can reduce risk of heart disease and delay onset of chronic diseases, weight control, improve the body composition (Maikeal, C., 2001) and indirect effect from maintain function, may improve quality of life for the elderly (Kulsatidpon S., 2006) as well as reduce medical care cost for the elderly, family caregivers and government in the future. Therefore, from these benefits for the elderly, health-promoting behaviors should be promoted amongst the elderly.

However, results from previous pilot study showed that the elderly who are members of the elderly club, attended the social activities at the Boromarajonani College of Nursing, Chakriraj Banpong district, Ratchaburi have a chronic disease, including hypertension 52.08 % and diabetes 47.92 % of all seniors. It can be seen that the rate of chronic disease among the elderly is high. Therefore, the researchers recognize the importance of health. The elderly if seniors are encouraged to promote healthy behaviors that will help. Slowing down the degeneration of the body. And to prevent the complications that may arise out of the performance. This result may help understanding these factors and can be used to promote of the health promoting behaviors for the elderly in the future.

Purposes:

The objective of this research was to examine the health promoting behaviors of elderly in Banpong District, Ratchaburi.

Ethical measures

Permission from the ageing in Banpong district, Ratchaburi to allow the researcher access to name lists of members were obtained at the first stage. Then the consent forms from potential participants who agreed to take part in this study freely were obtained after the participants understand and satisfy with the detail of the project. All participants can withdraw from this study at any times. Privacy of participants was kept by limiting people who can access to data. Results from this study were reported as a whole without identify participants' name.

Design/Methodology

Design: Descriptive research
Population and sample:
Population of this study was the older people living in Banpong district, Ratchaburi, Thailand about 13,418 older adults. Sample size was calculated using Krejcie and Morgan's formula and required 380 participants. Sampling was a random sampling using lottery method.

Data collection:
The researcher contacted head of the elderly club Banpong district, Ratchaburi to recruit participants into the study and then the researcher interviewed participants based on the developed questionnaires. There were four groups of questionnaires: personal characteristics and health promoting behaviors.

First, personal characteristics including gender, occupation, education, marital status, income, health status and having family caregivers were asked participants to learn the health promoting behaviors amongst elderly.

Second, health promoting behaviors questionnaires, developed by the researcher based on Pender' health promotion model (Pender, 1996). The health promoting behaviors questionnaires included detail of 6 aspects of health promoting behaviors: responsibility of health, interrelationship, exercises, nutrition, spiritual factors and stress management. There were 43 item-likert scales ranged from 1-4 scores in each item. Content Validity Index of this questionnaires evaluated by five experts was .94 and the reliability test based on the Cronbach alpha coefficient was good at .85.

Data analyses:

The collected data were analyzed by descriptive such as means and standard deviations were used.

Results:

1. Demographic data

Table 1 frequency and percentage of characteristics of participants in terms of gender, age, education, marital status, income, occupation, health status and family caregivers (N=380)

Characteristics		Frequency	Percentages
Gender			
	Male	121	31.8
	Female	259	68.2
Age (years)			
	60-75 years	325	85.5
	76-95 years	55	14.5
Education			
	Illiterate	36	10.1
	Primary school	261	68.7
	Secondary school	62	16.3
	Bachelor's degree	22	4.9
Marital status			
	Married	237	62.4
	Single	45	11.8
	Widowed	98	25.8
Occupation			
	No occupation	81	21.3
	Agriculture	130	34.2
	Merchant	39	10.3
	Retired civil officers	28	7.4
	Employee	75	19.7
Income per month			
	Less than 5,000 Baht	276	72.6
	5,001 – 10,000 Baht	81	21.3
	Greater than 10,000 Baht	23	6.1
Health status			
	Very poor	3	0.8
	Poor	49	12.9
	Moderate	206	54.2
	Good	115	30.3
	Very good	7	1.8
Caregivers			
	Spouses	125	32.9

Characteristics		Frequency	Percentages
	Adult children or grand children	137	36.0
	Self reliance	98	25.8
Sibling		20	5.3

Older adults in the participants, most of them were female (68.2 percent) in the group aged 60-75 years (85.5 %). Most of participants graduated from the primary school (68.7 %) and them were married (62.4 %). Most of them were occupation agriculture (34.2%) and nearly half of them had the average income per month less than 5,000 baht (72.6%). Most of participants health status moderate (54.2), the majority of Adult children or grand children care (36 %) is a caregivers.

2. Health promotion behaviors of participants

Table 2
means and standard deviations of Health promotion behaviors of participants (N=380)

Health promotion behaviors	Means	Standard deviations
1. Responsibility of health	3.46	0.84
2. Interrelationship	3.58	0.72
3. Exercises	3.43	0.86
4. Nutrition	3.80	0.80
5. Spiritual factors	3.54	0.69
6. Stress management	3.56	0.60
Total	**3.52**	**0.84**

The health promoting behaviors that older people practiced was at the moderate level. An average score of health promoting behaviors was 3.52 and SD=0.84. The detail of 6 aspects of health promoting behaviors included responsibility of health, interrelationship, exercises, nutrition, spiritual factors and stress management. Average scores of each aspect were at moderate level. The highest average score was nutritional aspect, in particularly, mean equates to 3.80 and SD equates to 0.80. At the same time, the lowest score were exercise aspect (M=3.43, SD=0.86), stress management aspect (M=3.56, SD=0.60) and interrelationship aspect (M=3.58, SD=0.72)

Discussions:

The study revealed that health-promoting behaviors that older people practiced was at the moderate level. The detail of 6 aspects of health promoting behaviors

1.Considering the health promotion behavior in the aspect of " responsibility of health " found that the participants in the good level are the group of people who always go to see the doctors, nurses or health care staff. (X = 3.58, SD = 0.70). Because elderly illiterate for 10.1 percent, so they do not read books. In addition, physiological changes in the body of the elderly. The nervous system, including the eye, ear gradually deteriorate cause reduced visibility in parts of the ear to the auditory nerve degeneration. The elderly is a little deaf of hearing was then not listening to radio. (Cherthure P., 2005), watch television or attend a training course for health care, so elderly should seek health knowledge by listening radio interest and television broadcast tower in regard to health. Reading books, brochures talk about health or health problems to human health or community volunteers for self-care. And practice to promote optimum health.

Considering the health promotion behavior in the aspect of " Interrelationship

" Found the group of participants who get the good taking care from the family are in the good level. (X = 3.58, SD = 0.72). Elderly people who require the cares co-suffering of the respected old with a lot of free time to stop the occupation. However, because children need to get out the house, so they are not taking care of the elderly. Should encourage seniors to do activities with neighbors. Or elderly in order to remain a relative path images with others in the society (Thrapon, N., 2002).

3. Considering the health promotion behavior in the aspect of "The exercises of participants" found the group of participants who always have exercises softly e.g. Twisting or raising arms and legs are in the good level. (X = 3.43, SD = 0.80). Elderly with exercise, but it's not. Exercise until you feel the heart beat faster and harder the older idea that the home or small office. Home or work the exercise, which is consistent with the study (Maikeal, C., 2001). Exercise has been recognized as one of the significant behavior leading to healthy of the elderly.

4.Considering the health promotion behavior in the aspect of "The food nutrition quality, always found the people who like vegetables. (X = 3.80, SD= 0.95). Because the perception of touch. Include valve deterioration Atrophy of the nerves of taste. The taste buds of the tongue down the elderly because they feel that eating salty food fresh. Elderly should eat properly fit the needs of the body. Disease is Physical and environmental conditions change. That affect food intake in the elderly (Aussuntachai P., 2009).

5. Considering the health promotion behavior in the aspect of " Spiritual factors

Of participants, always found the people who feel that have value. (X = 3.61, SD 0.57). The elderly should be encouraged to self-esteem. And encourage them to do things with other people. So that the elderly to remain in their own esteem (Traewong S., 2004)

6. Considering the health promotion behavior in the aspect of " Stress management, always found they tell solved is problem of consciousness. (X = 3.56, SD = 0.60). Because

of elderly people with life experience, which has been facing a lot so, it makes sense that all problems can be solved (Phankong, A., 2008).

Limitation

This study mainly focuses only the specific subgroup that tends to be active in Banpong district, Ratchaburi. Implementation this result for other groups should be cautious.

Implications/recommendations

1. Furthermore, strengthening the elderly health promoting behaviors may require many strategies such as individualized health education which congruent with the previous health promoting behaviors of the elderly.

2. The qualitative researches to explore the actual factors of health promoting behaviors are required for the further research

3. Quantitative comparison study amongst the elderly living in the various cultures and environment with this group should be performed to confirm the results.

Conclusion and recommendations:

Results of this study showed that the health promoting behaviors of older people was at moderate level, especially the exercise aspect that was the lowest scores. Therefore, health profession may need to refine the health education program or campaign to raise awareness and encourage older people to increase their health promoting behaviors in the future.

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Public Opinions on the Role of Pharmacy Technicians in Performing Healthcare Services in Suphanburi Province, Thailand

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Abstract

A pharmacy technician (PT) or a pharmaceutical technician is one of healthcare providers who perform pharmacy-related work under the direct supervision of a licensed pharmacist. PTs generally work in various healthcare settings, normally in hospitals or pharmacies, but can also work for long-term care facilities, pharmaceutical manufacturers or even the medical software companies. In Thailand, the role of a PT is still confined to public healthcare providers, particularly those belong to the Ministry of Public Health. This qualitative study aimed to explore public opinions towards the role of PTs from stakeholders.

The semi-structured interview with listed questions was employed for the data collection with 65 participants who were selected from public healthcare providers such as public hospitals or health promotional hospitals in Suphanburi Province. Participants comprised healthcare professionals including 12 doctors, 20 pharmacists, 14 nurses and 9 healthcare workers. In addition, another interview about the familiarisation of a PT was conducted with 10 patients from outpatient departments in public hospitals. Assent forms were distributed to all participants for the permission to collect the data. Data from each participant was treated anonymously and confidentially. The content analysis method was used to analyse the data.

Results showed that the major role of PTs from the healthcare provider perspectives principally depended upon the job assignment from a pharmacist. The role included clinical pharmacy, drug information services, community pharmacy, medicines production, primary care pharmacy, consumer protection and public health pharmacy, and medicines inventory control. However, the discernable perception of most healthcare providers to a PT was that the obvious role was limited to inventory control and community pharmacy. On the one hand, the majority of patients said that they were not aware of a PT's role. Some participants even overlapped it with the pharmacist competency.

Conclusion was that the role of a PT was still vague and much intertwining with the pharmacist's. The proposal from this study was firstly a pharmacist may transfer part of their unprofessional work to a PT. Secondly; there should be a niche for a PT to perform their work directly with patients such as those in the primary care pharmacy. Lastly, the progress and the career path must be indubitably stated in the PT's role to secure their future.

Keywords: *pharmacy technician, roles, healthcare services*

Rationale

In pharmacy services, there are probably three layers of healthcare professionals who are in charge of all medicines care providing for patients. The top hierarchy of care is being responsible by a pharmacist, following by the second tier of care by a pharmacy technician and the third layer belongs to a pharmacy assistant, respectively. However, the overlapping responsibilities among each professional create misperception to not only patients but of course for healthcare personnel in the healthcare sector as well. So far, there are many debates and opinions toward the competencies of pharmacy technicians. The Pharmacy Council of Thailand (2014) announced that pharmacy technicians are able to perform their tasks under seven jobs as the following (The Pharmacy Council of Thailand, 2014);

1. Clinical pharmacy
2. Drug information services
3. Primary care services
4. Production
5. Pharmacy services
6. Public health pharmacy
7. Inventory control

Nevertheless, some of these tasks are principally perform by a pharmacist while a pharmacy technician works as an assistant under the supervision of a pharmacist. For instance, the clinical pharmacy job is assigned for a pharmacist's responsibility but a pharmacy technician is expected to do the pill count and be able to calculate medication used for each patent. In addition, a pharmacy technician assists a pharmacist with drug statistical data, records and printing medication reconciliation sheets and collaborating with other units for referrals. The job also includes data collection and reporting the data on adverse drug reactions or drug related problem. These jobs are so dependent with a stringent pharmacist's supervision.

On the one hand, other jobs can be managed and performed voluntarily with pharmacy technician skills and knowledge but to some extent still with the slight permission from a pharmacist. Inventory control is a good example for this categorization of job. A pharmacy technician is due to preparing all required document and data for the procurement process. This also includes inspecting the physical characteristics of drugs, registering of stock and substock, managing the drug distribution system - both in and out of a hospital, and being a member of the hospital accreditation team for inventory control. A pharmacy technician has a lot of leeway for being involved in the drug management cycle starting from selection, procurement, distribution and evaluation processes (The World Health Organization, 1997).

Although some jobs can be performed independently under the permission of a pharmacist, it has been yet arguable from many pharmacists about the overlap. There is so far no rigorous separation between the job of a pharmacist and a pharmacy technician

except the overall competencies from the pharmacy council to determine which is which. The consequence from this is about the perception towards the competency that "who should actively perform the role?" Not only does other healthcare personnel have misled acknowledgement about the role of a pharmacy technician and a pharmacist, but patients or customers who utilize healthcare services are also confused and unable to identify who is a pharmacy technician.

Objectives

This research is the initial part of the full project in pharmacy technician's roles in the 21st century. For better understanding of both patients and healthcare personnel's perception towards such roles, the study aimed to explore the roles of pharmacy technicians in performing pharmacy services in public healthcare providers under the supervision from the Ministry of Public Health, Thailand.

Method

Due to the indistinguishable competencies between a pharmacy technician and a pharmacist, the qualitative method was principally applied to this study. It was used to clarify the vagueness or the overlapping of the current responsibilities from both healthcare professionals. The semi-structured interview with listed key questions was employed for the data collection. These questions covered the seven aspects of competencies of a pharmacy technician including;

1. Clinical pharmacy
2. Drug information services
3. Primary care services
4. Production
5. Pharmacy services
6. Public health pharmacy
7. Inventory control

Another part of the question in the interview was about the perception towards the roles of a pharmacy technician. Opinions from all participants were related to the description of their perceived characteristics of a pharmacy technician.

All participants consisted of 65 participants who were selected from public healthcare providers including public hospitals or health promotional hospitals in Suphanburi Province. Participants comprised healthcare professionals. There were 12 doctors, 20 pharmacists, 14 nurses and 9 healthcare workers. Additional interview about the familiarization of a pharmacy technician was employed with 10 patients from outpatient departments (OPD) in public hospitals. Consent forms were distributed to all participants for the permission to collect the data. Data from each participant was treated anonymously and confidentially. The content analysis method was used to analyse the data.

The content-analytic approach was used for the data analysis (Babbie, 2010 & Krippendorff, 2004). The process starts with word frequencies, thus; the assumption is that words and phrases mentioned most often are those reflecting important concerns in the interview (Neuendorf, 2002 & Weber, 1990).

Results

Findings from this study were separated into two parts – opinions from healthcare personnel and patients towards competencies determined by the Pharmacy Council of Thailand 2014.

A. Opinion from healthcare personnel for the seven competencies of a pharmacy technician

a) *Clinical pharmacy*

Clinical pharmacy is the job focusing upon the well-being of patients using drug as a center of care. A pharmacy technician's responsibility includes recording or printing medical reconciliation sheets and collaborating with other units for referrals. The job can also be linked to data collection and reporting on adverse drug reactions or drug related problems. The majority of participants stated that a pharmacist must perform the clinical pharmacy work because the job itself needs professional skill to manage and make decision on patients' well-being. A pharmacy technician may be able to assist in those trivial tasks.

"A pharmacy technician must not work as a key person in clinical pharmacy but they can help a pharmacist." Healthcare personnel 5

"A pharmacy technician can't deal with patients about their clinical symptoms and also this is not abode by law to do so." Healthcare personnel 23

"They can do clinical pharmacy jobs but just to help a pharmacist." Healthcare personnel 33

b) *Drug information services*

One of the most important jobs for a pharmacy technician that plays with data is drug information service. It is directly connected with providing the proactive support in drug information and health-related products to both community and inside a hospital. Many respondents agreed that a pharmacy technician could perform their job in drug information services. This must be done with the permission and under the supervision of a pharmacist.

"This may be the most possible job that a pharmacy technician can do independently." Healthcare personnel 17

"They can perform this job but still a pharmacist has to permit them." Healthcare personnel 42

c) *Primary care services*

This job emphasizes health promotion and home health care in community and it needs the multidisciplinary team. A pharmacy technician generally has better skills to deal with communities (Thongkij et al., 2012).

"I graduated from Sirindhorn College of Public Health and am sure that all graduates have a very good skill to deal with communities. A pharmacy technician may do their best for pharmacy services in community, maybe even better than a pharmacist. " Healthcare personnel 27

d) *Production*

Production is related to the preparation of medicines in a hospital for pharmacy services. However, it has been uncommon to produce some drugs in a hospital currently due to high cost in the production process. While the price of drugs purchased from drug companies is to some extent cheaper and the provision of good services far better than a self-production in a hospital.

"I think a pharmacist should be the key person in the drug production. But I rarely see any hospitals to produce the drugs themselves. " Healthcare personnel 2

"A pharmacy technician can do drug preparation but not that so complicated formulae." Healthcare personnel 20

e) *Pharmacy services*

Pharmacy services can be enunciated as one of the most crucial job for pharmacy professionals (The World Health Organization, 2011 & Canadian Pharmacist Association, 2011). It starts from understanding the prescription or doctor's order sheets after being analyzed by a pharmacist. Most of the process in pharmacy services relate to a pharmacist decision. Thus, a pharmacy technician may be an assistant and the job is so dependent with a pharmacist.

"A pharmacy technician can do only counting the pills and playing with the patient data in the computer. " Healthcare personnel 35

"This job is the heart of a pharmacist and I think a pharmacy technician may not play an important role in this job except being an assistant." Healthcare personnel 44

f) Public health pharmacy

This is quite a challenging and rather independent work for a pharmacy technician (National Health Service, 2011). The job involves monitoring and reporting to the provincial health office about health-related products such as drugs, cosmetics, medical equipment and food sold in communities (U.S. Department of Health & Human, 2014). Data from the majority of participants showed that this is one of the most possible independent jobs that a pharmacy technician may be able to perform and manage by himself.

"If this job can be done truly by a pharmacy technician, the community will be an unhealthy-product free village. Why? Because a pharmacist never pays attention more to this job and I think a pharmacy technician can do better." Healthcare personnel 7

"It may be an independent work for a pharmacy technician." Healthcare personnel 19

g) Inventory control

Inventory control relates to jobs centering on preparing all required document and the data for the procurement process. It includes the drug management cycle according the World Health Organization's guideline (The World Health Organisation, 1997 & Laeiddee, 2010). The majority of participants proposed this job as the most possibly self-governing tasks for a pharmacy technician since it is not needed complicated and professional skills to deal directly with patients.

"I think this is a good job for a pharmacy technician to show their ability to the world. It is the least attached to a pharmacist at all." Healthcare personnel 25

"Working with no patients but drugs may be safer than prescribing wrong medicines. This is the most possible job that a pharmacy technician is so independent." Healthcare personnel 30

B. Opinion from patients toward a pharmacy technician

The majority of patients were not aware of who involved in the pharmacy services process. Some of them were not able to identify who is a pharmacist or a pharmacy technician. They even acknowledged that the duty of both professionals was not obviously different. The perception of patients towards a pharmacy technicians was a healthcare personnel who prescribed medication, giving patients some recommendation about how to use drugs or one selling medicines in a drugstore.

"I have heard about a pharmacist but don't know that there is a pharmacy technician. I think they are the same and they prepare and give me medicines." Patient 2

"I think a pharmacist and a pharmacy technician do the same job – prescribing medicine and explain me how to use drugs correctly." Patient 7

"I think a pharmacist and a pharmacy technician do the same job – prescribing medicine and explain me how to use drugs correctly." Patient 8

Conclusion

The major role of a pharmacy technician from the healthcare provider perspectives principally depended upon the job assignment from a pharmacist. The role included clinical pharmacy, drug information services, community pharmacy, medicines production, primary care pharmacy, consumer protection and public health pharmacy, and medicines inventory control. The most possible jobs that a pharmacy technician may be able to do freely with slight supervision from a pharmacist were inventory control, primary care services and production, respectively. However, with rules and regulations from the Pharmacy Council of Thailand, all competencies of a pharmacy technician are still dependent with a pharmacist adherently.

From the patients or customers' perspectives, the roles or competencies of a pharmacy technician were still severely overlapped with a pharmacist's. Patients could not identify or acknowledge who was a pharmacy technician. Nonetheless, only two jobs that patients knew about a pharmacy technician were drug prescription and drug use explanation. The indiscernible perceptions from both healthcare personnel and patients to a pharmacy technician were due to the overlapped competencies, resulted in vagueness of their performances. To solve the problems, the Pharmacy Council of Thailand should determine the exact competencies for both professionals and probably share some parts of the job in pharmacy services to be independently performed by a pharmacy technician.

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"The Environment and classified area of NR Homestay, Samutsongkhram Province"

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Abstract

The research titles "The Environment and classified area of NR Homestay: Samutsongkhram Province" aimed to study about the environment and classified area of NR Homestay in Samutsongkhram province in associate with an intercultural communication theory. This research has employed a qualitative methodology by collecting data from the homestay host family and tourist, combined several approaches i.e. observation, in-depth interview and documentation. The key findings are as follows:

NR Homestay, Samutsongkharm Province demonstrate a platform model for future development of homestays tourism industry in Amphawa district. NR Homestay is a place for tourism industry measurement as well as a form of tourism activity developing such as temple tour (5 or 9 temples). Mostly homestay tourists expect in exploring the local lifestyle, learning culture and getting close to local tourist attractions. It is advisable that the environmental cost-related to contribute Homestay development is relatively feasible. Regarding to the accommodation, the host family will manage room into two separate areas which are included 1) a public space where both host family and visitor can share activities and 2) a private space where allowed only the host family or visitor. Moreover, divided space will make visitor more comfortable during a stay.

Keywords: Environment, Classified area, Homestay, Tourism

Acknowledgements

Introduction

Current community has been transformed by the development and advancement of social, economic, political, technology and culture, which resulted in the country growth and relationship improvement more clearly all over the world. It also develops a communication link faster and more modern than the past. Consequently it allows people across the geographic location and culture boundaries to meet and learn from each other easily and fast. Tourist could also understand the culture by visiting several places such as school, restaurant, shopping mall and recreational facilities where local people demonstrated their social community and lifestyle.

"NR Homestay, Samutsongkharm province" defines as development area relevant to the tourism industry context as a hostel or homelike setting where tourists have occupied for pleasant and learned way of life in a short period of time. It is also the place where divided areas to meet the needs of the tourists. So, it is interesting to study about NR Homestay, Samutsongkharm province on how the homestay manage environment and its room and space to attract people from difference culture to come and visit.

Research proposition

How to organize the environmental area of NR Homestay and benefit tourism industry in a good manner?

Objective

The purpose of this research is to study the environmental and classified area of NR Homestay, Samutsongkhram Province**.**

Research areas

1. Studied related environment of NR Homestay, Samutsongkharm province. Because this province locates the area of research.

2. Studies **classified area** in NR homestay, Samutsongkharm province. Because this is a selected homestay case of research.

Concept and Theories of Research

The purpose of this research is to study about environment and classified area of NR Homestay, Samutsongkhram Province. Researcher has adopted ideas and theories to conduct data analysis of key concept, appropriate communication concepts and intercultural communication theory. Information is summarized as follows:

Interpersonal Communication

Subtle evolution Muhammed Gul (2538: 7), described intercultural communication is the process of transcribing and interpreting the interaction and between people from different cultures together under one communication context, communication and education about different cultures. Therefore, interest in understanding the differences of each culture, causes and different elements that affect it, problems and Solutions to create a better understanding between people from different cultures.

Lustig and Koester (cited in Sirinad Tantiraksa, 2549: 33) define " Intercultural communication" that refers to "Exchange process and interpret the symbols in a particular context by individuals in the communication process. There are many cultural differences in the interpretation and expectations about appropriate behavior are different. This leads to the definition is not the same means of Intercultural Communication and tend to emphasize interpersonal communication coming from different cultures; Non-mediated or face-to-face and Interactive.

In addition,Lustig and Joline (referred to in Jiraporn Butrasanti , 2539: 49) has provided a means of intercultural communication is the process of cultural transmission, interpretation and the interaction between people from different cultures under the communication context.

The above definition "Intercultural communication" means a communication between two parties occurred purposely to meet and connect with each other. In a form of communication, each will perform interaction, data transmission or interpretation differently subject to individual character. However, it is essential to drive the contact of two individuals to achieve the needs and create a better understanding for each other.

The interaction between two differences culture groups has been influenced by circumstance and conditions or called environment of communication. This is a significant aspect to resulted whether if the communication is success or fail as Knutson (referred to in Metta Wiwattananukoon, 2538: 133) says that the environment of communication that affects communication and culture. It covers a time, place, circumstances and conditions surrounding environment such as communication alone or in the presence of the public, etc., and including economic, social, political, religious, etc. The role of technology and journalism, etc.

Which Lewin (cited in Metta Wiwattananukoon, 2538: 140) has spilled the influence of the environment to communicate with people of different cultures into two categories?

1. Physical Environment such as home, seat arrangement. A major center for architecture and building, etc.

2. Psychological Environment, which consists of physical awareness, knowledge and understanding about the environment, and using the environment to convey meaning to others.

In addition, the intercultural communication concept features on the territoriality. Because it shows the interaction of two individuals clearly communicated and the area that reserved by individual. Altman & Chemers (referred in Metta Wiwattananukoon, 2538: 143) mentioned; Behaviors are owned by a temporary or permanent basis, and Hall has said; the territory is about the idea of space, depending on geography and climate. For example in Thailand, when people talk to each other often away but some countries even considered even close camaraderie. It keeps people from ever talking distance was found to be so uncomfortable.

Research methodology

This research has been conducted using qualitative method by collecting data from the homestay host family and tourist, combined several approaches i.e. observation, in-depth interview and documentation as details below;

Observation method has been performed during the virtual tour visit to NR Homestay made by researcher. The physical environment and recreation activities were inspected and recorded.

In-depth interview method has been conducted through sampling group participated homestay activities such as the homestay owner or local tourism contributors. The study framework designed to pursue the group comment and discussion over homestay tourism issues.

Documentation method was to compile data from selected books, journals, articles, media releases and related information. This is the most important technique of data analysis to interpret results effectively.

Sample

The research case is a study of NR Heomestay, Samutsongkharm province, so that researcher targets selected sampling who experienced homestay industry to assure key information of environment and the best homestay area, have been carried out from their perspective. They are included but not limit to NR Homestay owner and management employee.

Analysis

This research includes data summarization and analysis. The data processing situations are data collection and analysis. There are separate categories of information to be used in an appropriate conclusion, perform data analysis by the Data Reduction, and analyzed a truncated content. Follow by obtaining specific information that is critical to the research in order to interpreting data obtained from observation, interviews and document research to eventually summarized and presented the descriptive research.

Results and Discussions

Summary of finding

The research findings are divided into two sections: 1. General Environment, and 2. **classified area** of NR Homestay, Samutsongkharm province. Details are as follows:

1.General Environment of NR homestay, Samutsongkharm province: according to the observation and interview from the homestay host family, back to the old track 50 years ago before the house is modified into homestay residential, NR Homestay was a two-story wooden architecture in traditional colonial style. The building served as well-known flourmill manufacture named "Mai-Boon-Lean"

Later the flourmill business was closed, the owner decided to develop this building in order to generate profitability so that becoming a homestay residential as a result. Homestay project was inspired and supported by the local governor where about to encourage local people to develop tourism activities in the province. Also this Thai traditional building is very large and well structured in a good condition. All rooms and spaces have been designed appropriately and functional like home setting. The owner developed this house up and run as NR Homestay; it stands for the "Natural Resort"

NR Homestay is surrounded by natural environment, in other word it is blended to nature. Visitor might not notice this is tourist residential as the house stand in peaceful atmosphere. The house is maintained in well Thai preservation. There are enough rooms both indoor and outdoor for tourism activities and accommodate all the visitors to enjoy peaceful, privacy and leisure time. Whether the private or group visitors can learn and join activities together with local community. Back behind NR Homestay is orchard neighboring where tourist can experience the very fresh fruits by plucking them off the trees. In the morning visitor is able to participate local activities such as offering food to monk who came by boat, taken boat sailing to visits those temples located next to the river while at night the boat sailing to watch the fireflies, should not be missed. Adding to these activities, there are more for visitor to grow the mangrove, view the coconut sugar producing, visit the Benjarong, a traditional Thai five-colored famous porcelain in the Rattanakosin period, factory. NR Homestay locates 500 meters far from the floating market. Visitors are able to take approximately 5 minutes walk tour along the canal to reach the market. Getting to NR Homestay is very convenient by private car, bus, or boat. NR Homestay function rooms

have been divided suitably and preserved in a well condition. The place located close to the river. In front of the house is an open space for visitor to relax and enjoy watching those passing by the boat heading to observe the fireflies at night, and the other part also surrounded by natural atmosphere.

In summary, NR Homestay owner is aware of the property competence to manage NR Homestay, the reasons are include but not limit to interior and exterior rooms divided, ease of space used, and facilitate to make the visitor feeling comfortably and relax during the stays. The owner can consequently make the decision to run NR homestay smoothly from several support reasons.

2. Classified Areas of NR homestay, Samutsongkharm province

It is found from the observations and interviews the homestay owner that NR Homestay has been provided indoors and outdoor functionally. Summarized as follows: 1.Public Area and 2.

Private Area as follows. ;

2.1 Public areas are include:

2.1.1 Outdoor area

NR Homestay offers tranquil atmosphere. It is suitable for relaxation, blending to nature, seamlessly neighboring by the lush of tropical trees such as coconut trees, beautiful flowers or potted plants and cooling naturally from Amphawa River. The house is situated next to the Amphawa River. It was built by teak wood, painted in green and cement floor. There are also 5 small houses connected orderly with large deck and boat pier. The deck is covered by roof protecting from sunshine and raining. This area is for multi-purposes where visitors can spend their leisure time watching fishes in the river at any time. In addition, there are the vendors of fruit, noodle, sweets etc. who carried them by the boat, passed by the house all day. The visitor can enjoy purchasing those typical foods and fruits from these vendors. Guest choose to stay in the room next to the waterfront, is able to enjoy learning local lifestyle from the local sailing boat all day. During the night, it will be very quiet though allowing to hear the sound of crickets, grasshopper, in particularly if any rainy night, there will be the loudly sound of bullfrog toad. This is a sign of environmental remaining natural being.

2.1.2 Indoor area

The indoor area of NR Homestay has been decorated with small garden and Thai stylish seats made by stone and wood for visitors. The small garden consists of a fishpond pottery, also there are a large patio seating in a lush garden. There is area next to the river where decorated with the cluster of colorful flowers potteries hanging along the balcony. This open space and large balcony serves as a restaurant for dining out which is suitable for group visitors. The visitor can relax with natural windy and keep them cool even in the summer without fan or air-conditioner.

2.1.3 The lower and upper floor of NR Homestay.

NR Homestay house is designed to allow more spaces thoroughly from downstairs to upstairs, nevertheless a big pillar stand in the center of the house properly. The interior designed less equipped with Thai antique-style furniture such as photo in wooden frame, wooden partition. All furniture was placed close to the wall. There are electronic equipment provided such as TV set, refrigerator and microwave oven available. The wooden round table for dinning is covered with clean white lace tablecloth as well as the wooden working table and chest placing nearby the opened window, where visitor can feel the breeze by the natural wind blow here. The stairs with handle bars is situated next to the wall up to the second story. The floor was made by polish parquet, which has been clean every day. Opening the front door, visitor will find small path leading to the patio and garden with huge trees standing and potted plants.

2.1.4 Bathrooms

Visitor especially female sometime, might be a bit worried about bathroom and toilet facilities management. However NR Homestay provides in adequately and maintains daily the clean and sanitary sharing bathrooms. The bathrooms are built safety with bolt lock, LED light at night. Tourist can reduce anxiety and feel safely like staying at home.

2.2 Private Area
2.2.1 Bedrooms are divided
1). "Baan Kumrai" is the name of bedroom

Baan Kumrai villa consists of one bedroom and bathroom, which is suitable for a small group of 5–7 persons. Accommodating comfortably like a general natural resort but equipped with less furniture included dressing table and shelves only. Visitor can hang their cloths over cloth hanger affixed on the wall. The room floor of polish wooden is clean, equipped with air-conditioner, decorated with clean curtain. Clean mattress, pillow and blanket are provided and move-able.

2). "Baan Rim Num-Chow Aeaug" is the name of bedroom

Baan Rim Num-Chow Aeaug villa consists of two connected bedrooms and bathroom, which is suitable for a group of 6-8 persons. Both two bedrooms are decorated similarly to Ban Kumrai bedroom but the room size and view. The front door area of Baan Rim Num-Chow Aeaug consumes large space and ornamented with plants in pottery. It is also close to the patio which situated next to the river, where visitor can easily walk to or further riding along the river for leisure time.

3). "The big house" is the name of the bedroom

The big house villa is a main building up to 30 persons. The big house is divided into five bedrooms. Upstairs contains 4 bedrooms, for 11-15 persons, included one bathroom. Downstairs contains 1 big bedroom, for 12-15 persons and a bedroom. In the big bedroom has a king size bed and mattress, pillow and blanket with air-conditioner. Furniture is included dressing table, curtain and wardrobe. Therefore in the small bedroom is likely similar equipped but the king size bed. While some small bedrooms provided the double steel bunk bed with two pillows, blankets, curtains and air conditioning.

4). "Lychee House" is the name of the bedroom

Lychee House is the brand new private house with ceramic floor that consists of one bedroom and bathroom with air-conditioner. It serves for 2-4 persons such as couple lover, closed friends, small family. There are king-size bed and mattress, pillow, blanket, colorful curtain. In front of the house is a big tree standing. Lychee House is the first villa to be seen when stepping into the NR Homestay.

5). "Baan Chom Deun" is the name of the bedroom

Baan Chom Deun villa is a wooden house with ceramic white floor and polish wooden wall included air-conditioner and bathroom. It is suitable for 6-8 persons. Baan Chom Deun stands lifting up above the ground level so that it requires visitor to walk up into the house. External interior looks like country cottage with terrace for purposes, such as making recreation activities or dinning, depending on the visitors. Inside the room is provided with floor mattress, pillow, blanket and brown curtain blended with wall and tile floor white color.

From the room/ classified area, It can be seen that NR Homestay host has manage functional room appropriately to meet with the purpose of uses including the private spaces; bedrooms that has been divided function space in the room proportionally. Adding to that, there is a large portion of public area available for visitor spending time or chatting with host family. Homestay owner will manage to allocate rooms from time to time by giving advance notice to visitor of space function and the ease of use. Also NR Homestay has developed the property such as building new villa, to maximize the benefit of area used to either Homestay owner or visitor.

Discussion of findings

This research studies about the environment and classified area of NR NR Homestay, Samutsongkharm province. Findings are interpreted as follows;

1. According to the study about the environment and classified area of NR Homestay, Samutsongkharm province. It can be found that NR Homestay location is significant in the tourism development area as well as was enriched by many tourist attractions. Its location is easy access and convenience to travel to NR Homestay by either private or public transportation. Visitor can extend the trip to the neighboring areas across whether the district or province. Furthermore, NR Homestay environment and its nature are outstanding which is an important factor for homestay visitor visiting the place. Considering to the environmental aspect, NR Homestay features significant landscape, geographic and culture where can be destination for culture lover visitors. Lastly, visiting activity will bring about the circumstance that will help to develop the form of communication across culture between the host family, local people and the visitors, as Gudykunst and kim (referred in Metta Wiwattananukoon, 2538: 140) explains the correct beliefs about the environment and how we use the physical environment to interact with one another. That there are at least 5 levels; 1) feel that we have on the environment, such as feeling comfortable or uncomfortable, etc. 2). Using spaces and dealing with space, like the space in the house, etc. 3). Classification of phenomena occurring environment, including definitions and phenomena. 4). Determination of the form of the relationship between individuals and 5). Way we think determines what the appropriate boundaries are not properly within the scope should be.

2. According to the study about the environment and classified area of NR Homestay, Samutsongkharm province. It can be found that NR Homestay has manage proportionally both indoors and outdoor space. NR Homestay owner divided room to optimize the great use of space by segregate private area separately from public area in order to avoid inconvenient and uncomfortable feeling that may occur in a certain time from either host family or visitor. This clearly explains human behavior pattern changed from time to time depending on privacy or communication needed, as Altman (referred in Metta Wiwattananukoon 2538: 142) has said; when we define the scope of our privacy that means that we determine the extent of contact between you and others, there is a need for privacy can affect communication. And each culture is a pattern and how to set and control privacy varies.

Conclusion

The research concludes that host performed the most important role in managing areas, both indoor and outdoor of the homestay. The participant will be linked to a form of communication occurred. In addition, the environment can signify to demonstrate the establishment of homestay as well.

Suggestions for the host and someone like to establish a homestay.

1. Homestay owner should study local environment, both nearby and surround neighborhood for preparation. This due to environment is the most important factor to demonstrate the availability of homestay tourism project. The environment and location are the primarily substance that will attract the homestay visitor to come and visit and consequently building confidence in the safety concerns.

2. Homestay owner should pay interests to the neighboring tourist attraction area and incorporate activity because it is one of a subject matter influenced visitor decision to travel.

3. Homestay owner should focus on classified area proportionally both indoor and outdoor area. This offer can enhance visitor experience toward positive results both in the form of communication and privacy living.

Suggestions for the next research.

1. Researcher should conduct quantitative research because it will explain rationally in the view of statistic.

2. Researcher should conduct the survey more than one single unit place because it will explain clearly in view of comparative of the environment and the overall area of the home stay.

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Attitude towards elderly of public health students under Praboromarachanok Institute

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Abstract

Background: Proportion of aging population in Thailand is on the rise that required attention and nursing care. Health care quality of elderly live in community depends on attitude of public health personal towards elderly.

Purpose: This study evaluated attitude towards elderly of public health students in three regions the northern, eastern, and northeastern of Thailand.

Methods: This cross-sectional online survey was conducted in June 2014. Participants were 207 public health students, year's 1- 4, with and without having experience in community practice.

Results: Finding revealed that majority of participants was female (82.7%), experienced with community practice (82%). Only 10.7% reported that they prefer to work with elderly population. The overall attitudes towards elderly of public health students are at moderate level (mean = 145.4, SD = 15.3). Mean score comparisons found significant different of attitude towards elderly among students with frequent contact (F= 2.75, p < .05) and spent more time communicate with elderly (F = 2.94, p < .05). There were no significant different of attitude towards elderly among students with different gender, years of study, community experiences, preference clients' age, and living with elderly at home.

Suggestion: This study suggests that involvement and participation with elderly may improve positive attitude of public health students towards elderly. Educators should identify potential opportunity that can be integrated in regular learning and extracurricular activities for public health students.

Keywords. Attitude, public health student, communication, elderly

Attitude towards elderly of public health students under Praboromarachanok Institute

Introduction

Current proportion and trend of aging population in Thailand is increasing, more than 15% were over 60 years old. An anticipation of aging population in 2038 will continuous increase from present to over 30% and proportion of working population will be decreased (Institute for Population and Social Research, 2014). Quality of life of elderly would depend on healthcare quality by the quality interdisciplinary team. Overall quality of life of Thai elderly was rated as moderate and rated as high level when consider in aspect of social *welfare, s*elf-respect, *family,* physical, and psychological *relations* (Tepsiri, 2012). In Thailand, public health personnel play the vital role as primary care providers for elderly in community (Nitas Raiyawa, 2013). Previous studies reported increasing trend of elderly living alone almost double, from 3.6 % in 1987 to 7.6% in 2007. There is much to do to develop healthcare system through public health personnel in Thailand. Public health personnel can be part of interdisciplinary healthcare team that joined together for delivery attentive high quality health care and develop health systems.

Health care quality for elderly depends upon attitude of public health officers towards elderly. The studied show that the attitudes of caring registered nurses for older people may affect the quality of care provided. (Mary Courtney, Shilu Tong and Anne Walsh, 2001). Prabaromarajchanok institute had the sole responsibility to produce public health personnel to serve population living in Thailand. In the same time, the institute focuses on improving quality of health care.

Objectives

To evaluate attitude towards elderly of public health students enrolled in Public Health College under Praboromarachanok Institute, Thailand ministry of public health.

Methods

This online survey at cross-section was conducted in three regions the northern, eastern, and northeastern of Thailand in June 2014. Institution Review Board was approved from Baromarajonani College of Nursing Saraburi, Thailand.

Participants

Participants were 207 public health students, years 1- 4 enrolled in Public Health College under Praboromarachanok Institute, Ministry of Public Health.

Measurement

1. Personal data form contains questions related to gender, years in public health program, school location, community practice, prefer age of clients to work with, living with elderly at home, frequent contact with elderly, and spend time communication with elderly.

2. The attitude toward elderly was assessed using the Kogan's Attitude toward Old People (Kogan's OP) previously translated according to Brislin's model by (Runkawatt,

2007). The reliability were 0.70 (Runkawatt, 2007), 0.73 (Runkawatt, Gustafsson, & Engstrom, 2011), ---and in this study. The questionnaire comprised of 34 items Response options were 7-point rating scale: 1 = Strongly disagree, 2 = Disagree, 3 = Somewhat disagree, 4 = Neither agree or disagree, 5 = Somewhat agree, 6 = Agree, and 7= Strongly agree. Score ranged from 34 – 238. The interpretation of attitude towards old people can be categorized as poor attitude (mean = 34-102), moderate attitude (mean = 103-170), and good attitude (mean = 171-238).

Data analysis

Descriptive statistics was used for data analysis for percentage, mean, and standard deviation of attitude towards old people and personal characteristics.

Results

Participant characteristics

Table 1
Attitude towards elderly according to participant characteristics (N = 207)

Characteristics	n	%	mean	SD	Level
Gender					
Male	41	19.8	144.0	16.7	moderate
Female	166	80.2	145.7	15.0	moderate
Years in program					
1	23	11.1	143.7	12.4	moderate
2	70	33.8	142.4	14.0	moderate
3	38	18.4	144.3	17.7	moderate
4	76	36.7	149.2	15.5	moderate
Community practicum					
Yes	125	60.4	146.0	15.2	moderate
No	82	39.6	144.4	15.6	moderate
People want to work with					
< 12 years	28	4.0	146.3	13.9	moderate
13-21 years	27	3.9	150.6	20.2	moderate
22-35 years	316	45.1	142.5	13.5	moderate
36-59 years	129	18.4	148.3	17.1	moderate
60-79 years	97	13.9	149.6	14.4	moderate
> 80 years	6	.9	136.0	0.	moderate
C a n n o t decide	97	13.9	147.1	17.0	moderate
Living with elderly at home					
Yes	106	51.2	146.7	16.2	moderate
No	101	48.8	144.0	14.3	moderate

Attitude towards old people: poor = 34-102; moderate = 103-170; good = 171-238

Majority of participants were female (82.7%), had practice experience in community (82.0%), living with elderly at home was 51.2%, and preferred to work with age <21 years (6.8%), adult (66.7%), and elderly (10.7%) as showed in Table 1.

Attitude towards elderly according to relationship and time spend with old people

Relationship and involvement with old people were evaluated including frequency of contact and time spending on communication. Frequency of contact ranged from daily (19.8%), weekly (22.7%), and monthly (17.9%). Quality time spending on communication was low (28.9%), moderate (25.3%), good (28.9%), and very good (17%) as showed in Table 2.

Table 2

Relationship and involvement with old people (N = 207)

Relationship	n	%	mean	SD	Level	F-test
Frequency						
Not at all	11	5.3	138.9	10.0	moderate	2.75*
Sometime	71	34.3	142.0	14.9	moderate	
Monthly	37	17.9	146.3	13.5	moderate	
Weekly	47	22.7	147.3	17.2	moderate	
Daily	41	19.8	149.9	15.2	moderate	
Quality time						
Never	0	.0	.	.		2.94*
Low	56	28.9	142.3	17.4	moderate	
Moderate	49	25.3	143.6	14.0	moderate	
Good	56	28.9	147.9	14.3	moderate	
Very good	33	17.0	151.5	14.9	moderate	
Total	207	100.0	145.4	15.3	moderate	

Attitude towards old people: poor = 34-102; moderate = 103-170; good = 171-238

*p < .05

The overall attitude towards elderly among public health students was at moderate level (mean = 145.4, SD = 15.3). Mean scores comparison indicated significant different of attitude towards elderly among students with frequent contact with elderly ($F = 2.75$, $p < .05$) and spent more time on communication with elderly ($F = 2.94$, $p < .05$). There were no significant different of attitude towards elderly among male and female students, students in different years of study, with/without community experience, prefer different age of clients, and had elderly living at home.

Discussion

This study was the first to explore attitude of public health students under Praboromarachanok Institute, Ministry of Public health toward elderly people. Majority of students had community practice experiences. Proportion of students intend to work with elderly was 10.7%. Results indicated that public health students in different year of study had similar attitude towards elderly similar to the study conducted on the 1st and 3rd year students (Yuriy Zverev, 2012). Overall attitude towards elderly among public health students was at moderate level contrast with previous study found negative attitudes among people in different age group and healthcare personnel towards elderly (Tangchonlatip et.al, 2010).

Moreover, quality of care for elderly is directly related to the attitudes of caregivers (Hweidi & Al-Obeisat, 2006). Therefore, attitude of healthcare personnel who responsible in providing care is an important factor of care quality. This study also found significant different of attitude towards elderly on frequent contact and quality of time spend on communication with elderly consistent with previous studies. Frequently and preference to work with elderly people were the predictors of positive attitudes towards elderly people (Liu, Norman, & While, 2013). Experience with elderly is recommended in order to create positive feelings towards older people (Soderhamn, Lindencrona, & Gustavsson, 2001).

Conclusion

Thailand is becoming aging society, it is important to prepare public healthcare personnel with positive attitude toward elderly. This study found moderate affection towards elderly of public health students. Educators provide education at public health collage under Prabaromarajachanok Institute should take into consideration in planning of supportive learning activity and experience to enhance positive attitudes in caring for older people in their professional practice.

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"Does the school-based program, physical activity and balance of food consuming style improve the effectiveness of childhood obesity prevention?"

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Abstract

Recently, Childhood obesity prevalence rates are increasingly becoming a serious problem around the world. Moreover, there are many research found that, obesity affects both a child's physical and psychological health. Physical activity and balance of food consuming are recognized as effective to reduce and maintain weigh in childhood. However, use of physical activity and balance of food consuming still without the best scientific evidence to support. The use of physical activity and balance of food consuming will be considered on this evidence-based project. The results of this project will be applied in primary care unit to prevent obesity in children aims to develop standards of nursing care and improve patient outcomes more effectively.

The study methodology was to research the best current available journal article in electronics databases in order to answer clinical question. The eight relevant articles were selected under inclusion and exclusion criteria, which were considered to display a high hierarchy of evidence, and then irrelevant articles were rejected. Critical appraisal process was carried out which CASP tool and Parahoo are the main appraisal tools which provide particular issues for research appraised.

This study discovered that both physical activity and balance of food consuming significantly reduce and maintain weigh in childhood. However, physical activity should sufficient provided in the same time with appropriate food quantity. The recommendation of the project regular follow up and parents' awareness is required to improve quality of intervention. Nevertheless, further study is required for sufficient participant to improve significant of results.

"Does the school-based program, physical activity and balance of food consuming style improve the effectiveness of childhood obesity prevention?"

Introduction and Background

In recent years, due to childhood obesity prevalence are increasing yearly, it has become a global epidemic (AlMarzooqi and Nagy, 2011). In Thailand, the study of Sakamoto et al., (2001) gave the prevalence rates of childhood obesity over the 97th percentile for weight-for-height in urban and rural areas of Thailand as 22.7% and 7.4% respectively. Moreover, many studies indicate that obesity is linked to numerous health problems. Contrary to popular views that within developed countries people of lower socioeconomic status tend to suffer more from obesity, it is mean that obesity is increasing in every region (Flynn et al., 2004).

According to Kushner (2002) and Chambers and Wakley (2002) obesity results from an imbalance in energy metabolism (i.e. energy intake exceeds energy expenditure). Obesity definition varies based on clinical perspectives and the age range (particularly between adult and child). Obesity diagnosis has a different base-line for adults and children. An adult is classed as overweight if their Body Mass Index (BMI) is over 25.0-29.9, and obese if their BMI exceeds 30.0 (Webber, 2004), whereas each age range for children has a different BMI. BMI is normally calculated on a graph, wherein the 85th to 95th percentile indicates being overweight and the 95th to 100th indicate being obese (Webber, 2004). In Thailand, childhood obesity is defined when BMI exceeds the 97th percentile (Nation Public Health Foundation and Policy and Planning Office, 1996). Additionally, Dehghan et al. (2005) said that there are many important factors that are obesity-conducive, which include genetic and environmental factors, lifestyle preferences (e.g. food-consuming behaviour) and cultural environment. Moreover, obesity affects children's other health problems. Obesity itself is not only an increasing health problem in developed countries; it is also a rising concern in developing countries (Flynn et al., 2004).

According to Onis and Blossner (2000), support that childhood obesity is raising many public health problems in multiple organ systems. Obesity in childhood has been associated with high prevalence of negative health consequences (Onis and Blossner, 2000; Davision and Birch, 2001), including hypertension (Gutin et al., 1990), diabetes (Parra et al., 1971), respiratory disease (Tracey et al., 1971), sleep apnoea (Dietz, 1998), and orthopaedic disorders (Dietz et al., 1982). Childhood obesity not only contributes to negative physical health, but also to negative psychological outcomes (Davision and Birch, 2001), including depression (Wallace et al., 1993), disturbed body image (Mendelson and White, 1982 and Hill et al., 1994), and low self-esteem (Banis et al., 1988; Kimm et al., 1991). It is clear that obesity affects both a child's physical and psychological health; therefore, child obesity prevention should be concerned with numerous branches of care. As a result, the understanding of strategies for preventing obesity in children is very important; it can develop standards of nursing care and improve patient outcomes more effectively.

Purpose

The aim of this study is to review and critically appraise research studies concerning the effectiveness of nursing care for obesity prevention in childhood, to inform evidence-based practice (EBP). This study focuses on obesity in childhood with particular regard to school-based programs, food-consuming behaviour and physical activity aspects. The value of childhood obesity prevention is critiqued in terms of validity, reliability, relevance and applicability to reducing the incidence of obesity and its prevalence in childhood.

Effective interventions to prevent childhood obesity are required in Thailand. This is because the research for effective obesity prevention in childhood in Thailand is still insufficient. If the school-based program, food-consuming behaviour and physical activity are successful, these interventions in childhood obesity in Thailand may help Advanced Practitioner Nurses to provide high quality of standard nursing care in childhood obesity effectively, in addition to the normal nursing role.

Methodology

The rationale of this paper to research the effectiveness of nursing care to prevent obesity in childhood is;
1. To promote EBP for health promotion in child health care.
2. To demonstrate the effectiveness of nursing care to prevent childhood obesity
3. To find a good child health promotion that suits childhood settings to prevent obesity and improve the quality and effectiveness of nursing care in health promotion.

The study is designed to answer the clinical question, decision based on best available evidences is Evidence-Based Practice (EBP) to find out the good practice which emphasis on the use of evidence, in particular research findings and in clinical decision making for advanced clinical practice leads to highest quality of nursing care and best patient outcome (Parahoo, 2006; Burns and Grove, 2007; Melnyk and Fineout-Overholt, 2011). Clinical decision-making is very important and requires careful consideration of plenty of information from different sources of evidence (as show in Figure 1.3.1, which illuatrates the components of EBP) to raise the Evidence-Based Clinical Decision-Making to improve quality of clinical care and quality of patient outcomes (Melnyk and Fineout-Overholt, 2011).

Clinical question

A well-formulated question is vital to find out the relevant information for answering the research question and hypothesis (White, 2009). Analysis of the components of the question is encouraged for the evidence-based practitioner. PICO has been chosen to create the question for this paper. Based on PICO form and a summary of the clinical problems concerning ways to solve child obesity, the clinical problem, the clinical question is:

> "Does the school-based program, physical activity and balance of food consuming style improve the effectiveness of childhood obesity prevention?"

CINAHL, MEDLINE and EMBASE were chosen as the main electronic databases for literature searching to utilize, because all of them provide relevant research studies that might answer the clinical questions of interest to this study, focusing on the effectiveness of prevention strategies for childhood obesity. Additionally, Google Scholar was used for hand searching in this paper. All databases searching yields many evidences, therefore related keywords and controlled vocabulary searching is necessary. The key words in this study were used with alternative key terms and synonyms (summarised in table 1) for effective searching.

Table 1

Summarised keywords and other word search

Keywords	Related search words
Childhood	Children School children Pre-school children Young children Primary school children Early childhood
Obesity	Fat Overweight Obese
Prevention	Protection program Prevention program (Physical activity, exercise) School-based program (Physical activity, exercise) Physical activity Physical exercise Exercise Physical activity intervention

Criteria for considering literatures

Table 2
Inclusion and exclusion criteria

Inclusion criteria	Exclusion criteria
Childhood (Pre-school and primary school children)	teenage and adults
Obesity prevention	Obesity prevention
- physical activities and exercise program	- medicine
	- invasive procedure
English language	Non – English language
Full text paper	1. Abstract paper
	2. Protocol paper
During 1998 - 2012	Before 1998

Types of participants

The participants included in this study were children aged between 3-15 years old, which is the school period, especially children at 7 years old (the age group wherein obesity becomes a notable feature) (Hui, 2003). The study included obesity preventions that considered children who were already obese at baseline, and excluded studies wherein participants were infants, toddlers, teenagers or adult at baseline.

Types of interventions

Strategies included in this study are school-based educational-programme, health promotion, behavioural therapy, counselling. The included interventions in this study may involved diet and nutrition, exercise and physical activity, whereas medicine and invasive procedure were excluded.

Types of comparison

This study considers the studies, which compared physical activity intervention and non-intervention in control group which received usual care or another intervention.

Types of outcome measurement

There are two types of outcome measurement: primary and secondary outcome measurements. The outcomes are compared and evaluated with baseline before and after the intervention measurement.

Primary outcomes included:
- weight
- weight and height
- body mass index (BMI)
- Secondary outcomes included:

- dietary intake
- activity levels
- change in knowledge, behaviour and attitude

The studies relevant to this paper considered to rank highly in the hierarchy of evidence, therefore systematic review, RCT and quasi-experimental study designs were chosen and used to guarantee the quality of literature and evidence reliability to produce trustworthy results to answer the clinical question (Greenhalgh, 2006) on this study. Then eight researches were selected to consider on this study.

Critical appraisal tool

Parahoo's (2006) critical appraisal tool is the main tool applied to evaluate studies individually in this paper. This is because Parahoo's (2006) tool consists of a framework structure which has been used and appropriated with quantitative research, and CASP tool will be used for systematic review and meta-analysis research studies. Moreover, the CASP tool checklist was used to make sense of evidence for the reader. Therefore, the CASP checklist will be used to complement the Parahoo critical appraisal tool to evaluate the five papers and CASP tool to evaluate two papers, which are critically appraised and synthesised.

Table 3
Summary details of eight selected papers

Study NO.	Author & Date & Title	Aim/Hypotheses	Methodology	Method & Sample	Measurement	Results	Comments
1.	**Reilly, J. J. et al. (2006)** -Physical activity to prevent obesity in young children: cluster randomised controlled trial	To assess whether a physical activity intervention reduces body mass index in young children	A Cluster randomised controlled trial	- Cluster randomised controlled trial single blinded trial over 12 months - 545 children from 36 nurseries in Glasgow, Scotland	- BMI - habitual levels of physical activity - Sedentary behaviour	- the intervention had no significant affect on BMI at 6 and 12 months (p= 0.87 and 0.90 respectively) - sedentary behaviour; the pupils in intervention group had significantly higher performance in movement skills tests than control pupils at 6 and 12 months (p=0.0027, CI = 0.3-1.3)	- Physical activity can significantly improve motor skills but did not reduce BMI in young children in the study
2.	**Lazaar, N. et al. (2007)** -Effect of physical activity intervention on body composition in young children: influence of body mass index status and gender	To evaluate the effect of school-based PA on the body composition according to body mass index (BMI) categories (non-obese vs. obese) and gender in children aged between 6-10 years old	A Randomised controlled trial	- Randomised controlled trial research study over 6 months - 425 (213 girls and 212 boys) healthy children from 14 primary schools	- BMI - Waist circum-ference - Skinfold thicknesses - Fat-free mass	- intervention had significant affect all body composition variables (p<0.05 to <0.001) (BMI except) - intervention was affected fat-free mass in boys (p<0.001)	- Physical activity effective to improve all body composition, BMI except in obese children at 6 months similarity in boys and girls - the pattern higher response affect BMI category in obese than nonobese children

Table 3
Summary details of eight selected papers

Study NO.	Author & Date & Title	Aim/Hypotheses	Methodology	Method & Sample	Measurement	Results	Comments
3.	**Vizcaino, M. V. et al. (2008)** Assessment of an after-school physical activity program to prevent obesity among 9-10 years old children: a cluster randomized trial	To assess the impact of a physical activity program on obesity in primary school children	A Cluster randomised controlled trial	-A Cluster randomised controlled trial 24 weeks -1044 children from 20 schools of the province of Cuenca, Spain	- BMI - triceps skin-fold thickness - Percentage body fat - blood lipid - blood pressure	- intervention do not affect BMI in both control and intervention groups - intervention affect Triceps skin-fold thickness (TST) (in boy (95% CI-1.71 to -0.57; p<0.001)). (in girl (95% CI -2.38 to -0.73)) - intervention reduction percentage of body fat in girl (95% CI -1.04 to -0.11; p=0.02) - affect decrease in apolipoprotein (apo) B levels in boy 95% CI – 8.81 to – 0.37; p=0.03 - increase apo A-I levels (95% CI 7.95-19.20; p<0.001) - increase diastolic blood pressure 95% CI 0.19-2.91; p=0.03	- An after-school physical activity program do not affect BMI, affect reduce adiposity, increased apo A-I and decreased apo B in primary school children in the study

Table 3
Summary details of eight selected papers

Study NO.	Author & Date & Title	Aim/Hypotheses	Methodology	Method & Sample	Measurement	Results	Comments
4.	**Thivel, D. et al. (2011)** Effect of a 6 month school-based physical activity program on body composition and physical fitness in lean and obese schoolchildren	To assess the effect of a 6-month physical activity program on body composition and physical fitness among primary school children	Randomised controlled trial	- Randomised controlled trial for 6 months - 457 obese children aged 6 to 10 years from 19 local public schools in France	- BMI - Waist circum-ference - Skinfold thicknesses	<u>Lean children</u> -BMI significantly in both intervention and control groups $p<0.05$ and $p<0.001$ respectively -waist circumference, fat-free mass, skin-fold thickness significantly in only intervention group $p<0.05$, <0.001, and <0.001 respectively <u>Obese children</u> -BMI and fat-free mass, skin-fold thickness significantly in only intervention group $p<0.05$, <0.001, and <0.01 respectively	-two physical activity session per week in addition to standard physical education classes in primary school-children bring effective results for prevention of child obesity

Table 3
Summary details of eight selected papers

Study NO.	Author & Date & Title	Aim/Hypotheses	Methodology	Method & Sample	Measurement	Results	Comments
5.	**Mo-suwan, L. et al. (1998)** Effects of a controlled trial of a school-based exercise program on the obesity indexes of preschool children	To evaluate the effect of a school-based aerobic exercise program on the obesity indexes of preschool children	Randomised controlled trial	- Randomised controlled trial - 292 second-year elementary school pupils of 2 kindergartens in Hat Yai municipality, Songkhla province, Thailand	- BMI - Skinfold thicknesses	-the intervention not significant affect on BMI in both control and intervention groups (p=0.057) except in girl in intervention group - the intervention had prevent BMI gain in girl in intervention group (p<0.01)	- a 29.6 week school-based exercise program can prevent BMI gain in girl which may induce a remission of obesity in pre-school age children

Table 3
Summary details of eight selected papers

Study NO.	Author & Date & Title	Aim/Hypotheses	Methodology	Method & Sample	Measurement	Results	Comments
6.	**Harris, C.K. et al. (2009)** Effect of school-based physical activity interventions on body mass index in children: meta-analysis	To determine the effect of school-based physical activity intervention on body mass index (BMI) in children	A systematic review and meta-analysis	- Data-based search from MEDLINE, EMBASE, CINAHL and Cochrane Central Register of Controlled trials up to September 2008 and hand search - 18 studies met inclusion criteria which are; (1) randomised controlled trials or controlled clinical trials (2) minimum 6 months of school-based physical activity intervention (3) BMI measurement, (4) participant aged between 5-18 years old	- BMI	The school-based physical activity interventions did not improve BMI (95% CI -0.19 to 0.10)	-Although school-based physical activity program intervention did not improve BMI, it had other health effects benefit.

Table 3
Summary details of eight selected papers

Study NO.	Author & Date & Title	Aim/Hypotheses	Methodology	Method & Sample	Measurement	Results	Comments
7.	**Atlantis, E. Et al. (2006)** Efficacy of exercise for treating overweight in children and adolescents: a systematic review	To determine the efficacy of exercise alone for treating overweight in children/ adolescents	A systematic review and meta-analysis	- multi Data-based (Ovid MEDLINE, PREMEDLINE, CAB ABSTRACTS, PsycINFO®, SPORTDiscus and Evidence Based Medicine Reviews) search and 2 reviewers independently identified relevant research - 45 papers considered met inclusion criteria which are; (1) RCTs (2) published in English (3) exercise/ physical activity treatment in overweight/ obese children or adolescents	Reported any overweight outcome	-Exercise effect on percent body fat (p=0.006) -Exercise effect on body weight (p=0.07) **body weight affects were significant and larger for studies of higher doses, nonsignificant and smaller effects were seen for studies of lower doses of exercise -Exercise effect on central obesity (p=0.07)	- an aerobic exercise for 155-180 min/weeks at moderate-to-high intensity is effective for reducing body fat in overweight children/ adolescents - the effects on body weight and central obesity are inconclusive

Table 3
Summary details of eight selected papers

Study NO.	Author & Date & Title	Aim/Hypotheses	Methodology	Method & Sample	Measurement	Results	Comments
8.	Aguilar, S.F. et al. (2009) Impact of an after-school physical activity program on obesity in children	To assess the impact of a 2 year recreational physical activity program	A Cluster randomised controlled trial	-A Cluster randomised controlled trial 28 weeks every year for 2 academic years -1044 children from 20 schools of the province of Cuenca, Spain	- BMI - triceps skin-fold thickness - Percentage body fat - blood lipid - systolic and diastolic blood pressure	- an after-school physical activity program reduced the frequency of overweight in girl in intervention group (95% CI p<0.001) - the intervention effect on both boy and girl in intervention group had lower total cholesterol level (95%CI p<0.001), and adipoprotein B level 95%CI p=0.008	- the physical activity program had lowered the frequency of overweight in girls and reduced total cholesterol and adiposprotein B in both boy and girl at the end of two years of intervention

Discussion

Applying the evidence in the Thai healthcare context is quite challenging to Thai healthcare providers. Almost all of the evidence was gathered in relation to Europeans populations, and id thus subject to variables such as cultural, environmental and genetic conditions; and food-consuming behaviour and type of food. Fortunately, one of selected studies (Mo-suwan et al., 1998) was conducted in Thailand. Additionally, the universal theoretical belief in the similarity of calories intake balance with energy output and standards of children's growth and development in all healthcare contexts worldwide makes results regarding the affect of PA on BMI largely transferable to other populations. It is possible to apply the results in the Thai healthcare context (i.e. to generalise them), because the general theory of relationship between weight grain and BMI (a result of energy metabolism balance between energy intake and energy expenditure leading to the storage of excess energy in triglycerides in adipose tissue form) is universal, therefore PA has emerged as a cornerstone to raise energy metabolism (Linda et al., 2001).

This study identified eight published papers that met inclusion criteria and were critical appraised. This is strength of this study, because published evidence was chosen, published evidence should be formally appraised and evaluated to inform clinical and public health approaches sufficiently before publication (Habour & Miller, 2001). Moreover, the eight selected studies are up-to-date which is particularly important in the child obesity area, which has been swiftly developing in recent decades (Campbell et al., 2001; Summerbell et al., 2002).

Findings from evidence

Key finding and overview of evidence

As presented in previous chapters, there are two types of study designs: RCT and systematic review and meta-analysis, which are high in hierarchy of evidence appraised to find the evidence to answer the clinical question for supporting effectiveness of PA in BMI. Although, the eight selected studies had different PA interventions, the overall key finding of this study in its appraisal of the selected studies was that they had similar significant positive results showing the affect of PA on body composition variables such as fat-free mass, blood lipid and cholesterol, waist circumference and blood pressure. Five studies found no significant impact of PA on BMI. However, scrutinizing the details of the studies revealed the potential of PA interventions to reduce BMI in children. The sample size of all studies was quite sufficient, especially RCT studies 1, 3 and 8 conducted with 80% power (Burns & Grove, 2009), and they were balanced between intervention and control groups in term of study design. The systematic review and meta-analysis studies had a good quantity of high hierarchy evidence (18 and 13 studies respectively). The minimum intervention duration was 90 minutes a week and the maximum was 270 minutes a week, quite wide gap of intervention frequency and quantity. Additionally, the follow-up

duration average of six months after intervention was appropriate to measure the outcome, as the amount of time of PA affects body composition (Horowitz et al., 2000); Tonkonogi et al., 2000). Poehlman et al. (2002) suggested that regular exercise training over at least 6 months increased fat oxidation, glucose metabolism (increase number of glucose transportation and change glucose into triglycerides), mitrochondrial function, sympathetic nervous system activity and lipoprotein lipase activity, which may indirectly, positively affect metabolic profiles. However, from the study results it remains difficult to identify the optimal exercise program characteristics and duration of intervention program to maximise BMI loss in children. Therefore, it might be useful if the intervention takes a longer period of time.

Overall, the findings of six RCTs were compromised in term of trustworthiness due to randomisation bias (the studies did not indicate randomising methods) and shortcoming in blinding. It may be concluded that the six RCTs do not reach the high quality of RCT norms which may also affect their validity and reliability. However, the systematic review and meta-analysis made inadequate mention of inclusion and exclusion criteria, therefore there may be significant variable and different types and duration of PA. However, these studies findings highlight the utilisation of PA on BMI, challenging healthcare providers to seek the best evidence to support and answer the clinical question to improve patient outcome and health promotion in children.

Effect on BMI

As addressed previously PA raises metabolism mechanisms in the human body in both adults and children, and may in consequence also affect BMI. BMI is the main outcome measurement of the clinical question of this study. Studies 1, 2, 3 and 6 found that PA has no significant effect on the main outcome of BMI, whereas studies 4, 7 and 8 found contrary evidence. Study 4 found that PA had a significant affect on BMI in boys and girls in both intervention and control groups of lean children but only in intervention group of obese children. The study reviewed by study 7 found that BMI is significantly affected by a high dose of aerobic exercise (155-180 min/week) on obese children. Moreover, study 8's results also found that PA reduced overweight and BMI in both boys and girls in the intervention group. When considering the evidence of the study on Thai children (study 5), the intervention only supports a positive significant affect of BMI in girls (p<0.01) with three sessions of 35 minutes per week for 29.6 weeks of intervention. From these results, it appears that there is no absolutely effectiveness of PA on BMI reduction in children; although potentially positive results of PA on BMI have been found, some study's results opposed this and found no significant affects. Furthermore, all of the selected studies neglected to presented participants' pertinent background information, such as ethnicity, parents' biological background (possibly related to participants' genetics), subject characteristics, and food-consuming behaviour and daily activity of participants and their families. Therefore, although the effectiveness of PA on BMI measurement is a main outcome, the participants' environment and background are also of concern simultaneously.

Without such information it is impossible to fully explain the effects and association of variables on the outcome. It would be helpful if the authors were more concerned about participants' background data and environmental factors, which are necessary information, may be related to outcomes, and would enable better comparison of intervention effectiveness and interpretation of results.

In summary, the synthesis of all selected studies demonstrated that PA is incomplete to judge the effectiveness of PA on children's BMI because the studies' results are scattered and do not show significant results in the same way. Moreover, all studies were not conducted to optimum quality in terms of methodology, which reduces the trustworthiness of results, and consequently their validity and reliability. However, PA had significantly positive results and effectiveness on other body composition factors.

Improving outcome in children

Improving the outcome in children in this study is concerned with and focused on improving BMI in a positive way, to maintain BMI in normal weight children and reduce BMI in obese children with PA intervention. Due to appraising the selected studies in the previous addressed it can be argued that although some studies found no significant result of PA on children's BMI, PA seemed to be positively related to BMI improvement. Additionally, it was also shown to have a significant effect on other body composition factors, as mentioned previously (e.g. blood lipid and cholesterol, which may cause of risk of chronic care in children). Therefore, it can be assumed that although PA does not significantly affect BMI, it does benefit children's health. Furthermore, the studies need high quality methodology control, with a high standard of study design type and consideration variables which contribute to outcomes.

As the results of study 8 suggest that PA for BMI has significant affects, it would perhaps be advisable to observe the intervention effects beyond the initial weight loss period, which typically lasts six months (Jakicic & Otto, 2005). Moreover the results of study 8 demonstrated that PA could have a significant impact on BMI when maintained beyond 12 months to two years, which can significantly improve the outcomes in children.

Due to its impact on energy balance, PA may have positive outcomes on BMI in children. However, the effectiveness of PA on BMI requires further research studies to ascertain both its appropriateness and adequacy. PA quantity and duration also need investigation in their effects on BMI, as recommended by studies 1, 3 and 4. However, many factors contribute to children's nutritional status and are related to reducing or maintaining BMI, as discussed above. Therefore, further study is needed to improve clinical outcomes in children.

Future research

Discussion of the details of the influence of PA on the BMI of children revealed several gaps in the selected literature. Firstly, attention to variability in children's activities; the PA in each study varied and similar activities were not focused on. Secondly, different follow-up periods of time and different durations of interventions were used, which may be particular to short-term or long-term relationships between PA and BMI. Finally, initial information of demographic factors of participants were not determined such as ethnicity, culture, parents' physical data (genetics), food-consuming behaviour, food intake regulation and physiological components.

A related suggestion for further study it the optimal intensity, frequency and intervention duration of PA. Moreover, participants' consuming-behaviour and, regularity of PA should be examined for different approaches and relation to outcome factors. Additionally, cost-effectiveness and national policy consideration should be considered as a priority. This is because there are many variables may related to study outcomes or some interventions could be combined with PA for improve effectiveness and significant results for promoting intervention in childhood.

Table 4

Dissemination topics adapt from research finding

Findings
1. Children in both boy and girl who receive the physical activity intervention more than six months significant BMI reducing in both child obesity and non-obesity as compare with six or less than six months program of physical activity no significant results.
2. Physical activity intervention significantly effect on other body compositions such as blood lipid, waist circumference and sedentary behaviour and fundamental movement skills
Limitations
1. The quantity of physical activity may insufficient to BMI affects.
2. Time duration of the physical activity program may restrict and tie consequence inadequate time for outcome affects.
3. Qualitative method may require for interview risk factors to contribute study outcome.
4. Different of physical activity type in each study may lead to difficult to compare the effective in the same way due to different of energy expenditure.
5. Insufficient variables and environment considered and control such as dietary consuming at home.

Table 4

Dissemination topics adapt from research finding

Integrating research implications into dissemination plan
1. After provide physical activity program over six months period for children in both obesity and non-obesity the clinical study outcome is more effective to BMI than less than or six month program of physical activity.
2. The physical activity program that provide for children are more effective in long term of intervention.
3. For further research study, sufficient sample size should be recruited with power calculation on RCT study
4. The participants' environment should be considered carefully because it might be affected on outcomes.
5. The patients' discipline and genetic should be strongly concern as a important variable.
6. Physical activity combine with food control are likely to be effective on BMI than physical activity intervention alone.
7. The duration of physical activity more than 6 months and at least 30 minutes of each session might be affected clinical outcome and potential to effective for reducing BMI in children.
8. Physical activity intervention may effective for other body compositions such as blood lipid, cholesterol and waist circumference rather than BMI.
9. For further research physical activity might be conducted at home and combine with other intervention such as amount of dietary control and control type of food consumption.
10. Further research should be explored the optimal of physical activity, frequency duration and mode of activity among children which impact on children BMI.

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Factors influencing urban and rural Thai adolescents' eating behavior

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Abstract

Cardiovascular disease (CVD) has been the leading cause of premature death in adults in Thailand. Promoting healthy eating in adolescents is one way of helping to maintain health and lower risk of CVD in later life. This quantitatively study aimed to identify the factors influencing Thai adolescents' eating behaviour, so that they could be used in the future to develop a healthy eating intervention programme.

The theory of planned behavior (TPB) was used as the theoretical framework to identify factors influencing adolescents' eating behavior and dietary intake. 184 urban and 152 rural adolescents from public high schools in Ratchaburi Province, Thailand were recruited to complete the Thai Eating Questionnaire (TEQ) developed based on the TPB. It included a brief food frequency questionnaire (FFQ).

Using stepwise regression analyses, urban adolescents' eating behavior was predicted by perceived behavioral control (PBC) (r^2=.050), while their eating intention was significantly predicted by attitude towards eating behavior (r^2=.241). Rural adolescents' subjective norm was a significant predictor of eating intention (r^2=.058), which was a significant predictor of eating behavior (r^2=.055).

Rural adolescents would benefit from interventions designed to increase personal motivation and social approval by involving significant others such as parents and peers. Urban adolescents would benefit from interventions designed to increase facilitators and decrease barriers to healthy eating and increase self-efficacy to do this.

Keywords: urban Thai adolescents, rural Thai adolescents, healthy eating,
the Theory of Planned Behavior

Factors influencing urban and rural Thai adolescents' eating behavior

Introduction

Thailand is now facing a serious situation with the increase in CVD (Bundhamcharoen et al., 2011). The prevalence rate of heart disease has doubled over 6 years from 317.7 (x100,000) in 2001 to 690.8 (x100,000) in 2007 (Bureau of Policy and Strategy, 2009a). The symptoms and complications of CVD usually appear in middle aged or elderly adults (Wood & Kotseva, 2004). Atherosclerosis, the main pathophysiological process, that underlines the majority of coronary artery disease begins in childhood, and accelerates through adolescence and early adulthood (Wheatcroft, Noronha, & Kearney, 2005; Wood & Kotseva, 2004). Diet is believed to be central to the aetiology of CVD contributing to atherosclerosis, and hypertension (Wheatcroft et al., 2005). Many studies have shown a strong relationship between CVD and diet (Hamer and Mishra, 2010; Allender et al., 2008). Although CVD is a serious disease, it is also a potentially preventable disease.

Theories have been developed to explain dietary behaviour including cognitive models developed in health psychology to explain day to day decision making in relation to health behaviours, including eating behaviour. One model based on cognitive decision-making is the TPB (Ajzen, 1991). While eating behaviour needed to be examined for promotion of a healthy diet, the studies which have examined healthy eating intention and healthy eating behaviour reported that the components of the TPB were a useful predictor of healthy eating intention and healthy eating behaviour with varying degrees of success (Berg et al., 2000; Blanchard, Fisher, Sparling, Sharks, Nehl, Rhodes et al., 2009, Fila & Smith, 2006; Kassem, Lee, Modeste, & Johnston, 2003; Pawlak & Malinauskas, 2008; Prell, Berg, & Jonsson, 2002).

This study used the TPB model as the conceptual framework to identify factors influencing urban and rural Thai adolescents' eating behavior (Figure 1). Because of the high prevalence of CVD among Thai population, and associated with diet, results from this study are important for the development of intervention strategic that promote healthy eating behavior in Thai adolescents.
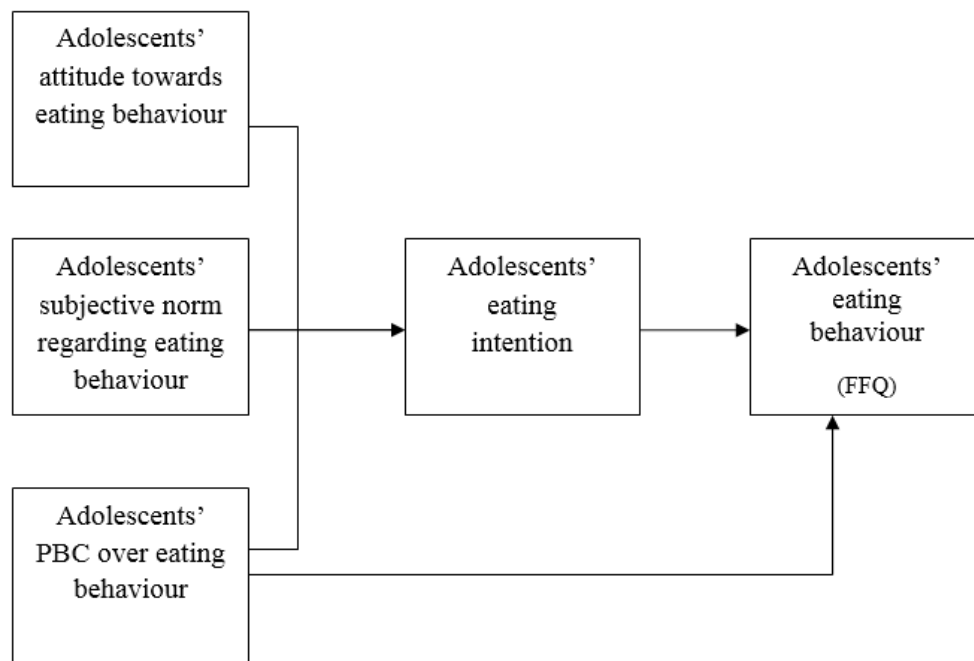
Figure 1

The study model of healthy eating based on the TPB

Methods

Participants

According to Rashidian and colleagues (2006), an effective sample size for regression analyses of the TPB questionnaire part of the study is 148. That is calculated by the variance inflation factor method (α= .05; power= 80%). In this study, samples were 184 urban Thai adolescents and 152 rural Thai adolescents. Participants were recruited from 15-18 year-old male and female students, attending grades 10 to 12 in Benjamarachutit Ratchaburi School (urban) and Suanphung Wittaya School (rural), Ratchaburi Province, Thailand. It was a convenience sample because the researcher approached the students during school time and some students had only limited time for participation in the study. However, inclusion and exclusion criteria were used. The inclusion criteria were adolescents of 15-18 years who can read and write. The participants from Benjamarachutit Ratchaburi School (urban) also needed to live within Muang Ratchaburi (town boundaries), and the participants from Suanphung Wittaya School (rural) needed to live within Suan Phung district to reflect the city (urban) or rural environment. Exclusion criteria included severe mental illness and learning disability.

Measures

There was no instrument currently developed based on all components of the TPB that was available for use with Thai adolescents. Therefore, the researcher developed the new questionnaire, namely the Thai Eating Questionnaire (TEQ). The TEQ was developed according to the steps suggested by Ajzen who developed the TPB model (Ajzen, 2006). It is composed of 112 items divided into 6 parts, comprising personal information (9 items), eating behavior (9 items as a food frequency questionnaire), eating intention (9 items, 7-point rating scale), attitude towards eating (25 items, 7-point rating scale), subjective norm regarding eating behavior (18 items, 7-point rating scale), PBC over eating behavior (42 items, 7-point rating scale).

Data analysis

All data were analysed with the Statistical Package for Social Science (SPSS version 15.0 SPSS Inc. Chicago, IL, USA). Descriptive statistics, including percentages, mean, and standard deviation, were used to examine the demographic data and study variables. Inferential statistics, stepwise regression analyses were undertaken to predict eating intention (dependent variable) by attitude, subjective norm, and the PBC, and eating behaviour (dependent variable) by PBC, and eating intention (Field, 2009; Rashidian et al., 2006).

Results

184 urban Thai adolescents (67 males and 117 females) and 152 rural Thai adolescents (59 males and 93 females) were recruited for the survey. The percentage of males to females between urban and rural adolescents was similar at 1:2. The mean age of urban and rural adolescents was 16.2 years (SD=0.8) and 16.7 years (SD=0.9), respectively. Rural participants were older on average than the urban participants (16.7 years, SD=0.9 vs. 16.2 years, SD 0.8, z= -4.767, and p=0.000), but despite this were shorter (161.5cm, SD=8.7 vs. 165.1 cm, SD=8.5, t= 3.801, and p=0.000), had a lower weight (53.4kg, SD=12.6 vs. 57.0 kg, SD=13.2, z=-3.689, and p=0.000) had a smaller waist circumference (72.7 cm, SD=9.3 vs. 77.4 cm, SD=9.7), z=-5.306, and p=0.000). The percentage of rural adolescents with normal weight (80.3%) was higher than that of urban adolescents (69.0%), while fewer rural adolescents were overweight, pre-obese, and obese (approximately 4% vs. 5%, 4% vs. 6%, and 6% vs. 11%, respectively) compared to urban adolescents. In addition, fewer rural adolescents were underweight and pre-underweight (approximately 1% vs. 3%, and 5% vs. 5%, respectively).

Pearson's correlation coefficient showed that urban adolescents' eating behaviour had a very low correlation with eating intention (*r*=. 151), and was weakly associated with PBC over eating behaviour (*r*=. 224). Eating intention was reasonably correlated with attitude towards eating behaviour (*r*=. 491), but had a low correlation with subjective norm regarding eating behaviour (*r*=. 368), and PBC over eating behaviour (*r*=. 271). Attitude towards eating behaviour was reasonably associated with subjective norm regarding eating behaviour (*r*=. 411), and it had a weak correlation with PBC over eating behaviour (*r*=. 321). Subjective norm had a very weak association with PBC over eating behaviour (*r*=. 198).

For rural adolescents, the results indicated that only eating intention was significantly correlated with eating behaviour, but this association was low (r=. 234), while eating intention had a low correlation with their subjective norm regarding eating behaviour (r=. 241). Their attitude towards eating behaviour had a reasonable association with the subjective norm (r=. 453), and there was a weak low correlation with PBC over eating behaviour (r=. 354). The subjective norm regarding eating behaviour was reasonably associated with the PBC over eating behaviour (r=. 401).

The results indicated that as there were no high correlations between each components of the TPB, and the data were sufficiently reliable for regression analysis (Table 1).

Table 1

Pearson Correlation matrix between the TPB variables

	HEB	HEI	AT	SN	PBC
Urban adolescents (n=184)					
1. Eating behaviour (HEB)	-				
2.Eating intention (HEI)	-.151*	-			
3. Attitude toward eating behaviour (AT)	.126	.491**	-		
4.Subjective norm regarding eating behaviour (SN)	.080	.368**	.411**	-	
5.PBC over eating behaviour	.224**	.271**	.321**	.198**	-
Rural adolescents (n=152)					
1. Eating behaviour (HEB)	-				
2.Eating intention (HEI)	.234**	-			
3. Attitude toward eating behaviour (AT)	.089	.144	-		
4.Subjective norm regarding eating behaviour (SN)	.133	.241**	.453**	-	
5.PBC over eating behaviour	.115	-.019	.354**	.401**	-

**p<.01

The stepwise regression analyses of eating intention of urban adolescents on three constructs of the TPB (attitude, subjective norm, and PBC) showed that attitude toward eating behaviour, and subjective norm regarding eating behaviour together predicted 27% of variance (r^2=. 274). Whereas attitude towards eating behaviour predicted 24% of variance (p=. 000), and subjective norm regarding healthy eating added just another 3% (p=. 005). For rural adolescents, the results showed that only subjective norm regarding eating behaviour predicted 5.8% of variance only (r^2=. 058, p=. 003). The results of stepwise regression analyses of eating behaviour of urban adolescents are on two components of

the TPB (eating intention, and PBC) and showed that only PBC over eating behaviour predicted 5.0% of variance (r^2=. 050, p=. 002). However, rural adolescents' eating behaviour was predicted by only eating intention, which explained 5.5% of variance (r^2=. 055, p=. 004) (Table 2).

Table 2
Stepwise multiple regression analyses of the TPB variables on eating intention, and eating behaviour

Predictors	B	Beta	Estimate	R square	P value	95% CI
Urban adolescents						
Dependent variable:						
Eating intention						
Independent variables:						
Attitude toward eating behaviour	0.025	0.408	0.300	0.241	0.000	(0.222, 0.378)
Subjective norm regarding eating behaviour	0.109	0.200	0.109	0.274	0.005	(0.034, 0.184)
	Constant = 3.826					
Dependent variable:						
Eating behaviour						
Independent variables:						
PBC over eating behaviour	0.059	0.224	0.059	0.050	0.002	(0.022, 0.097)
	Constant = 32.907					
Rural adolescent						
Dependent variable:						
Healthy eating intention						
Independent variables:						
Subjective norm regarding eating behaviour	0.141	0.241	0.141	0.058	0.003	(0.050, 0.233)
	Constant = 33.805					
Dependent variable:						
Eating behaviour						
Independent variables:						
Eating intention	0.230	0.234	0.230	0.055	0.004	(0.076, 0.384)
	Constant = 29.078					

Discussion

The results of this study generally supported the constructs of the TPB, which were found to be predictive of factors influencing eating behavior. These findings are consistent with the predictive pattern demonstrated in some studies that have used surveys based on the TPB to identify its effect on dietary consumption in adolescents. They will be discussed as follows.

Predicting eating intention by attitude

In this investigation of the eating intention of Thai adolescents, attitude was the strongest predictor (24.1%) of eating intention in urban Thai adolescents, while attitude failed to predict rural Thai adolescents' eating intention. This was consistent with the results from numerous dietary studies using the TPB with adolescents. For example, a survey of college baseball players in USA showed that attitude was the strongest predictor of intention to eat a healthy diet, and explained 38% of the variance (Pawlak et al., 2009). According to some studies of the TPB's application to dietary behaviour in adolescents, the attitude construct was found to be one of the predictors of intention, but the percentage of prediction was less than the subjective norm, and PBC (Backman et al., 2002; Pawlak & Malinauskas, 2008; Pawlak et al., 2009). Overall, across studies attitude predicted approximately 25 - 40% of dietary consumption.

Attitude towards eating behaviour was described as the Thai adolescents' beliefs or feeling about positive and negative outcomes of their own performance eating behaviour and the evaluation of the importance of these outcomes. Therefore, one possible explanation for the effect of attitude towards eating behaviour on eating intention was that urban adolescents are likely to be concerned about positive outcomes of healthy eating behaviour and negative outcomes of unhealthy eating behaviour or the behavioural beliefs.

Although many studies of adolescents have shown intention towards specific dietary behaviour was predicted by attitude, there is no association between rural Thai adolescents' attitude and eating intention in this study. However, this is consistent with a study conducted in Thailand by Sangperm and colleagues (2008) who found that the healthy eating intention of urban Thai male adolescents was not associated with their attitude towards healthy eating behaviour.

Predicting eating intention by subjective norm

Both urban and rural Thai adolescents' eating intention in this study was predicted by their subjective norm, and explained 3.3 % and 5.8 % of the variance respectively. This is similar to the findings from other studies for example, Pawlak and colleagues (2009) results from their study of factors influencing intention to eat a healthy diet in college baseball players found that the subjective norm influenced intention to eat a healthy diet, and explained 29% of the variance. In contrast, other studies found that there was no association between subjective norm and dietary intention. For example, the study by Blanchard et al. (2009) showed that intention to eat fruit and vegetables in college students was not affected by subjective norm.

The results of the above studies are contradictory and as most of them have a similar cross-sectional design; their results may reflect the differences in the studies populations, including the age of the participants. However, the studies conducted with younger children and adolescents, compared to older adolescents are more likely to show that subjective norm was a predictor of their dietary consumption. In addition, many studies also indicated that older children or adolescents compared to younger children, are increasingly able to decide their food choices using cognitive motivational factors such as thinking about the advantages of eating healthy foods rather than being affected by social influences (Bissonnette & Contento, 2001; Fila & Smith, 2006). Therefore, subjective norm may not affect older adolescent's choice. For example, Wong and Mullan (2009) used the TPB model to predict the breakfast consumption of Australian university students aged between 17-30 years (mean age=19.46 years).

Predicting eating intention by perceived behavioural control

In this study, PBC did not contribute directly to the prediction of eating intention of either urban or rural Thai adolescents. This is inconsistent with the findings of major studies regarding dietary behaviours, as PBC is considered an important variable that is significantly associated with intention. For example, Pawlak and Malinauskas (2008) conducted a study to identify beliefs about eating 2.5 cups of vegetables a day and assessed how well these beliefs predict the intention to eat them. The findings illustrated that PBC was one of the predictors of intention, and explained 15.9% of the variance. Similarly, Pawlak et al. (2009) conducted a study to investigate factors important to college baseball players regarding the intention to eat a healthy diet using the TPB. They found that the PBC was the only predictor of intention to eat a healthy diet, and explained 27% of the variance.

According to the TPB, behavioural intention is influenced by attitude towards behaviour and subjective norm regarding behaviour. In order to account for behaviours not under complete volitional control, the behavioural intention is affected by external factors that are perceived to facilitate or impede the performance of behaviour and this factor is named the PBC (Ajzen, 1991). In contrast, both urban and rural Thai adolescents' eating intention was not influenced by the PBC construct. It seems to be that the eating intention of urban and rural Thai adolescents is independent of the PBC or external control factors. Thai adolescents' perception of eating behaviour may be that it is completely under their own control, and they can eat what they want to eat, and so it was not influenced by environment factors.

Predicting eating behaviour by eating intention

In this study, eating intention was a predictor of rural adolescents' eating behaviour, and explained 5.5% of the variance. Similarly, a cross-sectional study by Hewitt and Stephens (2007) conducted among Americans adolescents indicated that intention to eat a healthy diet had a positive correlation with healthy eating behaviour, explaining 39% of the variance. Furthermore, a study by Blanchard et al. (2009) showed that the fruit and vegetable intake of college students was predicted by intention (β=0.32, P<0.05) (Blanchard

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et al., 2009). The evidence from a meta-analysis of 185 studies using the TPB as a theoretical framework found that intention accounted for 25% variance in behaviour (Armitage & Conner, 2001).

Although there is strong evidence of a significant relationship between intention and dietary behaviour, it was quite surprising that this relationship was not significant in urban Thai adolescents. However, this finding is consistent with some other studies. For example, in a cross-sectional study by Fila and Smith (2006) the TPB was used to predict healthy eating behaviour in urban Native American adolescents aged 9-18 years and there was no relationship between healthy eating intention and healthy eating behaviour. This is consistent with the study by Sangperm et al. (2008), where the results showed that there was no association between intention and healthy eating behaviour in urban Thai adolescents.

In comparing the different results, it seems reasonable to suggest that some eating behaviours are under complete volitional control and that some behaviours can be influenced by a single internal factor or intention, and that some dietary behaviours are not under volitional control and are influenced by external control factors, and not only personal motivation. This is consistent with the general rule of the TPB that when behaviours pose no problems to volitional control, they can be predicted by intention with considerable accuracy (Ajzen, 1991). Therefore, it might be explained that urban Thai adolescents' eating behaviour could be driven by external factors, and that eating behaviour is not under complete volitional control behaviour in urban Thai adolescents. For rural Thai adolescents, eating behaviour was predicted by eating intention, and therefore the eating behaviour of Thai rural adolescents is under volitional control.

Predicting eating behaviour by the perceived behavioural control

In this study, PBC was not a predictor of rural adolescents' eating behaviour. However, the urban Thai adolescents' eating behaviour was predicted by the PBC, and explained 5.0% of the variance, and a similar study among New Zealand adolescents (Hewitt & Stephens, 2007) reported that the PBC was an important determinant of children's healthy eating. It appears that the urban Thai adolescents' healthy eating behaviour was influenced by external factors such as availability of foods, price, and time pressures and that is supported by a small number of studies using the TPB.

Theoretically, PBC plays a more important role in directly explaining adolescents' dietary behaviour as the TPB model suggests that intention will be the strongest predictor of behaviour when it is perceived to be under the individuals' volitional control, whereas PBC will be the greatest predictor when it is not considered to be under their volitional control (Ajzen, 1991).

Implications for practice

Rural adolescents would benefit from interventions designed to increase personal motivation and social approval by involving significant others such as parents and peers. Urban adolescents would benefit from interventions designed to increase facilitators and decrease barriers to healthy eating and increase self-efficacy to do this.

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The Future of Asia: Based on the Scenario of the Unified Korea

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I. Introduction

The whole global society is keeping an eye on Korea, the world's last remaining divided nation facing nuclear problems. This research focuses on the Korea-regarding policies of four powerful nations, The Unites States, China, Japan, and Russia, conditions for reunification arising from those policies, and the possible future that the reunification of Korea will bring if it comes true.

Both Koreas and the four nations have completed their power shift by 2012. In ROK, the president Park Geun-Hye, the first woman president of Korea, won the presidency on December 19, 2011. In DPRK, Kim Jong-Un became the supreme leader after the former leader, his father's death, and on April 13, 2012, Kim Jong-Un declared DPRK being one of Nuclear Club, stating that it is a state with nuclear weapons.

In 2012 presidential election of the United States, Barack Obama beat Mitt Romney by 3% and succeeded in gaining another 4 years of presidency. Now his government is working on holding China in check and the "Pivot to Asia" policy to put TPP (Trans-Pacific Partnership) under his leadership.

China, with Xi Jinping as its new leader, is opening the era of "China Dream" and "The Way to Powerful Culture. Japan pursues to be the number-two economy in the world as it had been for 42 years in the past, and believes the way to pursue its dream is to tilt itself toward the right. Russia wants to politically integrate with Ukraine and develop the Fareast Asia to make up for damages it suffers from excessive export of natural gas, political corruption and decreasing population.

The better future for Asia is possible when the whole Asia becomes "One Asia." Therefore, "One Korea" is inevitable for One Asia and globalized world.

II. U.S. policy toward the Korean Peninsula

1. The power game in 21st century

The power game among the world in 21st century is like a complicated, three-dimensional chess game. On the upper chessboard, the United States is likely to remain as a 'king' in the unipolar world with the strongest military power. However, on the middle chessboard, other countries follow a multipolar world where various countries serve as economical leaders in the world such as the U.S., Japan, and China.

On the lower chessboard lies a supernational world, which was brought by the information revolution that enabled the cost of intelligence transport and communication to decline drastically. Individuals and non-governmental factors can bring a dramatic change, either good or bad, to the whole world.

Today, more countries are facing more problems that are uncontrollable, even for countries with great powers. This is because power is no more wielded by a single or a few powerful nations but multiple nations or many factors. Due to the information revolution and globalization, the United States can't solely bring solutions to global issues any more, like it had in the past.

2. Smart Power for U.S. foreign policy

Hillary Rodham Clinton popularized the term 'Smart Power' during her Senate confirmation hearing for the position of Secretary of State as she claimed Smart Power to be a core principle of Obama's foreign policy strategy. And CSIS suggested five critical areas that U.S. should focus on as follows:

First, the United States must reinvigorate the alliances, partnerships, and institutions that serve our interests and help us to meet twenty-first century challenges.

Second, elevating the role of development in U.S. foreign policy can help the United States align its own interests with the aspirations of people around the world.

Third, bringing foreign populations to our side depends on building long-term, people-to-people relationships, particularly among youth.

Fourth, continued engagement with the global economy is necessary for growth and prosperity, but the benefits of free trade must be expanded to include those left behind at home and abroad.

Fifth, energy security and climate change require American leadership to help establish global consensus and develop innovative solutions.

3. Obama's Policy toward the Korean peninsula

Obama's policy toward DPRK has been in the context of security and denuclearization of DPRK rather than a part of Pivot to Asia movement. Obama had been maintaining a 'strategic patience' toward DPRK ever since his first term, but it turned out that his attempt to wait was not effective. However, in the Nuclear Security Summit held in Seoul, Obama expressed his views about DPRK's nuclear test, saying that the rocket launch plan, which is widely believed to be a cover for a long-range missile, requires a "clear, firm, precise" response. This shows a higher chance of changing in his attitude toward DPRK's nuclear issues, from a strategic patience to a strategic engagement. This change is likely to reveal when the United States ends Afghanistan issues and is ready to focus on East Asia.

III. China's polity toward the Korean Peninsula

China's Korea-regarding policy is based on 'maintaining peace on the Korean Peninsula for modernization of China' and 'improving China's influence over the Korean Peninsula to step forward to a more powerful nation. Xi Jinping visited South Korea in July 2013, a short time after his inauguration. His visit brought awareness of opportunities and strengthened the mutual strategic trust to both China and Korea.

1. Relationships with South Korea

It was hardly thought that China and ROK would be able to build a close relationship so fast when they started diplomatic ties On August 24, 1992. Once unforgettable enemies during the Korean War, the two nations now became indispensable partners to each other. There is a expression which describes the relationship between China and South Korea. They call each other 'a country where we send the most of our children to.' The statistics

shows that in 2012, China sent 58 thousand students to South Korea, and Korea sent 63 thousand to China. The economic statistics also proves their improved relationship. In 2011, China was South Korea's number one trade partner, which means that volume of trade with China was over twice that with Japan and the United States, the second and third biggest partner in South Korea's trade market. But these friendly partners in economy-wise still have a long way to go in the aspect of diplomacy.

2. Hallyu in China

Hallyu is another big factor that contributed to the growth of relationship. Hallyu in China started with Korean pop songs and TV series. In fact, the word "hallyu" itself, meaning Korean trend, first derived from China. Now hallyu in China has spread to various fields including food, games, animation, characters, sports, cosmetics and clothing, originating a new term 'hanban,' meaning Koreanish.

3. Relationships with North Korea

China's polity toward the Korean Peninsula can be summarized as:

First, China wants to gain recognition that it has an equivalent influence and say as the U.S. on the Korean Peninsula.

Second, the main aim for China's policy must be the maintenance of the status quo and peace on the peninsula, balancing friendly relationships with both Korea and avoiding any outbreak situations emerging from nuclear threats.

In the process of achieving these aims, China sees that the world is facing a transition period from a 'one superpower and many strong nations' system to 'U.S.-China bipolar' system. Therefore, the peace on the Korean Peninsula must not be sought by U.S. military and political influence alone, China claims.

IV. Japan's policy toward the Korean Peninsula

Abe Shinzo of the Liberal Democratic Party won the 2012 general election by a great majority, 249 of 480 seats. One international studies expert in South Korea interprets this enthusiastic support toward the LDP as a national nostalgia about 'powerful Japan,' which used to be the number-two economy in the 20th century.

Abe Shinzo as a LDP candidate came up with very nationalistic pledges: making amendments to the constitution to claim the self-defense right, making about-face on the Murayama and Kono Statement of apology, upgrading the defense measures of Dokdo/ Takeshima and Senkaku/Diaoyu Dao Islands, visiting Yasukuni Shrine and so on.

The Japanese government has been claiming that Dokdo/Takeshima Island belongs to their territory, which they say had been transferred to them according to the doctrine of terra nullius. Abe Shinzo takes a very strong and active attitude about this territorial dispute. The Japanese government defines the island as its territory in the diplomatic blue paper and defense white paper in 2012. In response to this, Lee Myeong-bak, the South Korean president at that time, visited the island for the first time as a sitting president. Along with

the hostile wartime sentiment between the two countries, the two countries are facing greater strain and confrontation day by day.

V. Russia's policy toward the Korean Peninsula

Wharf No. 3 of Rajin Port has been built with success in the DPRK. The building of the wharf pursuant to the plan for cooperation between the DPRK and Russia provided another foundation for making a positive contribution to boosting the friendly and cooperative relations between the two countries and economic and trade relations among countries of Europe and Northeast Asia. According to experts, these advantages have Rajin – ice-free port on the eastern coast of North Korea with the developed infrastructure, which uses Russian standard gauge with a high degree of security for shippers and benefits for entrepreneurs.

As Putin's re-elevated to the presidency, he set a goal of enhancing its influence over Asia by serving as a mediator on the DPRK's nuclear issues. Following the collapse of the Soviet Union, the newly-born Russia's first approach about Korea was being friendly to the South rather than the North, which turned out to be a huge diplomatic failure in that Russia had been totally excluded from the DPRK's initial nuclear decisions and at the same time had failed in drawing ROK's economic cooperation. Taking a lesson from this failure, Russia has completely turned its back on ROK since 1994 and has been focusing on restoring relations with DPRK. By strengthening its relationship with its neighbor North Korea, Russia is trying to enhance its position in Asia.

On the other hand, South Korea's position in Russia is very limited. However, if the inter-Korean railway (the Gyeongui line linking Seoul and North Korea's Shinuiju near the Chinese border) is restored, the Trans-Siberian railroad (TSR) is likely to be linked with the inter-Korean railroad. Should this happen, trilateral economic cooperation including Russia, the ROK, and the DPRK would gain a new momentum. Russia is willing to contribute to the Korean peace process through its service as a disinterested broker and facilitator for peace and security in and around Korea, as a champion for a multilateral security mechanism in Northeast Asia, and by pushing for multilateral economic cooperation projects, most notably the iron silk road plan linking the Trans Siberian railroad to Trans Korean railroads. And Russia is keen on these 'iron silk roads' projects.

VI. South Korea's policy toward North Korea

1. Trust-Building Process on the Korean Peninsula

Park Geun-hye seeks for building and improving trust between North and South during her term in office, saying that the actual denuclearization of North Korea is something that cannot be achieved in such a short time.

Also she explained that the overall process for reunification must be as follows: peaceful maintenance of divided Korea (No provocations from North), building trust(phased improvement the current situation with a scarce trust), and denuclearization and opening of North/establishment of peace structure.

2. Hallyu in North Korea

Even in an isolated and closed society like North Korea, Hallyu exists. The North Korean government strictly bans Hallyu from its people, claiming that it spreads a 'rotten lifestyle' that will ruin their future, but even so, a number of cases of North Korean people who were punished for watching South Korean TV or listening to K-pop are being reported.

This 'admiring the South' trend is not irrelevant to the corruption of distribution system due to food shortage and economic crisis in North Korea. The more Hallyu and South Korean culture pervades in North Korean society, the less the ideological difference between the North and South will become, and the stronger the longing for reunification will be. Can Jasmine Revolution be seen in North Korea as well? The answer depends on Hallyu.

3. Military Power Balance on the Korean peninsula

The North and South have been in a fierce competition over sixty years since the Armistice Agreement on July 27, 1953. As a result, the North became a military power nation while the South developed its economy dramatically.

The economic difference between the two is very striking; the GDP of South Korea in 2011 was 37.5 times more than that of North Korea. It is needless to compare the two nations on the economic wise any more.

But when we compare the military power of the North and South, the North exceeds in almost every aspect of military strength, including the number of troops, the amount of artillery, ships, submarines and planes. Experts estimate that aerospace technology of North Korea is 5~10 years ahead of South Korea. It's evident that the South needs something to overcome the fear from the North's military superiority and keep the equilibrium.

VII. Future of the United Korea

1. What Koreans think about reunification?

In a survey conducted in South Korea, it turned out that 74.7% of respondents said that they feel hostility toward Kim Jong-Un's rule. It is a common neither thought shared by most South Koreans that they show sympathy for North Korean people suffering from dictatorship, but they can't bear out nor forgives the dictator Kim. In the same survey, 48% answered yes to the question asking whether they think that reunification is necessary and 23% said reunification is an absolute need. With more than majority of people thinking positively about reunification, however, the number of people who don't want the United Korea also increased by 3.5% compared to the previous year. The reasons for their pessimism toward reunification are mostly related to social chaos and financial burdens.

Then, what do North Koreans think about reunification? When asked this question to North Korean defectors (North Koreans who escaped to the South), 55.5% answered that they view the South as an object of cooperation for the North. However, 20% more people worried about the possible armed provocation from the South, showing that many people in both the North and South feel insecure about the worsened relationship between

the North and South. On the other hand, North Koreans' interests and admiration toward the South turned out to be growing than ever. In fact, 85% of defectors polled said that had been in access to TV shows or music from the South back in their home.

From this survey derives at least one common agreement: just being exposed to each other's cultures is a way of contributing to understanding of each other and reunification eventually.

2. Future prospects for the United Korea

When would the United Korea come true, and how would its financial capability be?

The Institute of World Economy and International Relations (IMEMO), Russia's foremost national policy think tank, takes the imminent collapse of the North Korean regime as a given in a special report published recently. IMEMO concludes that Korean reunification led by South Korea coincides with Russia's national interests. IMEMO believes the 2012-2020 transfer of power from North Korean leader Kim Jong-il to his son Jong-un will trigger the collapse of the North. The leadership crisis will lead to a power struggle between "bureaucrats" with foreign business connections and "military and security officials" with no outside links, the report said.

IMEMO forecast reunified Korea to see annual GDP growth of 3.5 percent before reunification (2011-2020), 2 percent during the process of reunification (early 2020s) and 5-6 percent in the final stage (late 2020s). The think tank projected that reunification would lay the groundwork for a new leap for the Korean economy. The economic development of reunified Korea would have a strong correlation with the formation of a "three-sided" system in the region that includes China and Japan, according to the report. This would boost trade with other regions. By the early 2020s, North Korea's rapid economic development would lead to a trade deficit, but reunified Korea would be able to achieve a trade surplus by the late 2020s, the report added.

Hyundai Research Institute (HRI) has also predicted the future of the Unified Korea in its recent report, based on two different scenarios, a single economic zone on the Korean Peninsula and expanded Eurasian economic zone. In the first scenario, although the South Korean economy may suffer a temporary setback due to the burden of the cost for unification, the potential growth rate is expected to rise by 1.0%p in the mid and long term due to the increasing capital goods-oriented production and investment for the development of North Korea, as well as general productivity enhancement. S. Korea's real GDP in 2050 is estimated to reach US$4.8 trillion and GDP/capita of US$95,000. N. Korea is expected to achieve rapid economic growth in the short run and then maintain a higher level of growth than South Korea in the mid and long term due to the fast improving labor productivity and heightening industrial structure. As a result, it is forecast to achieve real GDP of US$510 billion and GDP/capita of US$21,000 by 2050. The unified Korea, therefore, is forecast to achieve real GDP/capita of around US$70,000 and real GDP of US$5.3 trillion, ranking as the 12th economic power in the world.

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Effect of Use and Gratifications Theory to Knowledge Sharing in Social Media: Evidence from Officers in Thailand

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Abstract

The objective of this research is to study effect of the use and gratifications theory, which consist of 4 aspects including information seeking, socializing, entertainment, and status seeking, to knowledge sharing in social media. Information seeking is the process or activity of attempting to obtain information in both human and technological contexts. Socializing is a term to refer to the lifelong process of inheriting and disseminating norms, customs and ideologies, providing an individual with the skills and habits necessary for participating within his or her own society. Entertainment refers to the way social media serves as means for entertaining and escaping pressure. Moreover status seeking describes how sharing news in social media helps one to attain status among friends or colleague. The sample of this research is 374 officers in Bangkok, Thailand. The research instrument is a questionnaire consisted of 5 demographic questions and 15 5-likert-scale questions to use and gratifications theory and knowledge sharing. While the usage statistical techniques are frequency, percentage, mean, standard deviation, and structure equation model. IBM SPSS Statistics 22 and IBM SPSS AMOS 22 Trial Version were applied as calculated instrument. The research found that most of participants are female, undergraduate student, and like to knowledge sharing via Facebook. The results also revealed that all aspects, but status seeking, were significant positive determinants to knowledge sharing intention. The factor loading for all items exceed level of 0.7. Moreover, the AGFI, GFI, NFI, and CFI are more than 0.8.

Keywords: Use and Gratifications Theory, Knowledge Sharing, Officer in Thailand

Effect of Use and Gratifications Theory to Knowledge Sharing in Social Media:
Evidence from Officers in Thailand

Introduction

Social media have changed the way people interacting with each other and with companies. The rise of Web 2.0 has enabled consumers to actively act and react on what companies are doing, without being dependent on third parties for media-access – anyone with a smartphone can potentially reach a worldwide audience. Moreover, consumers have shifted their information seeking behavior with regard to products and services from offline sources to electronic word-of-mouth sources (eWOM), like social networking and review sites. While traditional commercial information, such as advertisements and promotion, is become decreasingly effective, consumers tend to increasingly rely on peer consumer opinions available online (Dijkmans, Kerkhof, and Beukeboom, 2015)**.**

The U&G theory explains what social and psychological needs motivate audiences to select particular media channels and content choices, as well as the subsequent attitudinal and behavioral effects (Diddi and LaRose, 2006). Several researches applied U&G theory to measure something and used various aspects to measure U&G. Luo, Chea, and Chen (2011) used information seeking, interpersonal utility, entertainment, pass time, and convenience. Moreover, Kim (2014) used expression seeking, information seeking, socialization seeking, and entertainment seeking. However, this research used the guidelines of Lee and Ma (2012) mentioned that U&G consisted of information seeking, socializing, entertainment, and status seeking

As a result, many research applied the 4 aspects in measure social network. Ancu & Cozma (2009) used Information seeking to find political information. Furthermore, Park et al. (2009) also find information about events on-off campus by using Information seeking. Raacke and Raacke (2208) used Socializing and found that users used social network to keep contact with their friends. Harisdakis and Hanson (2008) found that YouTube was opportunity channel to have interpersonal motives. As for entertainment, Hanson and Haridakis (2008) found that socially active, young males used to fulfill entertainment needs and Nov et al. (2010) proposed enjoyment as motivation for users to share photos within an online community. Finally, status seeking was used in Tufekci (2008) to explain that persons decided to present themselves through user profile and LaRose and Eastin (2004) also found that social status was one of the prime motivators driving Internet usage.

There are different meanings in knowledge sharing because of different discipline and different traditions (Wang and Noe, 2010), however, this research pointed to online knowledge sharing. Online social media have become increasingly popular in the last few years. The rapidly increasing use of social media for sharing information has also triggered a great deal of academic interest (Osatuyi, 2013). Hence, knowledge sharing plays an important role in converting social knowledge into individual knowledge, and public knowledge into private knowledge. Moreover, Chiu, Hsu, and Wang (2006) found that social interaction and socializing were related to knowledge sharing behaviors.

Due to above reasons it can construct 4 hypotheses consisting of

H1:Information seeking will be positively associated with users' intention to share knowledge in social media

H2:Socializing will be positively associated with users' intention to share knowledge in social media

H3:Entertainment will be positively associated with users' intention to share knowledge in social media

H4:Status seeking will be positively associated with users' intention to share knowledge in social media

The Conceptual Framework as below;
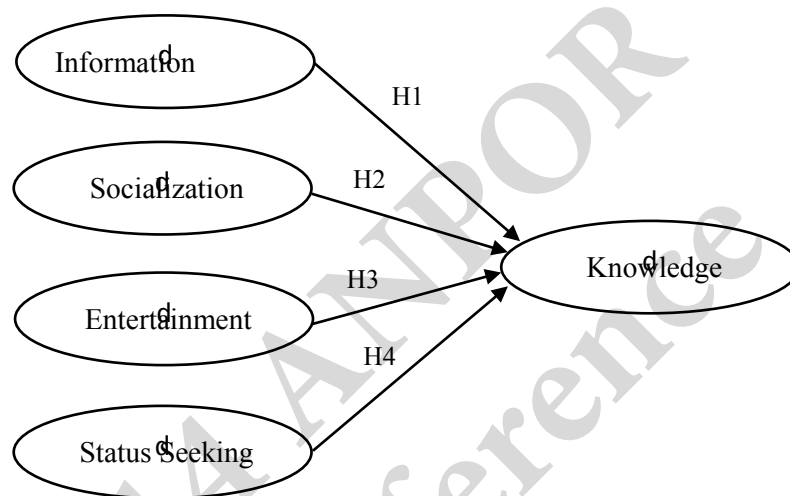
Research Methodology

To validate research conceptual framework, a survey research with quantitative approach, collected by questionnaires, was used for this study. The survey targeted a sample of 374 Bangkok people who were used social media to share knowledge. The questionnaire was divided into 3 parts: (1) general data of respondents, (2) social media usage behavior, and (3) question to measure use and gratifications theory and knowledge sharing. The questions in part 3 were 5-level in Likert's Scale from strongly disagree to strongly agree.

Reliability analysis was conducted by 30 samples test with Cronbach's Alpha. It was found that Cronbach's Alpha range from 0.77 to 0.84 which more than 0.70 suggested by Nunnally (1978)

It was used frequency and percentage to calculate in part 1 and 2 while Structural Equation Model: SEM was used for part 3. In this study, structural equation model had 5 latent variables and 15 indicators. Data analysis was preceded in two stages; i.e. measurement model and structural model. Both measurement model and structural model were assessed using AMOS 22. Model estimation was performed using the maximum likelihood estimation (MLE) approach.

The first of stage of SEM was measured validity and reliability of each construct by confirmatory factory analysis (CFA). Hair et., al. (2010) mentioned that factor loading greater than 0.50 was considered significant, composite reliability (CR) greater than 0.60, and average variance extracted (AVE) greater than 0.50 was used to measure validity.

Results

1. In result of general data, it was found that most of them were female (77.81%), were 21 – 30 years old (60.70%), graduated in bachelor degree (63.64%), worked in staff position (65.24%), and had average income per month at 10,001 – 20,000 THB (40.91%). See Table 1

Table 1
Frequency and Percentage of General Data

Description	Frequency (n=374)	Percentage
Gender		
Female	291	77.81
Male	83	22.19
Age		
21-30 years	227	60.70
31-40 years	113	30.21
41-50 years	26	6.95
More than 50 years	8	2.14
Education Level		
High school or less	5	1.34
Associate degree	21	5.61
Bachelor's degree	238	63.64
Master's degree	103	27.54
Doctoral degree	7	1.87
Position		
Staff	244	65.24
Sales	63	16.84
Manager	18	4.81
Assistant	9	2.41
Secretary	3	0.80
Other	37	9.89
The Average Income per Month		
Less than 10,000 Baht	12	3.21
10,001-20,000 Baht	153	40.91
20,001-30,000 Baht	145	38.77
30,001-40,000 Baht	48	12.83
40,000-50,000 Baht	11	2.94
More than 50,000 Baht	5	1.34

2. In result of social media behavior, it was found that most of them used social media several time at day (68.72%), used social media 1 – 2 hours per time (51.34%), used social media for watch friend's status/news (42.25%), added 10 - 20 people without knowing who they are (46.52%), joined more than 10 groups on social media (49.47%), and changed profile picture every month (40.34%). See Table 2

Table 2
Frequency and Percentage of Social Media Usage Behavior

Description	Frequency (n=374)	Percentage
How often do you use Social Media?		
Several time a day	257	68.72
Once a day	82	21.93
Several time a week	35	9.36
How many hours do you use Social Media in each time?		
Less than 1 hour	56	14.97
1 – 2 hours/time	192	51.34
3 – 4 hours/time	83	22.19
More than 5 hours/time	43	11.50
What is the main reason for using Social Media?		
Watch friends' status/news	158	42.25
Share photo	101	27.01
Read fanpages	63	16.84
Share personal views	34	9.10
Chat with friends/family members	14	3.74
Share information- eg. News or messages	3	0.80
Play games	1	0.27
How many friends have you added without actually knowing who they are?		
None	3	0.80
Less than 10 People	88	23.53
10-20 People	174	46.52
More than 20 People	109	29.14
How many group have you joined on Social Media?		
None	0	0
Less than 5 Groups	84	22.46
5-10 Groups	105	28.07
More than 10 Groups	185	49.47
How often do you change your profile picture?		
I don't change my profile picture	0	0
2-3 times/per week	4	1.07
Every week	81	21.66
2-3 times/per month	137	36.63

Description	Frequency (n=374)	Percentage
Every month	151	40.34
Other	1	0.27

3. The validity and reliability measurement of this study, it was found that factor loading range from 0.700 – 0.864, CR range from 0.779 – 0.849, and AVE range from 0.540 – 0.654. Therefore, factor loadings were very significant; CR and AVE were also accepted, as shown in table 3.

Table 3
Factor Loading, Composite Reliability, and Average Variance Explain

Construct	Items	Factor Loading	CR	AVE
Information Seeking	It helps me to store useful information	0.736	0.824	0.609
	It is easy to retrieve information when I need	0.796		
	To keep up to date on the latest news and events	0.808		
Socializing	I can interact with people when sharing news	0.810	0.829	0.619
	To keep in touch with people	0.842		
	It is effective to exchange ideas with other people	0.701		
Entertainment	It helps me pass time	0.825	0.845	0.645
	To combat boredom	0.799		
	It helps me to relax	0.785		
Status Seeking	It helps me feel important when sharing news	0.749	0.779	0.540
	It helps me to gain status when sharing news stories	0.755		
	It helps to look good when sharing news stories	0.700		
Knowledge Sharing	I intend to share news stories in social media in the future	0.836	0.849	0.654
	I expect to share news stories contributed by other users	0.864		
	I plan to share news stories in social media regularly	0.719		

Moreover, the results of the overall model fit indices of initial model is shown in table 4. It was found that the model fit fairly but CMIN was more than 2, AGFI was shown less than 0.90, and RMSEA was more than 0.05. After the model was adjusted, the results of overall model fit indices of revised model is shown in table 5. Almost estimators were in significant acceptable value expect sig. of chi-square. However, Hair et., al. (2010) mentioned that if large sample was used in research, it can ignore this rule.

Table 4
The Results of Initial Model

Chi-square /df	CMIN	GFI	AGFI	CFI	RMSEA
242.918 / 80	3.036	0.923	0.884	0.938	0.074

Table 5
The Results of Revised Model

Chi-square /df	CMIN	GFI	AGFI	CFI	RMSEA
126.997 / 74	1.716	0.957	0.931	0.980	0.044

    4. The structural models showed good fit indices (x^2/df = 1.716, GFI = 0.957, AGFI = 0.931, CFI = 0.980, RMSEA = 0.044), the standardized path coefficients were shown in picture below. Moreover, the results of hypotheses testing show in table 6. Information seeking affected the positive results to knowledge sharing (H1: β = 0.160, p = 0.015) while socializing affected the positive results to knowledge sharing (H2: β = 0.303, p = 0.000). As for entertainment, it affected the positive results to knowledge sharing (H3: β = 0.188, p = 0.004) and status seeking affected the positive results to knowledge sharing (H4: β = 0.154, p = 0.017).
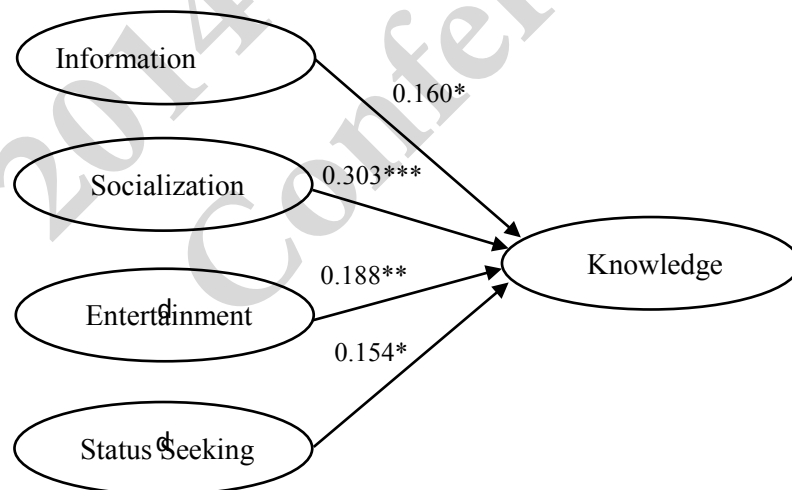
Table 6

Beta, p-value, and Results of Path Relationship

Path Relationship	Standardized Estimate	p-value	Results
H1: Information Seeking → Knowledge Sharing	0.160	0.015	Accept
H2: Socializing → Knowledge Sharing	0.303	0.000	Accept
H3: Entertainment → Knowledge Sharing	0.188	0.004	Accept
H4: Status Seeking → Knowledge Sharing	0.154	0.017	Accept

Conclusion

It was found that most of them were female, were 21 – 30 years old, graduated in bachelor degree, worked in staff position, and had average incomes per month at 10,001 – 20,000 THB. It was also found that most of them used social media several time at day, used social media 1 – 2 hours per time, used social media for watch friend's status/news, added 10 - 20 people without knowing who they are, joined more than 10 groups on social media, and changed profile picture every month. It was found that factor loading were very significant, CR and AVE were also accepted. The results of hypotheses testing show that all of use and gratifications theory affected the positive results to knowledge sharing significantly.

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Factor affecting buying decision process life Insurance for elderly of Government officials in Pranburi Prachuap Khiri Khan

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Abstract

This research aimed to study factors affecting decision to purchasing life Insurance for elderly of government officers in Pranburi Prachuap Khiri Khan. According to group sample, there were 400 government officers in Pranburi Prachuap Khiri. Questionnaire was used as a main tool to collect data. For data analysis, the researcher applied both descriptive statistics including percentage, mean, and standard deviation, and inferential statistics which are Independent Samples t-test and One-way ANOVA

The results showed that age affects the decision to purchase life insurance for elderly of government officers in Pranburi. Prachuap Khiri Khan. Post-purchase Behavior Different status affects the Purchase Decision life insurance elderly aware of the problem. Assessment and selection education affects the Purchase Decision life insurance for the elderly, Evaluation of Alternatives and Purchase Decision. Salary affects the Purchase Decision life insurance for the elderly aware of the problem. Evaluation of Alternatives and Purchase Decision and number of family members affects the Purchase Decision life insurance for the elderly aware of the problem, Search and Post-purchase Behavior.

Keyword: purchasing process, life Insurance for elderly

Introduction

Access to older ages is that everyone cannot be avoided. In general the elderly is aged 60 years and over. The elderly have health problems than other ages. It was found that most seniors have health problems from chronic illness. In addition, psychological and emotional problems of the elderly are caused by degenerative changes. Aging problem is an inevitable risk, which elderly could not ignore. Moreover, apart from the aging problem, accidental risk possibly leads to complication and will take longer period to heal.

Life insurance is an alternative to reduce trouble in the time of unexpected happens. Since the insurance will be paid to compensate for the loss of revenue that comes from death, dismemberment, disability, loss of income of the elderly and reducing the burden on family members. In addition, the insurance is also useful to create financial security for themselves and their families.

Life Insurance is widely popular in the professional field. Life insurance will provide benefits to the insured in the protection of life and property directly. Life insurance also has a huge role in economic and social development of the country. This is evident from the state policy that encourages people to do more insurance by allowing the insurance premium from 10 years and more to be tax deductible (Revenue Department, 2013).

Insurance companies have a different life insurance contract for the elderly to compete, which is good for the customer to compare benefits or condition that meets the requirements. Moreover, for the elderly, life insurance is not required medical examination or health problems. As a result, insurance companies are interested in making a market for this type of insurance (Insurance Baby Boomer, 2012).

Buying decision process

A buying decision process (or cost–benefit analysis) describes the process a customer goes through when buying a product. This buying decision model has gone through lots of interpretation by scholars. Although there is a variation of the models, a common theme of five stages in the decision process was introduced by John Dewey (2007). The stages are:

1. Problem/Need recognition
2. Information search
3. Evaluation of alternatives
4. Purchase decision
5. Post-purchase behavior

These five stages are a good framework to evaluate customers' buying decision process. However, it is not necessary for customers to get through every stage, nor is it necessary that they proceed in any particular order. For example, if a customer feels the urge to buy chocolate, he or she might go straight to the purchase decision stage, skipping information search and evaluation.

Research Objective

To study the factors those influences the buying decision process life insurance of the senior officers in the district of Pranburi, Prachuap Khiri Khan Province.

Research Methodologies

The quantitative data were collected by questionnaire survey by accidental sampling to 400 government officers in Pranburi, Prachuap Khiri Khan. The questionnaire was reviewed and resulted in the IOC index in every item greater than 0.6. A tryout with a sample of 30 government officers showed that the total value of all sets in order to test the reliability by coefficient alpha (Alpha Coefficient) of Cronbach (Cronbach's Alpha Coefficient) variable equaled to 0.868 which greater than the minimum requirement for the test at 0.80 (Malhotra, 2004). A Secondary data is collected from textbooks, academic journals, statistical data from government agencies and public sectors. In addition, reviewed articles and seminar are also used.

The data have been analyzed using SPSS to analyze the descriptive analysis, and inferential analysis.

Results and Conclusion

Part 1: Results of the exploration of the government official demographic factors

Personal characteristic of the 400 respondents of a government official in Pranburi, Prachuap Khiri Khan is female with the percentage of 68.8 The largest age group is between 51-60 years with the percentage of 33.0 According to the results 65.0% had an undergraduate and 52.5% are the married. The highest monthly income level is between 10,001-20,000 baht per month with 33.8%

Part 2: Results of buying decision process

Most of the samples had effect of buying decision process in the mush with the mean was 3.59 and Product, Price, Place, Promotion level decisions at a high level.

Table 1
Summary of Problem/Need recognition

Problem/Need recognition	Level of Perceived		
	Mean	S.D.	Implication
You decide to buy life insurance for elderly with incomes rise.	3.35	0.84	Middle
You decide to buy life insurance for elderly aware of health issues that may arise in the future.	3.76	0.89	Much
You decide to buy life insurance for elderly looking to build a stable life.	3.78	0.89	Much
Total	3.63	0.73	Much

Table 2
Summary of Information search

Information search	Level of Perceived		
	Mean	S.D.	Implication
You will learn the details of various company	4.05	0.88	Much
You will get information on life insurance elderly of various advertising media.	3.61	0.81	Much
You will compare coverage and benefits to each company before making a purchase.	4.00	0.91	Much
Total	3.89	0.69	Much

Table 3
Summary of Evaluation of alternatives

Evaluation of alternatives	Level of Perceived		
	Mean	S.D.	Implication
Image and credibility of the insurance companies influence the decision to buy insurance.	4.26	0.81	Much
You can buy more life insurance contracts that give the benefit of the insured.	3.94	0.82	Much
Reputation and financial stability of the insurance company are affecting the decision to buy insurance.	4.09	0.83	Much
The speed of Claims Preparing affects the decision to buy insurance.	4.13	0.84	Much
Attitudes to the insurance companies involved in the insurance policy.	3.82	0.79	Much
Total	4.05	0.65	Much

The personal factors		The buying decision process of life Insurance for elderly				
		Problem/Need recognition	Information search	Evaluation of alternatives	Purchase decision	Post-purchase behavior
	Hypothesis testing	H_1		H_1	H_1	
The number of family members	One-way ANOVA	**0.000***	**0.020***	0.059	0.195	**0.000***
	Hypothesis testing	H_1	H_1			H_1

* H1 accepted as statistically significant at the 0.05 levels.

Age in the decision process for the post-purchase behavior is the level of statistical significance was 0.023, which is less than the significance level of 0.05, that is, reject the null hypothesis (H0) and accept the minor hypothesis (H1). In summary, the hypothesis that personal factors related to age differences in the impact on the buying decision process life insurance for elderly is the post-purchase behavior.

Education levels In the Evaluation of alternatives and Purchase decision are the statistical significance level were 0.000, 0.003, respectively, which is less than the significance level of 0.05, that is, reject the null hypothesis (H0) and accept the minor hypothesis (H1). In summary, the hypothesis that personal factors related to education level differences in the impact on the buying decision process of life Insurance for the elderly, are the Evaluation of alternatives and Purchase decision.

Revenues in the buying decision process of Problem/Need recognition. Evaluation of alternatives And Purchase decision are the statistical significance level were 0.001, 0.000, 0.000, respectively, which is less than the significance level of 0.05, that is, reject the null hypothesis (H0) and accept the minor hypothesis (H1). In summary, the hypothesis that the personal factor in the revenue side has a different impact on the buying decision process of life Insurance for elderly aware of the problem. Evaluation of alternatives and Purchase decision are different. The results are consistent with the research of Arun Wisutpattanakulnet (2007) have studied the subject Factors affecting the decision to purchase a life insurance policy through the banking industry found that age, education, monthly income. Affect the decision to purchase life insurance policies.

The status of the buying decision process for the Problem/Need recognition is the level of statistical significance was 0.032, which is less than the significance level of 0.05, that is, reject the null hypothesis (H0) and accept the assumption secondary (H1) By the assumption that Personal factors related to status differences in the impact on the buying decision process of life Insurance for elderly aware of different issues. The results are consistent with the research of Juthamas Wachitapohol and Kraichit Suttamung (2013) studied the decision was made life forms. Bancassurance Found that people in different status affects the decisions made in the form of life insurance. Bancassurance People in Bangkok are different.

The number of family members in the buying decision process of Problem/Need recognition. The Problem/Need recognition, Information search and Post-purchase behavior a level of significance equal to 0.001, 0.000, 0.000, respectively, which is less than the significance level of 0.05, that is, reject the null hypothesis (H0) and accept the assumption

secondary (H1) by the assumption that the personal factors in the number of family members have different effects on the buying decision process of life insurance for elderly aware of the problem. The Problem/Need recognition, Information search and Post-purchase behavior are different. The results are consistent with the findings of Sirirote Wongkajang (2011) "The study Factors affecting the decision of government officials the insurance in Maejam, Chiang Mai" found that the insurance will ensure the stability and family life.

Recommended for public

The study found that the people have to focus on life insurance increase (Sirirote Wongkajang, (2011) indicated by the continued growth of life insurance business and the increase in life insurance policies, so the results of this study. People can apply to make their decisions based on their own life insurance policy need.

Suggestions for the industry

The insurance industry can lead the study of factors that influence the buying decision process life insurance for elderly. To define strategies that meet the needs of their customers, whether the return, facilitate the payment of insurance premiums, the speed of Claim.

Suggestions for further research

The study of factors that affect the buying decision process of life insurance for elderly government officials in Pranburi, Prachuap Khiri Khan Province may have other factors that affect the buying decision process. With a variety of life insurance for elderly the further research should study the other factors that may affect the buying decision process of life insurance.

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The study on factors affecting decision of Thai tourists travel to Japan

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Abstract

This research aims to study the factors that affect the decision of Thai tourists visit Japan and to compare demographic factors, age, occupation, level of education and income affect the decision of Thai tourists to Japan. The sample used in this research as tourists returning from Japan to Thailand. Instruments used in the study were 400 completed questionnaire, were used in data analysis were percentage, standard deviation, frequency, descriptive statistics, inferential statistic, statistics and chi – square test. The results showed that the Thailand tourists travelling to Japan, mostly female between 31-40 years with a bachelor's degree. The average monthly income of 10,001 – 30,000 baht by the travel behavior of international travelers to Japan and the objective is to explore the nature of travel with tour group. Travel as a family, time travel 5 days a charge for the tour around 40,001 – 50,000 baht region to travel mainly in the Kanto region, the airline operated services mainly Thai airways factors that affect travel decisions to Japan of Thailand tourist is historical temples, palace castles and natural attractions such as mountains, islands, travel guide health such a hot massage and exploring the arts, such as museums, galleries, respectively average at agreed level and the factors that cause travelers to Japan by the motive is to open to tourists enter the country without a visa within the period specified. Experience in tourism tourist attraction in Thailand travel to the brain and body to relax. And innovative technologies respectively with the average at the agreed level and moderate level of statistical analysis showed that older tourists from Thailand education. The average monthly income differently. Affect the behavior of tourists on a trip to Japan, such as the selection of different airline service may be different due to a different or time period to do so well.

Keywords: *Thai Tourist, travel to Japan*

The study on factors affecting decision of Thai tourists travel to Japan

Introduction

Statement of the problems

Japan is island country in East Asia Region, located in Pacific Ocean. The area of Japan is 377,930 square kilometers. Japan has about 3,000 islands. The biggest Island is Honshu, Hokkaido, Kyushu and Shikoku as follows. Almost of Japan Island is archipelago and mountain which all of that is volcano such as Fuji volcano, which is the tallest and most beautiful in Japan. Japan's population is most number 10 in the world about 128 million people. The city of Japan is Tokyo, when we plus the area of perimeter it's became to the biggest area in the world. Nowadays Japan is the country of leader in economic and also Japan is the member of UNESCO, G8, OEDC and APEC. Japan awakened to co-ordinate with any country to solve the international problem and Japan is the good standard of living country.

Japan Tourism shown that the number of tourism growth is highest in August 2013 and the amount of tourist about 906,700 travels to Japan as tourism or business. As a result, the numbers of passenger were recorded as 17.1% increasing from last year. In addition, Thai tourists are in the third highest rank which increase 103.2% comparing to the same period in last year. The reason is the policy of Japan government allows Thai tourists travel to Japan without Visa. Consequently, Thai tourists want to visit Japan more and more.

Japan is a beautiful country with good traditional and unique culture. This might be one of several reasons for Thai people to visit Japan. There are both internal and external factors which motivate tourists to visit Japan. Internal Factors could be tourism attractions as nature, sea beach, mountains and the human attractions. The safety is safe for tourist included the convenience transportation in Japan. External Factors are economic system, the favorite for tourism, the expand and growth for transportation included the exchange political policy.

Objective of research

1. To study the factors affecting with the decision of Thai tourist travel to Japan.

2. To compare the factors of population, sex, age, occupation, level of education, income are affecting to Thai tourist behavior travel to Japan.

Research Hypothesis

1. Thai tourists have different sex, age, occupation, level of education and average income per month which affecting to tourist behavior.

2. The most important factor for Thai tourists travelling to Japan is Visa Free policy.

Scope of Study

1. The area for study is Suvarnabhumi Airport.

2. Population is the Thai tourist group who travel to Japan on 2013 amount 201,624. (Japan National Tourist Organization, 2013)

3. Sampling is the group of Thai tourist came back from Japan on January 2014 amount 400 samples.

4. The study period is November 2013 - February 2014

Definitions

1. Tourists means Thai tourists who use travel to Japan.

2. The factor affecting to decision to travel is Internal Factor and External Factor.

Internal Factor such as fatigue from work, want to avoid the problem in daily life, relaxing for physical and mind such as organic food, tourism for health.

External Factor such as the tourist point and many style in Japan, the traditional and culture in each season, food and beverage, tourist trends, fashion, visit friend and relationship.

The benefit from research

1. To understand the factor which affecting to Japan tourism of Thai tourist which can apply for program tour of customer of private customer and can apply to big group demand.

2. To understand the tourist behavior which decide travel to Japan?

Literature Review and related research

Research on factors which affect decision making of Thai tourists travel to Japan. Researcher conducted Literature Review and related research as follows:

1. The information of Japan
2. Tourist behavior decides to travel
3. Internal Factors affecting to tourist decision
4. External Factors affecting to tourist decision
5. Motivation for travel

The information of Japan   Japan is Island country in East Asia Region, located at Pacific Ocean, the west side is connecting with Korea and Republic of China by Japan Sea is barrier. The north connects to Russia with Sea of Okhotsk, which is a border. Japan has area about 377,873 square kilometers so Japan is the 62 biggest countries in the world. Japan has factor of island about 3,000 islands. The biggest island is Honshu, Hokkaido, Kyushu and Shikoku, respectively. Almost of Japan Island is archipelago and mountain which all of that is volcano such as Fuji volcano which is the tallest in Japan. Japan has more population in the rank 10 of the world is more than 128 million people. Previously, Japan has the good relationship with Republic of China and Japan called them is "Yamato", So "Wa" is the name which Chinese people called Japanese. The city of Japan is Tokyo which all countries is containing many island, from northern side to southern side is Hokkaido, Honshu (the biggest island), Kyushu and Shikoku. Japan is the archipelago country so the landscape is near seaside, almost of area is mountain about 70% of country and cannot do the agriculture. Japan located near the ring of fire at Pacific so that Japan would easily has opportunity to have an earthquake more than any country in the world. Japan has 4 seasons such as spring season (March – May), summer season (June – August), fall season (September – November), winter season (December – February).

The religion in Japan is mixed till diversity such as the parents take the children to Shinto Shrine for Sunday ceremony (Chi Ji Co Sun), celebrate wedding party in Catholic Church and celebrate in Christmas day, funeral party in Buddhism style, and respect ancestors with Confucianism. In addition, the 25th century has more cults such as Tenrikyo and Omu Shinrykyo.

For long time period Japan has the traditional and culture from period of Jomon which is the old culture of country till the culture which mixed between Asia, Europe and North of America. Traditional Japanese arts included handicrafts, crafts such as Japan's Kosuke (Flower arrange), original Ukiyo eh doll porcelain pottery, tea ceremony, art of fight, landscape for garden and so on.

Tourist behavior decides to travel

Tourist behavior to decide for travel means the reaction of tourist to concern about travel service. The process of deciding which specific travel has 9 processes as follows:

1. Tourism Promotion
2. Need
3. Motivation for tourist is as follows:
   3.1 Physical Motivation
   3.2 Culture Motivation
   3.3 Personal Motivation
   3.4 Prestige and Status Motivation
4. Decision Making, the factor to decision is 8 processes are as follows:
   4.1 Where we are going?
   4.2 When we are going?
   4.3 What transportation we are going?
   4.4 Who we are going?
   4.5 What we are going for?
   4.6 What kind of accommodation we are deciding?
   4.7 How long we are going?
   4.8 How many days for each place?
5. Planning for Expenditure
6. Travel Preparation
7. Travel
8. Experience of tourism
9. Attitude of tourist

Internal Factors affecting to tourist decision

Perception is the side effect that people use to understand things around them by choosing and arrangement the information from various sources.

Motivation is driving force by internal or external of person which enthusiasm for doing anything.

Culture

Attajak Sattayanurak (2005) show that the motivation for Thai tourist travel to Japan is the culture of Japan has diversity such as song, fashion, food and beverage, language so Thai people receive the culture and want to visit with the motivation to Japan.

Research Methodology

This research, the study on factors affecting decision of Thai tourists travel to Japan has methods are as follows:

1. Population and sample used in the research
2. Instruments used in the research
3. Data Collection
4. Data Analysis
5. Statistic used in Data Analysis

Population and sample used in the research

1. Population for this research is Thai tourist who is going to Japan. Population of Thai tourist travel to Japan on 2012 is amount 201,624 (Japan National Tourist Organization, 2013)

2. The sampling for research is sampling for Thai tourist came back from Japan, for receive the trusted representative sampling as (Taro Yamane, 1973) by the reliability of the sample at a confidence level of 95% and acceptable error of 5%, the formula used to determine a sample size is

n = the Sampling Size
N = the population Size
e = sampling error is equal to 5%
n = 399.21

Based on population 201,624, the calculated sample size according to the above formula shown that the sample size in this study, a total of 399 samples or 400 samples.

3. Sampling is used to select as an accidental sampling, the sample is selected to obtain the number required by not the rules. The samples will be who is travelling to Japan and can provide the information.

Instruments used in the research

The instruments used in this research were a questionnaire that was created in a self-administered questionnaire. This study covers the information which provides 4 parts are as follows:

Part 1 A questionnaire on the basis of Thai tourist who travels to Japan such as gender, age, status, occupation.

Part 2 A questionnaires about the behavior of tourist, the purpose of the trip to Japan, the period of time to stay in Japan and the expenditure for travelling.

Part 3 A questionnaires about the information of tourism style, the attractions of tourist point.

Part 4 A questionnaires about the reason and the motivation for travel to Japan.

Data Collection   The researchers used data collected in this form are factors

1. Secondary Data, from the study of the theoretical concepts and related research, the data to support this research by various sources including textbooks, journal, articles, theses and other websites.

2. Primary Data, from the questionnaires of Thai tourists who travel to Japan at Suvanabhumi Airport about 400 samples during the period of January 2014.

Data Analysis The researchers analyzed data from 400 questionnaires, using SPSS statistical software to calculate statistics as follows:

Part 1 Find the value of the basic statistics of tourists who travel to Japan such as gender, age, status and occupation.

Part 2 Find the value of the basic statistics of tourist behavior such as the period of time for travel in Japan, the budget for travelling and the airline transportation.

Part 3 Find the value of the basic statistics of the style of tourism and the tourist attraction.

Part 4 Find the value of the basic statistics of the motivation and the reason for travel to Japan.

The average of Part 3 and Part 4 is interpreted as follows:

Average	1.00 – 1.49	means	Less
	1.50 – 2.49	means	Poor
	2.50 – 3.49	means	Medium
	3.50 – 4.49	means	More
	4.50 – 5.00	means	Most

Statistic used in Data Analysis

Descriptive statistics was used to analyze the data on the status of the sampling questionnaire and the behavior for travel using frequency and percentage. Information concerning the characteristics of tourism and the factors that make tourist by use the average () and standard deviation (S.D.) and inferential statistics to analyze the data for the relationship between demographic characteristics and travel behavior by using the chi-square test to determine the significance level of 95% based on the significant value if the value is significantly lower than or equal to 0.05 indicated that there is a relationship. If the value is significantly higher than 0.05 indicated a significant statistical is not relationship.

The result for analyze data

From the survey of Thai tourist who travels to Japan at Suvanabhumi Airport, "the study on factors affecting decision of Thai tourists travel to Japan" by use the questionnaires 400 sample. The information in questionnaire divides 4 parts as follows:

Part 1 the information of respondents filled out.

Part 2 the tourist behavior.

income per month is the factor for travel to Japan by using the chi-square test and the results are as follows:

Hypothesis 1:

1. Behavior of Thai tourist travel to Japan in the objective of gender found that behavior of travel is not depend on gender (χ^2= 4.377, p = 0.497)

2. Behavior of Thai tourist travel to Japan in the objective of journey depend on gender found that behavior of travel is not depend on gender (χ^2= 4.421, p = 0.110)

3. Behavior of Thai tourist travel to Japan in the objective of passenger who travel together depend on gender found that behavior of travel is depend on gender (χ^2= 12.070, p = 0.034)

4. Behavior of Thai tourist travel to Japan in the objective of the period of time depend on gender found that behavior of travel is depend on gender (χ^2= 26.749, p = 0.008)

5. Behavior of Thai tourist travel to Japan in the objective of the expenditure in Japan depend on gender found that behavior of travel depend on gender (χ^2 = 33.713, p = 0.000)

6. Behavior of Thai tourist travel to Japan in the objective of decide the region depend on gender found that behavior of travel is not depend on gender (χ^2 = 10.413, p = 0.166)

7. Behavior of Thai tourist travel to Japan in the objective of decide the airlines depend on gender found that behavior of travel is not depend on gender (χ^2 = 9.428, p = 0.492)

8. Behavior of Thai tourist travel to Japan depend on age found that behavior of travel in the objective depend on age (χ^2 = 96.664, p = 0.000)

9. Behavior of Thai tourist travel to Japan in the objective of characteristic of journey depend on age found that behavior of travel is depend on age (χ^2 = 51.624, p = 0.000)

10. Behavior of Thai tourist travel to Japan in the objective of passenger who travel together depend on age found that behavior of travel is depend on age (χ^2 = 78.062, p = 0.000)

11. Behavior of Thai tourist travel to Japan in the objective of the period of time depend on age found that behavior of is depend on age (χ^2 = 2.288E2, p = 0.000)

12. Behavior of Thai tourist travel to Japan in the objective of the expenditure depend on age found that behavior of travel is depend on age (χ^2 = 2.077E2, p = 0.000)

13. Behavior of Thai tourist travel to Japan in the objective of decide the region depend on age found that behavior of travel is depend on age (χ^2 = 1.7E262, p = 0.000)

14. Behavior of Thai tourist travel to Japan in the objective of decide the airlines depend on age found that behavior of travel is depend on age (χ^2 = 1.772E2, p = 0.000)

15. Behavior of Thai tourist travel to Japan in the objective depend on income found that behavior of travel is depend on income (χ^2 = 2.287, p = 0.000)

16. Behavior of Thai tourist travel to Japan in the objective of characteristic of journey depend on income found that is depend on income ($\chi^2 = 57.586$, p = 0.000)

17. Behavior of Thai tourist travel to Japan in the objective of passenger who travel together depend on income found that is depend on income ($\chi^2 = 73.796$, p = 0.000)

Hypothesis 2:

The factor is affect to Thai tourist travel to Japan most is cancellation visa. From the research found that the average feedback of Thai tourist are the factors to make the trip to Japan found 5 factors that no visa within the given time (average = 4.6025, S.D. = 0.60033), the place is not same in Thailand (average =4.4400, S.D. = 0.74686) and high technology (average = 4.3700, S.D. = 0.72761)

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An Assessment of Service Quality through 30 baht treats all scheme projects at Cha-am Public hospital by using SERVQUAL scale

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Abstract

This study aims to assess service quality of Cha-am Public hospital through 30 baht treats all scheme projects by using SERVQUAL scale. Our research seeks to contribute, guide and develop the service quality of public hospital through 30 baht treat all scheme projects. Moreover, the government can improve the campaign to be a superior standard for well-being and quality of life of Thai people. We applied quantitative research methods to conduct this research. The use of questionnaire was also collaborated to conduct the research. In addition, the questionnaire consists of three sections- the first section asks the personal data of the respondents, the second section emphasizes on the behavior of using the medical care through 30 baht treats all scheme projects and the third section focuses on 22 items scale with 5 dimensions to assess the expectation and perception of service quality. The data was collected by non-probability convenient sampling to 400 samples (Alpha 0.05) at Cha-am public hospital and analyzed by descriptive statistics in the section of the personal data and respondent's behavior then used the inferential statistic which is factor analysis to measure the construct validity of SERVQUAL model and examine the level of service quality and the average different between the expectation and perception through SERVQUAL model by paired t-test. The result revealed that the expectation was higher than perception in all dimensions of service quality with a significance level of 0.05. This means that the respondents were dissatisfied in service quality through 30 baht treats all scheme projects at Cha-am Public hospital. Thus, this research could contribute an interesting point to the government for controlling and solving the problem about the service quality of public hospital which applied 30 baht treats all scheme projects in their service for improving the quality of life and well-being of people in Thailand.

Keywords: *service quality, 30 baht treats all scheme project, quality of life*

An Assessment of Service Quality through 30 baht treats all scheme projects at Cha-am Public hospital by using SERVQUAL scale

Introduction

The recent population of Thailand is about 69.52 million people, which is an approximate 6.2% increase from the population taken in the 2010 census (World population statistic 2013). Although there is a social insurance provided by the government, it is not for all Thais. A wide range of people still has no any health insurance. According to Provisions of the Constitution of the Kingdom of Thailand in 1997 formulated that a good health is a basic human right that everyone must have and they should have opportunity to access medical service in equally both of poor and rich people. As a result, the announcement of 30 baht treats all scheme projects was launched by the government in 2001. This scheme supposes that people shall have an equal right to receive the standard public health care service without charge as provided by law. Currently, all public hospital in Thailand has already followed this campaign.

Cha-am is a district in Petchaburi province. The city locates in the western part of Thailand with population 75,065 people (Thailand statistic 2013) and has only one public hospital. All people have a right to use the medical service in the Cha-am public hospital through 30 baht treats all scheme projects. Due to the limited hospital space, budget and resource, there are some complaints and comments about the service quality of this campaign from patients who use the service through 30 baht treat all scheme projects. The previous research (Kanokporn, Patchaya, and Prattana 2010) documented that most of hospital in abroad had assessed the service quality by using SERVQUAL model (Parasuraman, Zeithamal, and Berry 1988).

The SERVQUAL model is a multiple-item scale for assessing the perceptions of consumer about the service quality. Crosby (1979) and Garvin (1983) noted that service quality is an abstract which is intangibility, inseparability and heterogeneity so it cannot measure directly. As a result, we have to use the item scale for measuring the service quality construct. Parasuraman, Zeithamal, and Berry (1988) documented that service quality consist of five dimensions scale measurement which are tangible, reliability, responsiveness, assurance and empathy. However, public hospitals in Thailand are still lack of using this model to assess the people's perception. Thus, this study aims to assess service quality of Cha-am Public hospital through 30 baht treats all scheme projects by using SERVQUAL model. Our research seeks to contribute, guide and develop the service quality of public hospital through 30 baht treat all scheme projects. Moreover, the government can improve the campaign to be a superior standard for well-being and quality of life of all Thais.

The objective

This research aims to assess service quality of Cha-am Public hospital through 30 baht treats all scheme projects by using SERVQUAL model. The research examines the difference between the expectation and the perception of service quality in all five dimensions, including tangible, reliability, responsiveness, assurance and empathy.

Research Methodology

This research applied quantitative research methods to assess the service quality of Cha-am Public hospital through 30 baht treats all scheme projects and indicate the research instrument, population and sample and method of analysis as followed:

3.1 Research instrument

The research started from the secondary data to review the theory and the previous research questionnaire such as a study of patient's expectations and satisfaction in Singapore (Lim and Tang 2000), Health care quality in NHS hospital (Youssef, Nel, Tony & Bovaird 1996) and Patient satisfaction in Japan (Elleuch, 2008) and then developed the our own questionnaire as a research instrument. The questionnaire was given to the pilot study included a small sample size (N=30). We then analyzed the pre-test data by adjusted and removed the questions to avoid the error. Next we analyzed the reliability of the scales by means of Cronbach's alpha with acceptable levels for reliability are 0.70 or above (Bagozzi 1956) the result showed alpha 0.928 so the reliability of the scales exceeds the recommended values. Therefore, it showed that research instrument has a good reliability and validity.

The questionnaire consists of three sections- the first section of instrument asked about the personal data of the respondents which included six items as sex, age, marriage status, education occupation and income. For the second section emphasized on the behavior of using the medical care through 30 baht treats all scheme projects. The third section focused on 22 items scale with 5 dimensions to assess the expectation and perception of service quality by five- point Likert-type scale for all items, ranging from 1 to 5

Average score	Interpretation
4.21 – 5.00	Very high
3.41 – 4.20	High
2.61 – 3.40	Average
1.81 – 2.60	Low
1.00 – 1.80	Very Low

3.2 Population and sample

The data was collected by non-probability convenient sampling to 400 samples (Alpha 0.05) (Yamane 1967) at Cha-am public hospital. The respondents were the patients who came to use the medical service through 30 baht treats all scheme projects. Due to

the objective of this research to examine the expectation and perception, the data was collected from the patients after they completed their medical service. (Huh, 2002; Pizam, and Millman,1993). We collected the data between 10 am. – 1 pm. on Monday to Friday in April 2014 in a period of four weeks.

Method of analysis

The data was analyzed by descriptive statistics in the section of the personal data and respondent's behavior then used the inferential statistic which is factor Analysis by principle component analysis to measure the construct validity of SERVQUAL model including all five dimensions tangible, reliability, responsiveness, assurance and empathy. The result of factor loading must be in the acceptable levels at 0.5 (Bagozzi 1988). We checked the reliability of the scales by Cronbach's alpha with acceptable levels for reliability are 0.70 or above (Nunnally 1978). The result showed alpha 0.926 so the reliability of the scales exceeds the recommended values then we examine the level of service quality and the average different between the expectation and perception through SERVQUAL model by paired t-test.

Finding

The questionnaires were distributed to 400 patients in Cha-am Public hospital to survey about service quality of Cha-am public hospital through 30 baht treats all scheme projects. The rate of return was 100% and then we checked the completed of information before analyzed. The findings were indicated into 3 sections including general data, the opinion level of expectation and perception were measured by service quality model then we assessed the differences between the expectation and perception of respondents through 30 baht treats all scheme projects.

4.1 General Data of respondents
The result showed that there were 400 respondents and most of respondents were female at 63% and the rest were male, aged range between 51-60 years old at 43.0%, 61-70 years old at 21.0%, 41-50 years old at 19.0% and 31-40 years old at 17.0%. The majority respondents were married at the 72.0%, graduate under bachelor degree level at 67.0%, employees at 28%, and have income per month below 10,000 baht at 75.0%.

4.2 Respondents' expectation and perception were classified by service quality (SERVQUAL)
Using the service quality scale in the table 1-6 as following revealed the standard deviation and mean of expectation and perception;
4.2. The result found that the expectation of respondents is higher than perception. To summarize that the respondents are dissatisfy the service quality through 30 baht treats all scheme projects at Cha-am Public hospital. Moreover, the result showed that the perception and expectation toward the service quality are different as the sig. (2-tails) equal 0.00 that is lower than 0.05. Therefore, it can be concluded that there is the different between respondents' expectation and perception toward the service quality as table 1.

Table 1

Mean of respondents' perception and expectation about the service quality through 30 baht treats all scheme projects at Cha-am Public hospital.

Gap	N	Mean	Std. Deviation	t	Sig.(2-tailed)
P-E	400	-1.62	0.03		
Perception	400	2.92	0.27	-53.88	0.00
Expectation	400	4.54	0.52		

4.2.2 Tangibles- The respondent's expectation of tangibles dimension ranged from the appearance of the physical facilities and the type of services provided, up-to-date equipment, well dressed employees, and visually appealed physical facilities, respectively (see Table 2).

Table 2

Mean and standard deviation of expectation and perception in Tangibles dimension

Items	Expectation		Perception	
	Mean	**S.D.**	**Mean**	**S.D.**
The appearance of the physical facilities of Cha-am hospital is in keeping with the type of services provided.	4.23	0.78	2.83	0.61
Cha-am hospital has up-to-date equipment.	4.21	0.77	2.86	0.60
Cha-am hospital's employees are well dressed and appear neat.	4.19	0.77	2.92	0.57
Cha-am hospital's physical facilities are visually appealing.	4.17	0.79	2.81	0.61

4.2.3 Reliability- The respondent's expectation of reliability dimension ranged from having enough staff to serve the patients, serving the patient as their promise, performing with a good service, accurate keeping its data records, and clean and prepare the equipment for ready to use, respectively (see Table 3).

Table 3

Mean and standard deviation of expectation and perception in Reliability dimension

Items	Expectation		Perception	
	Mean	S.D.	Mean	S.D.
Cha-am hospital has enough staff to serve the patients.	4.26	0.76	2.92	0.65
Hospital staff can serve the patient as their promise.	4.24	0.81	2.89	0.62
Cha-am hospital performs a good service.	4.23	0.81	2.82	0.60
Cha-am hospital keeps its data records accurately.	4.21	0.76	2.80	0.62
Cha-am hospital always clean and prepare the equipment for ready to use.	4.18	0.82	2.88	0.64

4.2.4 Responsiveness- The respondent's expectation of responsiveness dimension ranged from receive prompt service from Cha-am hospital staff, staffs respond to customers' request promptly, staffs are willing to give the information and take care the patients, and staffs are always willing to help customers, respectively (see Table 4).

Table 4

Mean and standard deviation of expectation and perception in Responsiveness dimension

Items	Expectation		Perception	
	Mean	S.D.	Mean	S.D.
You receive prompt service from Cha-am hospital staff.	4.23	0.80	2.94	0.60
Staffs respond to customers' request promptly.	4.22	0.78	2.81	0.64
Staffs are willing to give the information and take care the patients.	4.20	0.80	2.82	0.61
Hospital staffs are always willing to help customers.	4.19	0.77	2.84	0.63

4.2.5 Assurance- The respondent's expectation of assurance dimension ranged from staffs can give the valid information to patients, feel safe in your transaction with the hospital staffs, staffs of hospital are polite, and staffs are professional for giving the information to patients, respectively (see Table 5).

Table 5
Mean and standard deviation of expectation and perception in Assurance dimension

Items	Expectation		Perception	
	Mean	S.D.	Mean	S.D.
Staffs can give the valid information to patients.	4.30	0.76	2.98	0.58
You feel safe in your transaction with the hospital staffs.	4.27	0.78	2.93	0.60
Staffs of hospital are polite.	4.25	0.76	2.90	0.59
Staffs are professional for giving the information to patients.	4.24	0.79	2.88	0.61

4.2.6 Empathy- The respondent's expectation of empathy dimension ranged from staffs gives you individual attentions, hospital has operating hours convenient to their all patients, hospital has a proper information communication, staffs have your best interest at heart, and staffs really know what your needs are, respectively (see Table 6).

Table 6
Mean and standard deviation of expectation and perception in Empathy dimension

Items	Expectation		Perception	
	Mean	S.D.	Mean	S.D.
Hospital's staffs give you individual attentions.	4.27	0.77	2.84	0.60
Hospital has operating hours convenient to their all patients.	4.24	0.73	2.85	0.64
Hospital has a proper information communication.	4.21	0.81	2.88	0.60
Hospital staffs have your best interest at heart.	4.25	0.75	2.86	0.63
Hospital staffs really know what your needs are.	4.26	0.78	2.88	0.59

4.2.7 The Hypothesis testing- This research examined the difference between expectation and perception by using t-test. The result showed that the expectation was higher than perception in all dimensions of service quality with a significance level of 0.05 (see Table 7).

Table 7 Mean of expectation and perception, T-Test and significant level in all dimension of service quality (SERVQUAL SCALE)

SERVQUAL	Mean	Std. Deviation	T	Sig. (2-tailed)
Tangibles P – Tangibles E	- 1.65	0.89		
Tangibles P	2.80	0.53	- 36.95	0.00
Tangibles E	4.45	0.67		
Reliability P – Reliability E	- 1.68	0.83		
Reliability P	2.68	0.52	- 40.44	0.00
Reliability E	4.36	0.66		
Responsiveness P – Responsiveness E	- 1.71	0.81		
Responsiveness P	2.79	0.56	- 41.92	0.00
Responsiveness E	4.50	0.61		
Assurance P – Assurance E	- 1.62	0.84		
Assurance P	2.89	0.54	- 38.74	0.00
Assurance E	4.52	0.65		
Empathy P – Empathy E	- 1.67	0.81		
Empathy P	2.70	0.50	- 41.43	0.00
Empathy E	4.38	0.67		

Conclusions and suggestions

This research aims to assess the difference between expectation and perception of service quality of Cha-am Public hospital through 30 baht treats all scheme projects by using SERVQUAL scale in five dimensions- tangibles, reliability, responsibility, assurance and empathy.

The result showed that there were 400 respondents and most of respondents were female at 63%, aged range between 51-60 years old at 43.0%. The majority respondents were married at the 72.0%, graduate under bachelor degree level at 67.0%, employees at 28%, and have income per month below 10,000 baht at 75.0%.

The analysis of expectation in service quality reveals that the respondents focused on assurance, responsiveness, tangibles, empathy and reliability, respectively. Whereas the analysis of perception in service quality shows the highest mean from assurance, tangible, responsiveness, empathy, and reliability.

Moreover, the hypothesis testing shows the expectation is higher than perception in all dimensions of service quality with a significance level of 0.05 by using t-test which means that the respondents are dissatisfied in service quality through 30 baht treats all scheme projects at Cha-am Public hospital. Thus, this research can contribute the interesting point to the government for controlling and solving the problem about the service quality of public hospital where the 30 baht scheme applied in order to improve the people's life. Therefore, they should have an equal right to receive the actual standard public health care service. The future research should assess other hospitals about 30 baht treats all schemes campaign to robust the result for government's decision making to improve and develop the campaign and the future research should compare the perception of service quality between 30 baht treats all scheme project and social insurance.

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Pattern and Approach to Conducting Business under Social Enterprise Concept of Market Fairs in Amphur Hua-Hin, Prachuap Khirikhan Province

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Abstract

The research aims to study both form and approach to conduct business in market fairs located in Amphur Hua-Hin, Prachuap Khirikhan province by considering Social Enterprise concept, as well as to study how problems occurred during the process and how to appropriately provide a development guideline under the concept of Social Enterprise. This research is a qualitative research. The researcher conducted literature reviews about Social Enterprise concept, applied a non-participant observation method combined with an in-depth interview method toward key informants, which were 27 merchants in 2 market fairs including Pae Mai second hand market fair and Ngan Sil market fair. Data from the interview was brought to proceed with descriptive analysis to classify the data and make a conclusion.

The study showed that market fair put an importance on social support. It gave small entrepreneurs, such as villagers, an opportunity to take their goods to sell in the area. Most of goods were clothes, apparels, shoes, handbag, and artworks from local artists. Market fair became one of revenue sources for people in the village. However, according to solution and development approaches by considering Social Enterprise concept, the market fair proprietor should realize about supporting the merchants to select local green products instead of modern products, as well as increasing public relation channel to create more customer awareness and extend market opportunity.

Keywords: Social Enterprise, market fair, merchant

Pattern and Approach to Conducting Business under Social Enterprise Concept of Market Fairs in Amphur Hua-Hin, Prachuap Khirikhan Province

Introduction

Business and society have always had interrelationship with each other. The mail purpose of business is to sell goods and to gain the most long-term benefit. Business might have some impacts on people's consumption; meanwhile the business itself is also under the influence of the society. That is, the business is surrounded by social construction, which is an external environment that is changing all the time. Consequently, the business also needs to adjust to conform to the environment. When people's behavior and needs in the society change, the firms have to adjust their products and services accordingly to keep the business. Therefore, it is noticeable that business associates with society at all time. (Lawrence, Anne T, 2011: 4-5)

A market fair is one type of business, known as the place where there are purchasers, full-time sellers whose occupation is selling, and part-time ones who already have a permanent career but come to sell new, second hand, or hand-made products. Most of the sellers who sell hand-made products are local people who reside near the market. Factors that are considered by the purchasers to come to the market are location – whether it is near their residence or on the way there, and facilities such as clean, convenient, and sufficient parking. Usually, the market fair is held in a community – in front of a temple, next to a school, on a community main road, or a place where people in the community know (Sakunee Nattapollawat, 1998: 17-18). Thus, the market fair is where there are various people both from the community and outsiders. According to the entrepreneurs, there are basic needs that are crucial to selling. The location and operators have to be provided with the platform for their stalls, the path, public utilities such as electricity, water, trash area, and toilets that are sufficient for both sellers and purchasers at a peak number. The operation of the market fair might not be totally conducted by the owner. In the case where the market fair is large and there are numerous sellers and purchasers, management systems are needed, including allocation of the selling areas. A person or a group of people responsible for it is the market fair administrator (Kukrit Pramote, 2005: 11-12).

A market fair can be found in every community. It is a source of income, family relationship, help, and basic economic system for the locale and encourages exchanging and sharing. Economic development at a community level, hence, is the way to generate the process of developing ideas, attitudes, and behaviors towards local life style that results in business at a community level. However, exploitation, inequity, and usage of natural resources bring about a wide range of environmental problems (Change Fusion, 2553). In effect, approaches to continuous and sustainable resolutions have been considered on the basis of complete solutions to social problems in terms of social entrepreneurs. It is the approaches to conduct businesses in which triple bottom lines – 1) earning profit,

2) supporting society, and 3) conserving environment – are simultaneously applied (Warakorn Saamgoses, 2009).

Social enterprises have been originated under the concept "the society is more advanced, expanded, and more complicated". Social and environmental problems become so complicated and serious that government sectors could not deal with. Meanwhile, private sectors conduct their businesses only for the profit of their own and their stakeholders such as shareholders ("Business for moral society", 2010). Social enterprises are business in which production and merchandising are conducted but not for the best profit. Their profits are social profit. It differs from CSR, which is a social project of the business, aiming to their highest profits. Social enterprises thus are involved in solving a problem of people living in harmony in the society. They also conform to community business focusing on people living together with good relationship and helping each other.

With the ideas of combining social enterprises and business in terms of market fairs, this research aims to investigate the management of the market fairs, as well as to solve the problem by applying the concept of social enterprises to create more income for local people in the community while paying attention to the environment and society.

Research Objectives

1. To study selling pattern and strategies of the merchants at the market fair in Amphur Hua-Hin, Prachuap Khirikhan Province.
2. To compare the concept of social enterprises and the business conducted at the market fair in Amphur Hua-Hin, Prachuap Khirikhan Province.
3. To investigate the obstacles to conducting market fair business and to introduce the solution conforming to social enterprises.

Research Methodology

This research is a qualitative and descriptive research, targeting to investigate the phenomenon regarding a second hand market business and to examine the linkage of such business to the social enterprises. The method of this research was designated as follows.

Key Informants

The key informants are the merchants at Pae Mai second hand market fair and Ngaan Silp market fair. These two markets are adjacent to each other and both located in Amphur Hua Hin, Prachuap Khirikhan Province. Snowball sampling technique was used for choosing the informants. The interviewers went to the market, gave self-introduction, conducted the interview, and asked questions to examine the relation to other informants. Data obtained from each group was compared and random interviews based on the suggestion from the previous informants were implemented. When saturated data was acquired, collecting information stage was ceased.

Research Instruments
1. Interview schedule: Structured interviews were utilized. Formation of questions was designed beforehand. The questions concerned the development approach, problems, and obstacles. This was to investigate actual problems in conducting market fair business both from male and female perspectives.
2. Voice recorder: It was used to record the interviews, and they later on were transcribed to be back up information for the interview.
3. Stationary and notebooks: They were used to record data from the key informants and to record what had been seen and heard at the time of observation.

Data collection

This research emphasized on studying the qualitative data, using primary data obtained from the in-depth interviews. The interviewer communicated face to face with the merchants and the market owner, and observed the conversation between them without interfering – non-participant observation – to understand behaviors and phenomenon that can be related to the main data obtained from the interview. Regarding secondary data, the data was collected by studying and researching magazines, documents, and books, along with searching for further information from the Internet to be used as reference and supportive data towards the research. Data was challenged by using triangulation technique to ensure its liability and relations among data acquired from different sources. The process included collecting data under the same context by multiplicity of interviewers, inspecting and comparing data from different sources, applying various theories to inspecting the same data.

Data Analysis

After the field study, the obtained data was analyzed by;
1. Collecting data by using data collecting instruments and proving the data gained from the observation and the interview.
2. Classifying the proven data.
3. Descriptive analyzing the classified data to assess formation and management of the market fair business on the basis of conforming to the objectives of this research.

Result

According to the data obtained from the non-participant interview, there were 27 informants. Those included 17 merchants in Ngaan Silp market, and 10 merchants in Pae Mai market. The findings concerning the overall picture of the business in these two markets were as follows.

Market Characteristics

The origin of Ngaan Silp market is that in the past local artists usually created their work at home and the pieces would be displayed only when there was an exhibition held by a gallery or a hotel, which might be only once a year and for a very short period of time. Interested people missed the chance to appreciate the artwork. In response, a leader who was an art piece collector, together with other artists, managed to establish an art gallery in Hua-Hin forest on the west. Its atmosphere was friendly and was open to public. Moreover, many artists' families that composed their unique pieces of work were encouraged to put their work on the display and sale in order to earn their living. The gallery was austerely built on the land of nine rai, originating "Ngaan Silp Market Fair" as known at present. It is opened on weekends, from 10.00 to 18.00. There are also many activities such as music, art work displays, magical shows, drawing class, color painting on a shirt, a scarf, and a mask, etc. Direction signs are installed to guide any visitors coming from downtown Hua-Hin. It eases and comforts the travelling to the market. Products sold are in forms of both retail and wholesale, and posted-to-order service is also available. Moreover, there are more opportunities for interested people to buy the products because auction events for these products are held at different places and different period of time.

According to the overall characteristics of Pae Mai second hand market in Amphur Hua-Hin, the market was located along the rail next to Pae Mai Golf Club. It is opened every Tuesday from 16.00 to 21.00. The market is a long path where venders and stalls are along on both sides. The products range from consuming goods such as food, appliance, clothes, to daily essential products that the vendors provide to meet consumers at all ages and genders' need. Referring to the data obtained, all merchants resided in the community or the one nearby. Most stores were second hand shops selling all used clothes, costumes, bags, shoes, glasses, and accessories. However, all of them were in a good condition, which could attract customers to visit and purchase the products here. Most of the clients are villagers, local people and residence of Hua-Hin. In addition, the market itself locates on the street; therefore, it is noticeable and very convenient for customers to visit the market. One thing that needs to be concerned for the customers is it is the retail market so the wholesale products could not be available in this market.

Approach to Conducting Business

According to the interview concerning the selling manner at Ngaan Silp Market, it was revealed that the pieces of work that are exclusively initiated by artists were given more attention, resulting in unique pieces of artwork being produced. All products that were exhibited and sold must be those created by the artists themselves without imitating or selling other artist's works under their names. Since the products being sold at Ngaan Silp Market represented the artists' ideas, the prices varied depending on the quality. As the piece was high quality, it could be expensive too. Moreover, if the artists were famous, the piece of his or her works would be more expensive. However, the price may depend on the need of the customers. In that case, the customers were the one who proposed the price.

Meanwhile, the interview of the merchants at Pae Mai second hand market disclosed that most of them chose the products based on customers' need, together with their own passion toward the products. They normally selected the high quality with good condition and well-known products to attract customers. Price was set depending on many factors such as the cost per unit, and the product perfection. The more perfect and well-known brand, the higher price could be set.

Public Relations

The interview of the owner of Ngaan Silp Market suggested that disseminating information by means of advertising and various public relations such as billboards along the street, fliers, pamphlets being given out at places, websites, and social media, brought in different groups of customers, most of whom were foreign tourists.

However, the public relations of Pae Mai second hand market were not widely implemented. There were only posters at the market. In addition, the market was opened only a day a week. Most customers were local people in Amphur Hua-Hin because people outside Hua Hin did not know the opening hour of the market. Regarding to the dealers, some products with a flaw or imperfection, as well as left over ones would be discounted. Moreover, posters of the discounted products were showed in front of the store to persuade customers to purchase the products.

Problems and Obstacles of the Management

Presently, there are more foreign tourists coming to Ngaan Silp Martket than Thais. This suggests that foreigners put more values to the artworks than Thais do. It also indicates that unclear and ineffective public relations toward Thai people may not be adequate. Furthermore, as the number of tourists has been increasing, waste issue in the market becomes a serious problem.

In the case of Pae Mai second hand market, although there is a wide range of consumer and second hand goods, the problem of internal management system and the lack of public relation plans are still vital. As a result, the market was not very famous among either local customers or tourists. The merchants did not earn as much as they expected or even other markets. Lacking of management system also brought about unorganized layout – area allocation not being organized, and stores that sold the same types of products not being located in the same area. Cleanliness was another issue, for there was not enough waste management system. Parking spaces were inconvenient because the market is small and located on the side of the street.

Discussion and Suggestions

According to the study of the pattern and the approach to conducting business at both markets via in-depth interview and non-participant observation, the obtained data was analyzed and compared to the approach of social enterprises which is based on the triple bottom lines – generating income, being environmental friendly, and supporting the society. The result of the analysis and the comparison can be discussed as follows.

Considering the characteristics of Ngaan Silp Market, it was found that its overall conducting pattern conformed to the social enterprises' principles. That is, it gives an opportunity to the local artists to engage in exhibiting and selling their works, which can be considered generating income for their family. The atmosphere is created to be natural by planting trees and using wooden materials, which is environmental friendly. Additionally, there are many activities held at the market such as music performance and drawing class conducted by local artists, which help encourage local people to live together in harmony.

However, not many Thai tourists visited Ngaan Silp Market, they may not recognize the full worth of artworks. Moreover, because of the high price, the customers deem that the art works are too expensive to be used as only display pieces. On the other hand, foreigners seem to appreciate the work more. This might be because they have passion towards the identity of Thai arts, so they buy numerous pieces in order to be showcase at their house. Furthermore, some artists expected high profit with their works so that they are hurry to produce the works resulting in lower quality and not price worthy.

According to the operation of Pae Mai second hand market, its business structure is similar to Ngaan Silp Market which most entrepreneurs are local people or people residing nearby, and that the majority of the customers are locale. It generates more income and helps improve the small local business. However, its down side is that it lacks waste management system. Consequently, there happens the odor pollution and cleanliness problem, which have some impacts on the environment around the market. In addition, public relation system is still insufficient. The current advertisement can reach only a small group of people, so there are a small number of visitors, most of whom are local people. Moreover, the quality of their second hand products does not reach the standard. Some of those are sold at the price as high as the new ones.

In response, the approaches under the concept of social enterprises that the entrepreneurs can apply to their business can be presented in three ways as follows.

1. Give more precedence to the products or the work they sell, through their experience, be aware of the value and the need of the purchasers than the monetary benefit, and set the price suitably and fairly.
2. Conduct more public relations through marketing activities and apply below-the-line strategy to their advertising techniques. Below-the-line strategy describes the activities conducted on site such as a seasonal exhibition or fair, and activities published on social network, as channels to represent the image, to raise awareness, and to promote the sales. As for Ngaan Silp Market, this strategy would solve the problem by raising awareness of people toward art words.
3. Implement efficient waste management system, could be recycling, natural disposing or selling the waste to person or companies who have capacity to reuse them There should also be announcement to encourage people to take care of the cleanliness continuously. When the waste is properly managed, the market area will be clean, organized, and ready to welcome visitors. It can be a model for its neighbour, and it confirms the triple bottom lines approaches in terms of being environmental friendly.

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Hedonic and Utilitarian Values of Eating Fast Food : A Case Study of Undergraduate Students in Thailand

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Abstract

The objectives of the research were to analyze factors of eating fast food through consumer values; hedonic and utilitarian, and to study relationship between consumer values and fast food restaurant attributes. The sample was 400 undergraduate students, which were selected by convenience sampling. The data were collected by questionnaire between April to May 2014 and analyzed by SPSS 11.5. The statistical techniques employed in this research were frequency, percentage, mean, standard deviation, factor analysis, and pearson correlation. The questionnaire was divided into 3 parts; general data, customer values, and fast food restaurant attributes. It was found that most of sample were female, studied in 3rd year, had domicile in Bangkok, and had revenue per month 8,001-10,000 THB. While in customer values, the factor analysis was shown that it could divide into 2 components consisting of hedonic value and utilitarian value. Moreover, it was also found that most of restaurant attributes do not correlated with consumer values.

Keywords: Utilitarian, Hedonic, Fast Food, Undergraduate Student

Hedonic and Utilitarian Values of Eating Fast Food
: A Case Study of Undergraduate Students in Thailand

Introduction

Fast Food or Quick Dish or Single dish meal is popular because it could give a full needed nutrient and also time saving compared cooking. As the research and data collection among Fast Food consumers, this type of food is the most preferred amongst teenager and first jobber so called Primary target. The secondary consumer is Kids because it is easy and convenience which is suitable for rush hour in recent. Moreover, people give a priority to Time so that having Fast Food becomes more and more popular.

There are two types of Fast food. First is full meal fast food which consists of carbohydrate, meat and vegetable. Full meal fast food may have bread, fried potato for carbohydrate. Sausage, ham, bacon, fried chicken, grilled chicken are protein and decorated with vegetable such as tomato, Lettuce. Full meal fast food may offer either small or big set for consumers. The second type of fast food is snack fast food which is a break meal. It might be dessert or meat dish such as ice cream, cake, donut, spring roll, meat-ball stick. (Wannarat, 1997)

Utilitarian Product is product that consumers want to utilize its advantages. Consumers will buy Utilitarian Product because they would like to fulfill their want or would like to fix some problems by concerned its benefit rather than their like or emotional. This kind of product is related to the Hedonic Product that consumers consume it emotionally including imaginary and satisfaction. The products will be helpful for positive feeling and experience of emotional. (Hirschman and Holbrook, 1982; Strahilevitz, 1999; O'Curry and Strahilevitz, 2001; Ang and Lim, 2006; Micu and Chowdhury, 2010) However the product will be emphasized on its utilization and relaxation of emotion depend on both interpretation and application.

Consumption norm for Thais could be spread out significantly influencing by the western norm on eating consumption especially for teenager. Competing with time for education is the core factor for eating consumption. Students turn to have fast food or prepared single dish for their convenience and it is easy to have it with limited time. Also, the taste is good and modern service provided. The examples of fast food are as the following; hamburger, sandwich, pie, pizza, fried chicken, and sausage. (Siriworakul, 2011) Moreover, this restaurant could be the meeting point for teenagers as well.

Research Methodology

1. This research is the quantitative study surveying the opinions of the Thai undergraduate students on customer value and fast food restaurant attribute.

2. The population of this research consisted of 2,106,643 undergraduate students in Thailand (Office of the Higher Education Commission, 2014). The sample group was calculated using the Yamane method. Finally, 400 samples were obtained and randomly sampled using the convenience sampling during April 2014 to May 2014.

3. Questionnaire was used as a research instrument. The questionnaire comprised four parts of general data of the respondents, fast food consumption behaviors, customer value on fast food, and opinion about fast food restaurant attributes, respectively.

4. The research initially began with the literature review for the conceptual framework, theories and researches compiled from the books, journals and related articles to gain the issues for drafting the questionnaire in accord with the research objectives. The two experts of marketing considered the validity of the drafted question. Only the questions consistent with the Index of Item Objective Congruence (IOC) over 0.5 were selected. The questionnaire adjusted and approved by the experts was tried out with 30 undergraduate students in Bangkok. It was found that the Alpha Cornbrash Coefficients of the questionnaire for customer value on fast food, and opinion about fast food restaurant attributes were 0.867 and 0.882, respectively, indicating that the questionnaire had high confidence. Therefore, this questionnaire was used in the data collection with the samples.

5. The data were verified and were analyzed using the SPSS program whereas general data of the respondents, fast food consumption behaviors, and opinion about fast food restaurant were analyzed by the descriptive statistics of frequency and percentage.

Customer values on fast food were analyzed by the Principal Component Analysis with Varimax Rotation. The Eigenvalue of each factor should be high than 1 and factor loading absolute value should be over 0.5 (Hair et al., 2009).

The correlation between customer value on fast food and opinion about fast food restaurant attributes was analyzed by pearson correlation with significance level at 0.05

Results

The general data analysis revealed that most of the samples were female, (n = 304, 76.00%), studied in third year (n = 140, 35.00%), GPAX between 2.51 – 3.00 (n = 194, 48.50%). They rest at dormitory in campus (n = 201, 50.25%). Most of them had a domicile in Bangkok and Metropolitan (n = 163, 40.75%) and obtained the average income in the amount of Bt. 8,500 -10,000 per month (n = 201, 50.25%), See Table 1.

Table 1

Frequency and Percentage of General Data of Samples

Description	Frequency (n=400)	Percentage
Gender		
Female	304	76.00
Male	96	24.00
Class		
First year	88	22.00
Second year	91	22.75
Third year	140	35.00
Fourth	81	20.25
GPAX		
Less than 2.00	7	1.75
2.01 – 2.50	44	11.00
2.51 - 3.00	194	48.50
3.01 – 3.50	98	24.50
3.51 – 4.00	57	14.25
The average income per month		
Less than 5,000 Baht	10	2.50
5,001-8,500 Baht	103	25.75
8,501-10,000 Baht	201	50.25
More than 10,000 Baht	86	21.50
Residence		
Dormitory in campus	268	67.00
Dormitory outside of campus	102	25.50
Home	23	4.75
Other	7	1.75
Domicile		
Bangkok and Metropolitan	163	40.75
Central	96	24.00
Western	65	16.25
Southern	41	10.25
Northern	17	4.25
Eastern	14	3.50
North-Eastern	4	1.00

The analysis of behavior in fast food consumption indicated that most of the respondents have McDonald as favorite fast food restaurant (n = 163, 40.75%); they have fast food restaurant in lunch (n = 177, 44.25%); they use fast food services once a week (n = 163, 40.75%); their favorite reason for eating fast food is eating with friends or family (n = 105, 26.25%); they have fast food with friends (n = 245, 61.25%); they prefer to have fast food at restaurant (n = 319, 79.25%) and they spent for a time about 100 – 200 THB (n = 208, 57.00%). See Table 2.

Table 2

Frequency and Percentage of Behavior in Fast Food Consumption

Description	Frequency (n=400)	Percentage
What's your favorite fast food restaurant?		
McDonald	163	40.75
KFC	121	30.25
Pizza Hut	33	8.25
The Pizza Company	30	7.50
Pepper Lunch	8	2.00
Burger King	5	1.25
Other	40	10.00
When do you typically eat at fast food restaurant?		
Breakfast	48	12.00
Lunch	177	44.25
Dinner	92	23.00
Snack	83	20.75
How often do you use fast-food services?		
Once a week	163	40.75
Twice a week	136	34.00
Once a month	87	21.75
Once a year	11	3.75
Other	3	0.75
The favorite reasons for choosing to eat at fast food		
Eat with friend / family	105	26.25
Limited time	100	25.00
Advertisement	53	13.25
Cost / Price	50	12.50
Enjoy the taste	35	8.75
Variety of menu	32	8.00
Lack of cooking skill	25	6.25
Who do you often have fast food with?		
Friend	245	61.25
Relatives / parents	45	11.25
Alone	92	23.00
Other	18	4.50
Which place do you prefer to have Fast food?		
Restaurant	319	79.75
Take away	41	10.25
Both of them	40	10.00
How much does a meal cost per person each time?		
Less than 100 Baht	48	12.00
101-200 Baht	208	57.00
201-300 Baht	91	22.75
More than 300 Baht	53	13.25

The factor analysis results related to customer value of Thai undergraduate student could be separately 10 factors into 2 components. The Kaiser-Meyer-Olkin was 0.769 whereas the Bartlett's Test of Spheicity was 1073.181 (Sig = 0.000). The two components consisted of hedonic and utilitarian with the total variance of 52.955%, See Table 3.

Table 3

Factor Loading, Mean, S.D. of Each Component of Customer Value

Factor	Factor Loading	Mean	S.D.
Component 1: Hedonic (Eigenvalues = 2.859 Variance = 228.951%)			
You choose fast food by consider on taste more than nutrient.	0.776	3.87	0.75
Having fast food could express you are modern	0.766	3.83	0.73
You have Fast food as a trend	0.746	3.87	0.76
Fast food restaurant is a place for meeting	0.742	3.90	0.78
You have fast food because it is convenient and save time	0.739	3,88	0.74
Component 2: Utilitarian (Eigenvalues = 2.436 Variance = 24.364%)			
Fast food is suitable for all age and gender	0.839	3.89	0.74
You give a priority to the raw material and freshness of food	0.714	3.86	0.76
You give a priority to the clean and neat place	0.714	3.92	0.72
You give a priority to the clean and well dress of waitress such as apron	0.601	3.81	0.79
Fast food have a nutrient as international standard	0.590	3.91	0.79

The fast food opinion about fast food restaurant attributes revealed that the most emphasize attribute is food order was correct and complete, the next are clean environment for using service and discount offer, respectively. See Table 4.

Table 4

Mean and S.D. of Opinion in Fast Food Restaurant Attributes

Fast Food Restaurant Attributes	Mean	S.D.
1. My food order was correct and complete	4.25	0.73
2. Discount offer	4.04	0.77
3. Clean environment for using service	4.04	0.72
4. Fast service	4.01	0.76
5. The food is tasty and flavorful	4.00	0.81
6. The service is excellent	3.97	0.72
7. Obviously price list	3.96	0.73
8. The quality of food is excellent	3.95	0.78
9. The value for price paid was excellent	3.92	0.75
10. Attractive promotion such as collection, coupon	3.92	0.77
11. Well dress	3.88	0.77
12. Availability of sauces, utensils, napkins, etc. was good	3.88	0.77
13. Enough table for service	3.87	0.85

Fast Food Restaurant Attributes	Mean	S.D.
14. The menu board was easy to read	3.86	0.77
15. The food is served hot and fresh	3.85	0.82
16. Nearest branch and convenient to use service	3.85	0.84
17. Employees are patient when taking my order	3.83	0.83
18. Variety of Channel for service	3.80	0.85
19. The menu has a good variety of items	3.79	0.81
20. Trial product	3.79	0.81
21. Employees are friendly and courteous	3.75	0.79
22. Sufficient parking lot	3.72	0.98
23. Employees speak clearly	3.71	0.87

The result from correlation between customer values and restaurant attributes can conclude that in hedonic value, it correlated with the food is served hot and fresh, variety of channel for service, and employees speak clearly. As for utilitarian value, it only correlated with employees are friendly and courteous. The other restaurant attributes do not correlate with customer values. See Table 5.

Table 5

Pearson Correlation between Customer Values and Restaurant Attributes

Fast Food Restaurant Attributes	Hedonic	Utilitarian
1. The food is served hot and fresh	0.102*	-0.040
2. The menu has a good variety of items	0.039	-0.082
3. The quality of food is excellent	-0.015	-0.066
4. The food is tasty and flavorful	0.017	-0.024
5. The value for price paid was excellent	-0.006	-0.024
6. Obviously price list	0.017	0.011
7. Nearest branch and convenient to use service	0.008	0.009
8. Variety of channel for service	0.129**	-0.049
9. Attractive promotion such as collection, coupon	-0.021	0.035
10. Discount offer	-0.090	-0.017
11. Trial product	0.030	0.044
12. Employees speak clearly	-0.121*	-0.016
13. Employees are patient when taking my order	0.045	0.083
14. Employees are friendly and courteous	0.018	0.107*
15. The service is excellent	0.080	0.026
16. Well dress	0.039	-0.003
17. The menu board was easy to read	-0.018	-0.041
18. Clean environment for using service	0.027	0.054
19. Sufficient parking lot	0.033	-0.091
20. Enough table for service	0.037	0.054
21. My food order was correct and complete	-0.005	-0.005
22. Availability of sauces, utensils, napkins, etc. was good	-0.023	0.020
23. Fast service	-0.056	-0.004

*sig. at 0.05 **sig. at 0.01 ***sig. at 0.001

Conclusion

As for the results above, it can conclude that most of the samples were female, studied in third year, GPAX between 2.51 – 3.00, rest at dormitory in campus, had a domicile in Bangkok and Metropolitan, and obtain the average income in the amount of Bt. 8,500 -10,000 per month.

The analysis of behavior in fast food consumption indicated that most of the respondents have McDonald as favorite fast food restaurant, have fast food restaurant in lunch, use fast food services once a week, have favorite reason for eating fast food is eating with friends or family, have fast food with friends, prefer to have fast food at restaurant, and each time spending about 100 – 200 THB.

The factor analysis results related to customer value of Thai undergraduate student could be separately 10 factors into 2 components consisted of hedonic and utilitarian.

The fast food opinion about fast food restaurant attributes revealed that the most emphasized attribute is food order was correct and complete, following by clean environment for using service and discount offer, respectively.

The correlation between customer values and restaurant attributes can conclude that in hedonic value, it correlated with the food is served hot and fresh, variety of channel for service, and employees speak clearly. As for utilitarian value, it only correlated with employees are friendly and courteous. The other restaurant attributes do not correlate with customer values.

The core benefit of this research is shown that it is hard to define what hedonic or utilitarian customers want, some attributes hedonic is emphasized more than utilitarian, and vice versa. Then, it is necessary for fast food companies to prepare everything for every single customer. Moreover, it is good topic for other researchers to find how correlate of customer value and restaurant attributes can make maximization profit to companies.

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The Health Behaviors of Elderly in Payom Subdistrict, WangNoi District, Ayutthaya Province

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Abstract

This research aims to study health behaviors of the elderly on exercise, food consumption, illness treatment, stress management and to compare the health behaviors of the elderly in Payom Subdistrict, WangNoi District, Ayutthaya Province to personal information which are gender, age, education, marital status, income, and revenue sufficiency. Most of their sources of revenue are various. The samples used in this study were 285 elderly aged 60 years and above, both male and female living in Payom Subdustrict, Ayutthaya. The study applies an accidental sampling. The tool used to collect data is a questionnaire. The data are analyzed by using frequency, percentage, average, and standard deviation. The differences between groups are compared with T-test and one-way ANOVA.

The study shows that the health behaviors of the elderly people are in a fair level. Considering each behavior, it shows that the health behaviors of eating, exercise, stress management are in a fair level and the health behavior of illness treatment is in a good level; the elderly people who are different in the average revenue, the sufficiency of revenue, the source of revenue, and the education are different in health behaviors with statistical significance level at 0.05.

Keywords: healthy behavior, consumer behavior, elderly.

The Health Behaviors of Elderly in Payom Subdistrict, WangNoi District, Ayutthaya Province

Introduction

World Health Organization broadly defined elderly as those aged 60 or over or any person who has retired from work when they are eligible for private or public pension benefits. However, it is also subject to the constructions by which each society makes sense of old age (WHO, Expert Committee 1989: 7).

Currently, Thailand has entered the elder society that called the elderly population; both men and women aged over 60 years since 1990 and tend to increase every year. Moreover, the United Nations estimated the increase in the elderly population from 1990 to 2010. Thailand had the increasing in the elderly population in 1990 and 2010 about 47 percent and 770 percent, respectively. This might because of structural changes of the world population. Therefore, the proportion of elderly in Thailand is increasing as well.

The increase in the elderly population resulted in increasing health problems. According to health behaviors and control of chronic diseases in the past, the elderly people would have rates of chronic disease and the severity of the disease more than other ages. Consistent with the concept of Prapasri Pen Suwan (1989:13) said that health behavior is typical behavior, but focused on health and it is associated with the disease. Condition of the body is caused by the pathogen, environmental and other factors. Furthermore, Michael and Cobb (1976, refer to Tharatorn Duangkeaw , Hiranya Dethudom 2007: 34) said that the health behavior is any action of any person to prevent disease and good health . In addition, Aris and Guten (1975, refer to Tharatorn Duangkeaw, Hiranya Dethudom 2007: 34) revealed that the health behaviors are every activities of person do normally and regularly for good health and can prevent diseases, so this consistent with the meaning of World Health Organization to refer that complete physical, mental and good health. It dose not mean only the devoid of disease or illness, but it also includes the ability to life well in society.

There are four behavioral aspects to promote good health, and prevent any diseases as following:

1) Behavioral of eating is practice of elderly in having correct food consumption by having food with 5 groups of nutrition with providing 1,600 calories each day. Moreover, Food need to be clean and without contaminants or pathogens. The food should be appropriate to the digestive system of the elderly.

2) Behavioral of exercises is practice of elderly in their body movements. Activities, which are suitable for the elderly, might be agricultural activities or soft to moderate exercises such as walking, riding a bicycle, and Chinese boxing. Elderly should have exercises around 30 minutes each time, and 3-5 days per week. After exercise, the pulse rate of 100-120 beats per minute while exercising and not faint palpitations.

3) Compliance behavior in morbidity refers to the practice of the elderly when an illness such as body check up with health personnel, eating suitable foods by concerning of the illness and relaxation practices to prevent complications in times of illness.

4) Stress management is practice of the elderly to prevent or avoid the sadness, anger, fear or anxiety arising from age or from loneliness. Having socializing with other people such as participating in community activities; meditation or other hobbies could make them feel comfortable, both physically and mentally (Aorachon Votavee 2005:15)

According to the mentioned reasons, the researchers are interested in the study of health behavior of the elderly in Payom Subdistrict, WangNoi District, Ayutthaya Province. Moreover, the researchers are aware of the problem and the real needs of the elderly and also aware of the behavioral level of the elderly as well as the ways to promote the health to the elderly.

Methodology

The researchers applied the concept of a research-based descriptive methodology as a framework for this research.
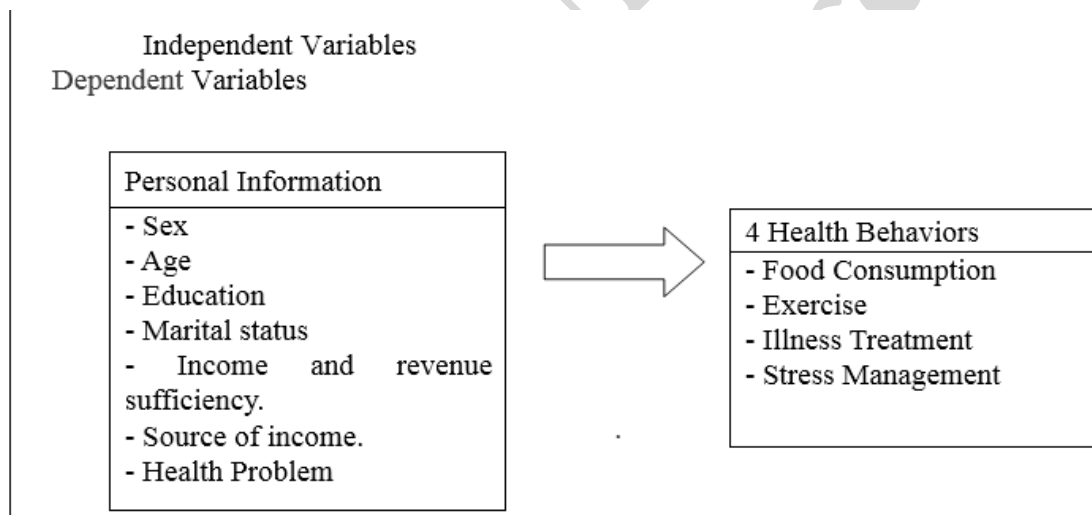
Figure 1
Lists of independent variables and dependent variables

Hypothesis

H_0: Gender of elderly has no difference in health behavior.

H_0: Age of elderly has no difference in health behavior.

H_0: Education level of elderly has no difference in health behavior.

H_0: Marital status of elderly has no difference in health behavior.

H_0: Income and revenue sufficiency of elderly have no difference in health behavior.

H_0H_0: Source of income of elderly has no difference in health behavior.

H_0H_0: Health problem of elderly has no difference in health behavior.

H_1H_1: Gender of elderly has no difference in health behavior.

H_1H_1: Age of elderly of elderly has no difference in health behavior.

H_1H_1: Education of elderly has no difference in health behavior.

H_1H_1: Marital status of elderly has no difference in health behavior.

H_1H_1: Income and revenue sufficiency of elderly have no difference in health behavior.

H_1H_1: Sources of income of elderly have no difference in health behavior.

H_1H_1: Health problem of elderly has no difference in health behavior.

Researchers used a primary data gathered from the comments of the elderly respondents. Probability sampling was applied in order to select an accidental sampling as well as a purposive sampling. For a secondary data, researchers used data academic articles, research, statistical document from government agencies and private organizations. There are 2 objectives in this study which are 1) to study the health behaviors of the elderly on exercises, food consumption, illness treatment, stress management and 2) to compare the health behaviors of the elderly in Payom Subdistrict, WangNoi District, Ayutthaya Province to personal information which are gender, age, education, marital status, income, and revenue sufficiency. The participants in this research were 285 elderly aged 60 years and above both male and female living in Payom Subdistrict, WangNoi District, Ayutthaya Province. The data was collected on Friday, Saturday and Sunday of 1 January - 1 February 2014 for a period of four weeks. A sample size was calculated from the formula of Taro Yamane (Yamane, 1973) so a sample size is 285 people at a confidence level of 95 percent and 5 percent tolerances as follows;

$$n = \frac{N}{1 + Ne^2}$$

n = sample size

N = number of population

e = acceptable tolerances

When we substitute this formula, we got the sample size number as follows:

$$n = \frac{N}{1 + Ne^2} = \frac{989}{1 + 989(o.o5)^2} = 285$$

In this research, a sample size is 285 people. The first step is making a multiple random sampling by 1.1) making a sample by villages that the elderly live and 1.2) making a sample of 285 elderly people living in villages. A tool used in this research was a questionnaire asking about the health behaviors of elderly in Payom Subdistrict, WangNoi District, Ayutthaya Province. There are 2 parts in a questionnaire 1) personal information including gender, age, education level, marital status, income and revenue sufficiency,

source of income and health problems of elderly and 2) questions asking about health behaviors of elderly. In the second part of the questionnaire, there are 30 multiple choices in 4 areas of health behaviors which are 8 items for food consumption, 6 items for exercising, 8 items for illness treatment and 8 items for stress management. In addition, the researchers used a rating scale with 5 levels of frequency; always, often, sometimes, rarely and never. For rating scale, the researchers assigned 5 for being always, being often, sometimes, rarely and never are 4, 3, 2,, and 1, respectively.

The researchers determined the criteria to analyze the average of health behavior by using a class interval.

A class interval = highest score - lowest score /rating scale

$$= \frac{5-1}{5} = 0.8$$

The researchers made a trial of questionnaire by taking 40 questionnaires to elderly in Payom Subdistrict, WangNoi District, Ayutthaya Province in order to test a reliability of questionnaire. We also found an alpha coefficient by using Cronbach's Alpha Coefficient. It was 0.797.

The second step is called a data analyzing. The researchers used SPSS and descriptive analysis. We presented a result in terms of percentage, average, standard deviation, and a level of behavior. By finding a range and an interval, the researchers found that an average of 1.00 - 1.80 means the health behaviors of the elderly are in poor level, a fair level are an average 1.81 to 2.60, an average level are an average 2.61- 3.40, an average from 3.41 to 4.20 is in a good level and an average of 4.21 – 5.00 are an excellent level.

Conclusions

1) For a demographic data, we can conclude that the majority of sample were male (62.1 %) ages between 60-69 years (58.9 %). Their education level is Grade 4 in Primary School (66.3 %). Marital status is married (50.2 %). Their monthly income is between 1,001-2,000 Baht (27.7 %) with low revenue sufficiency (66.7 %). Their sources of income come mainly from other family members (58.9 %). They have got a health problem (66 %).

2) The mean and standard deviation of the elderly health behaviors is presented in Table 1.

Table 1
The Study of Health Behaviors of Elderly with Mean (X), Standard Deviation (S.D.) and level.

Elderly Health Behaviors	X	S.D.	Level
Overall Health Behaviors	3.0413	0.33941	Average
Food Consumption	3.0614	0.38250	Average
Exercise	2.7854	0.68365	Average
Illness Treatment	3.6079	0.46733	Good
Stress Management	2.7105	0.52142	Average

From Table 1, we found that the overall health behaviors of elderly is in a fair level with X = 3.0413 and SD = 0.33941. Food Consumption is also in a fair level with X = 3.0614 and SD = 0.38250. Exercise is at a fair level with X = 2.7854 and SD = 0.68365. For illness treatment, the value of X is 3.6079 and SD is 0.46733so it is served in a good level. Finally, a stress management is in a fair level with X = 2.7105 and SD = 0.52142.

3) The analysis of factors in personal information that have an impact in 4 health behaviors presented with the T-test and One-way ANOVA, considering Table 2.

Table 2
Personal Information Factors Influencing Health Behaviors with T-test and One-way ANOVA

Personal Information		4 Health Behaviors			
		Food Consumption	Exercise	Illness Treatment	Stress Management
Sex	t-test	0.589	0.001**	0.119	0.032**
	Hypothesis		H_1		H_1
Age	One-way ANOVA	0.000**	0.763	0.178	0.139
	Hypothesis	H_1			
Education Level	One-way ANOVA	0.000**	0.000**	0.000**	0.009**
	Hypothesis	H_1	H_1	H_1	H_1
Marital Status	One-way ANOVA	0.000**	0.000**	0.000**	0.001**
	Hypothesis	H_1	H_1	H_1	H_1
Income	One-way ANOVA	0.083	0.083	0.000**	0.019**
	Hypothesis			H_1	H_1
Revenue Sufficiency	One-way ANOVA	0.690	0.535	0.017**	0.000**
	Hypothesis			H_1	H_1
Source of income	One-way ANOVA	0.000**	0.445	0.002**	0.013**
	Hypothesis	H_1		H_1	H_1

Health Problem	One-way ANOVA	0.003**	0.000**	0.198	0.088
	Hypothesis	H_1	H_1		

***Accept H1 with statistically significant at the 0.05 level

For the comparison of elderly health behaviors at a statistically significant level of 0.05, we found that a sex factor showed difference in exercise and stress management at a significant level of 0.05. Age factor showed difference in food consumption at a significant level of 0.05. Factor of education level had a difference in all four-health behaviors at a significant level of 0.05. A marital status factor showed differences in all four-health behaviors at a significant level of 0.05. Income factor shows a difference in illness treatment and stress management at a significant level of 0.05. Revenue sufficiency showed a difference in illness treatment and stress management at a significant level of 0.05. A factor of source of income showed differences in food consumption, illness treatment and stress management at a significant level of 0.05. A health problem showed difference in food consumption and exercise.

Discussion

Samples were men with ages between 60-69 years. Their education level is Grade 4 in Primary School. Marital status is married. Their monthly income is between 1,001-2,000 Baht with low revenue sufficiency. Their sources of income come mainly from other family members. They have got a health problem. Health behaviors are in an average level. An illness treatment is in a good level. This can be complied with Bandura's concept indicating that human behavior is controlled or determined by individual, through cognitive processes and by the environment. This means elderly can learn how to take care of themselves from Public Health Officials as well as other media such as broadcast radio and television. The elderly can be educated from those sources of information. As a result, their illness treatment is in a good level.

Suggestions

The findings suggest that Official of Payom Subdistrict, WangNoi District, Ayutthaya Province should encourage both public and private sectors such as Subdistrict Administrative Organization and a Health Center to provide a health promotion including an appropriate exercise for elderly. There should be a gathering of elderly to exchange some thoughts and experiences.

For further study, there should be an in-depth interview and other possible variables that affect elderly health behaviors in order to boost the level of elderly's health.

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Facebook: An Attractive Channel to Select Restaurant for Holiday

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Abstract

This research has objective to study about Facebook influences in selecting restaurant/café for dining in holiday. The sample was 400 undergraduate students which was chosen by convenience sampling and used questionnaire as research instrument SPSS v.11.5 was used in analyze data. The statistical techniques were frequency, percentage, mean, t-test, and f-test. The data was collected between March-April 2014. It was found that most of samples were female, studying in 3rd year, using Facebook 3-5 years, using Facebook 1-3 hours per day, dining outside every week, having cost about 300-500 THB per meal, and stimulated by friend in Facebook to choose restaurant. The most type of restaurants that the samples chose by stimulus in Facebook was Bakery, followed by coffee shop, Japanese restaurant, ice-cream shop, seafood, fast food, nightclub, buffet, food stall, restaurant in hotel, and Thai restaurant, respectively. As for hypothesis testing with t-test, it was found that men's perspectives were different from women in bakery, ice-cream shop, and restaurant in hotel. While hypothesis testing about study year, it was found that there were no differences in all types of restaurants. However, there were differences in some types of restaurant when hypothesis testing with using Facebook behavior.

Keywords: Facebook, Restaurant, Undergraduate Student

Facebook: An Attractive Channel to Select Restaurant for Holiday

Introduction

Communication is a very necessary nowadays and it becomes a key of recognition processes. People tend to express attitudes and opinions via social media which is a new trend of communication integrating with the information technology such as Facebook, Twitter, and Instagram. These are the examples of online social media services that allow users to become a registered users of the website and after registering to use the site, users may create a personal profile, add other users as friends, exchange messages, post status updates and photos or videos, and receive notifications when others update their profiles, including the information sharing (Elizabeth, 2012 and Wongkeawphothong, 2010). It affects the increase in the Internet and smartphone using at this time. Facebook a social media becomes very popular now it provides a faster and easier way of communication and it is worldwide. Now many organizations use Facebook in order to communicate both inside and outside organizations. Besides, the Facebook allows people to exchange information and share the common interests. Additionally, users may join common-interest user groups, organized by workplace, school or college, or other characteristics, and categorize their friends into lists such as "People from Work" or "Close Friends".

Student is a big group of Facebook users, they tend to use the social media more often and it creates a new type of lifestyle. Furthermore, they still use Facebook to share interests such as Japanese restaurants, coffee shops, bakery shops, ice-cream shops, Italian restaurants, Thai restaurants, Fast-food restaurants, etc. Using social media is saving the cost, time, so that people can easily access the information and even faster. The group of Facebook or other website users can communicate, transfer, and share the information together that could make social media on Facebook becoming boarder and stronger network. (Pumnuch, 2011)

Moreover, the students also express their opinions and share knowledge by interpreting from their perceptions. This group of people is able to make decisions, sometimes they use their experiences to consider and also they can react of things clearly. Of course, this group of people has purchasing power and also they have an effect to the family spending (Makasiranon, 2012)

Research Methodology

The research methodology can be summarized as follows:

1. A scope of the study, this quantitative research explored the restaurant selection-related behaviors of Facebook users, namely, the students of Silpakorn University, Petchburi Campus.

2. The population of this research consisted of 6,319 students of Silpakorn University, Petchaburi Information Technology Campus who used Facebook. Applying the sample sizes in accord with Yamane (1967) and the confidence of 95%, the final samples were 400 students who were sampled by the convenience sampling.

3. Questionnaire was used as the research instrument. The developed questionnaire comprised three parts, namely, the demographic data, the using Facebook behaviors of students of Silpakorn University, Petchaburi Information Technology Campus, and the restaurant-selection making of students of Silpakorn University, Petchaburi Information Technology Campus, that was influenced by Facebook, respectively.

4. Research Procedures:

4.1 The literature review was compiled from books, documents, and journals related to the communication technology and marketing and used as the conceptual framework of this research;

4.2 The questionnaire was drafted in accord with the research objectives in regarding with the influence of Facebook and the behaviors of Facebook users. The drafted questionnaire should have accurate and easily- understood contents with proper responding time;

4.3 The drafted questionnaire was submitted to the experts for the consideration on its validity. Only the items with the Index of Item – Objective Congruence (IOC) exceeding 0.50 were selected (Rovinelli and Hambleton, 1977)

4.4 The approved questionnaire was finally used for the data collection among the samples during March-April 2014

5. The collected data were analyzed as follows: 1) Percentage, mean, and standard deviation were used for the descriptive analysis on the general data and the behaviors of Facebook users, 2) t-test (t-test for Independent Samples) and F-test (One-way ANOVA) were used to compare the influence of Facebook on the users with different demographic data using the Least Significant Difference (LSD) of 0.05 (Wanichbancha, 2006). By this study, SPSS software program was used in the data analysis.

Results

The questionnaires were distributed to the students of Silpakorn University, Petchaburi Information Technology Campus, in March – April 2014. It was found that 400 questionnaires were returned as planning. The returned questionnaires were verified and analyzed as results:

1. Most of the samples were female (n = 323, 80.75%). They studied in the third year (n = 133, 33.25%) in the Faculty of Management Science (n = 277, 69.25%) with the GPA of 2.51 – 3.00 (n = 210, 52.50%). Most of them obtained the allowance of THB 5,001 – 7,000 (n = 218, 54.50%), dinner outside very week (n = 234, 58.50%), pay 300 – 500 THB per meal (n = 277, 69.25); see Table 1.

Table 1

Frequency and Percentage of Sample Separated by Demographic Data

Item		Frequency	Percentage
Gender	Male	77	19.25
	Female	323	80.75
Year	First	85	21.25
	Second	90	22.50
	Third	133	33.25
	Fourth	92	23.00
Faculty	Information Communication and Technology	59	14.75
	Management Science	277	69.25
	Animal Science and Agricultural Technology	64	16.00
GPAX	Less than 2.00	3	0.75
	2.01 – 2.50	75	18.75
	2.51 – 3.00	210	52.50
	3.01 – 3.50	87	21.75
	3.51 – 4.00	25	6.25
Allowance per month	Less than 5,000 THB	101	25.25
	5,001 – 7000 THB	218	54.50
	7,001 – 10,000 THB	59	14.75
	More than 10,000 THB	22	5.50
Frequency of dinner outside	Every Day	33	8.25
	2-3 times per week	102	25.50
	Once a week	234	58.50
	2-3 times per month	25	6.25
	A month and more than one month	6	1.50
Money Spent per meal	Less than 200 THB	34	8.50
	200 – 300 THB	34	8.50
	300 – 500 THB	277	69.25
	More than 500 THB	55	13.75

2. Regarding the behaviors of the Facebook users, most of the samples used Facebook 6 – 10 times per week (n = 191, 47.75%). They used Facebook 1 – 3 hours per day (n = 178, 44.50%). They used Facebook 3-5 years (n = 311, 77.75%). They used Facebook at University (n = 325, 81.25%). They connected Facebook via smartphone (n = 338, 84.50%), and they were influenced by friends in restaurant selection via Facebook (n = 196, 49.00%)

Table 2
Frequency and Percentage of Sample Separated by Behaviors of the Facebook Users

Item		Frequency	Percentage
How often do you use Facebook per one week?	1 – 5 times/week	55	13.75
	6 – 10 times/week	191	47.75
	11 – 15 times/week	105	26.25
	More than 15 times/week	49	12.25
How many hours do you use Facebook per day?	Less than 1 hour	112	28.00
	1 – 3 hours	178	44.50
	4 – 6 hours	56	14.00
	More than 6 hours	54	13.50
How long have you started using Facebook?	Less than 1 year	5	1.25
	1 – 2 years	17	4.25
	3 – 5 years	311	77.75
	More than 5 years	67	16.75
Where do you use Facebook as usual?	Home	57	14.25
	University	325	81.25
	Internet café	10	2.50
	Restaurant/ Bakery Shop	7	1.75
	Other	1	0.25
Which equipment do you use for connecting your Facebook account?	Computer (PC)	23	5.75
	Computer (Laptop)	36	9.00
	Smart phone	338	84.50
	Other	3	0.75
Who has influence to choose restaurant via Facebook	Friend	196	49.00
	Presenter/Actor	112	28.00
	Celebrity	61	15.25
	Blogger	31	7.75

3. Concerning the use of Facebook for restaurant purposes, the most type of restaurant that the sample chose by stimulus in Facebook was Bakery, the next were coffee shop, Japanese restaurant, ice-cream shop, seafood, fast food, nightclub, buffet, food stall, restaurant in hotel, and Thai restaurant, respectively. As for hypothesis testing with t-test, it was found that men's perspectives were different from from women's in bakery, ice-cream shop, and restaurant in hotel. Males are stimulus by Facebook more than females in restaurant in hotel while females are stimulus by Facebook more than males in bakery shop and ice cream shop. As for the others, it is not different; See Table 3

Table 3: Mean of Male, Female, and total for stimulating by Facebook and t-statistics

Restaurant	Male-Mean	Female-Mean	Total-mean	t-statistics
1. Bakery Shop	4.35	4.77	4.69	4.5086***
2. Coffee Shop	4.32	4.36	4.35	0.4294
3. Japanese Restaurant	4.30	4.31	4.31	0.1073
4. Ice cream Shop	3.95	4.15	4.11	2.1470*
5. Seafood Restaurant	3.89	3.92	3.91	0.3220
6. Fast food Restaurant	3.88	3.87	3.87	0.1073
7. Night Club	3.79	3.70	3.72	0.9661
8. Buffet	3.68	3.62	3.63	0.6441
9. Food Stall	3.58	3.62	3.61	0.4294
10. Restaurant in hotel	3.79	3.44	3.51	3.7572***
11. Thai Restaurant	3.46	3.43	3.44	0.322
12. Pizza Shop	3.44	3.40	3.41	0.4294
13. Italian Restaurant	3.15	3.22	3.21	0.7514
14. Vietnamese Restaurant	2.99	3.05	3.04	0.6441
15. Islamic Restaurant	2.77	2.60	2.63	1.8249
16. Chinese Restaurant	2.57	2.55	2.55	0.2147
17. French Restaurant	2.54	2.50	2.51	0.4294
18. I-san Restaurant	2.38	2.42	2.41	0.4294
19. Southern food Restaurant	2.25	2.30	2.29	0.5367

* sig at 0.05 **sig. at 0.01 and *** sig. at 0.001

4. In hypothesis testing about studying year's effect to stimulus by Facebook in restaurant selection, it was found that there were not differences between studying years in all restaurant types at significant level 0.05. As for hypothesis testing with using Facebook behavior, there were differences in some types of restaurant. For example, it was different in Chinese restaurant when compare with time of starting to use Facebook or it was different in seafood restaurant when compare with time spent per day with Facebook. However, in overall, it has few cases which were different. Hence, the results in this topic were not shown.

Discussion, Conclusion, and Suggestions

1. Most of the samples were female, studied in the third year, studied in the Faculty of Management Science, got GPAX of 2.51 – 3.00, obtained the allowance of THB 5,001 – 7,000, had dinner outside very week, and paid 300 – 500 THB per meal. Regarding the behaviors of the Facebook users, most of the samples used Facebook 6 – 10 times per week, used Facebook 1 – 3 hours per day, started to use Facebook 3-5 years, used Facebook at university, connected Facebook via smartphone, and were influenced by friend in restaurant selection via Facebook.

2. The most type of restaurant that the sample chose by stimulus in Facebook was

Bakery, the next were coffee shop, Japanese restaurant, ice-cream shop, seafood, fast food, nightclub, buffet, food stall, restaurant in hotel, and Thai restaurant, respectively. As for hypothesis testing with t-test, it was found that men had differed from women in bakery, ice-cream shop, and restaurant in hotel. There were not differ among studying years in all restaurant types and there were differences in some types of restaurant. However, in overall, it has few cases that differ.

3. Since this study was the quantitative one, the qualitative research should be conducted in the future using, for example, the in-depth interviews, observations, or any other methods to obtain in-depth details because such information will be very beneficial and necessary in establishing the business plans that are in compliance with the media.

4. 4. This study focused only on the Facebook users that were the students studying at the Faculty of Management Science, Silpakorn University, Petchaburi Information Technology Campus. Hence, the future researches should compare the behaviors of Facebook users between the students of Silpakorn University, Petchaburi Information Technology and other campuses/institutes.

5. 5. Since this research was involved mainly with www.facebook.com, the future studies should pay attention to other Social Network such as Google.com, yahoo.com or Sanook.com, and so on, to obtain more information that can be used by the entrepreneurs for the decision-making on the online public relations and advertisements.

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The Factor Analysis in Hotel Selection of Foreign Elder Tourists in Hua-Hin Prachubkirikhan

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Abstract

This research aims to study consumer behavior and analyze the factors affecting the hotel selection of foreign elder tourists. The sample group of this research was 180 elder foreign tourists who had visited Hua-Hin, Prachubkirikhan during March to May 2014. The scope of the sample was age more than 50 years old. The instrument of this research was questionnaire. It was selected by convenience sampling method and analyzed by statistic programs which were frequency, percentage, mean, standard deviation, and principal component analysis. It found that the majority of respondents came from Europe, live in Hua-Hin from 7-10 days, spent money more than 6,000THB per day, searched information from the Internet, and used to be in Hua-Hin 2-3 times. Moreover, the factor analysis shows that there are 30 variables affecting the hotel selection of foreign elder tourists and can extracted into 6 components consisted of convenience, activity, safety, easiness for travel, privacy, and price. While the data were arranged by mean, it was found that the highest mean was privacy, the next was safety, convenience, easiness for travel, activity, and price, respectively. This research can contribute the factors in hotel selection of foreign elder tourists and provide the information for hotel entrepreneurs to prepare the facilities and strategies to support the elder consumers who have a high demand and budget.

Keywords: Hotel, Foreign Elder, Tourist

The Factor Analysis in Hotel Selection of Foreign Elder Tourists in Hua-Hin Prachubkirikhan

Introduction

The tourism industry is a major business that brings massive revenue into the country both direct and indirect ways. As tourists and accommodation business gain the majority benefit from the tourism industry or even to increase revenue to the local community (Lomsetthi, 2011). Tourism industry comprises many types of business both direct such as transportation, accommodation, restaurants and tourism business and; indirect such as goods' producing. The groups of foreign tourists are considered as export products. Therefore, tourism industry is a major source of foreign currency in the tourism industry's investment. Likewise, the benefits will occur within the country, it also builds the career part, boost the economic circulation and the revenues from the tourist industry. The research factors in marketing which foreign tourists have chosen to travel in Thailand found that most of them focus on the beauty of the scenery in the first primacy, followed by the price of accommodation and characteristics of Thai people, respectively (Suttipark, 2009)

Currently, the world population trend found that the elderly people have a higher rate which has continued up to 40 percent of the total world population due to the working age decreased and their retirement earlier than the past. Therefore, these elderly people will have more time to travel because they don't have any burden or responsibility at all. Therefore, most of the elderly people live their life happily with the revenue collection from almost their whole life. From the above information, retirement tourists who receive the benefit from government or monthly pensions paid and have their personal collection will have more power to effort their expenditure in travelling. According to statistics of elderly tourists traveling to Thailand in the last 5 years, were found a continued increase in the average rate of 6 percent per year. On the part of the retirement of tourist travelling in Thailand also showed a good growth rate by 5.33 percent per year. The average cost of elderly tourists per person per day is about 44 USD. Although the rate is lower than the average cost of travelling in general, to stay longer can earn a lot of money to the country. The research in elderly foreign tourists who travelling to Thailand found that the elderly foreigners' purposes are to take a rest, be relaxed and rehabilitate (Wongreedee, 2011). Consequently, the consumption behavior of elderly tourists is resulting in recognition of the importance of developing the marketing plan to select the target more clearly.

The hotel and accommodation are one of the important factors which influence tourists to visit Thailand. Moreover, the second factor is attraction places in Thailand. The hotel business in Thailand has recently improved regarding quality and availability of services as can be seen from a variety of business enterprises throughout the country. Moreover, Thais people provide the professional service and also have the unique characteristic and civility difference from other countries. The accommodation rates in Thailand are not very high comparing to the neighbor countries' accommodation rate

amongst the same levels in development. These are the strengths to make an impression for tourists. Therefore, hotel business has an important role in driving the growth of the tourism industry in Thailand. The research in marketing mix in the tourism sector has found that nowadays the tourism sector has a tourist's management system in order to meet the increasing in tourists factor (Madhyamaburush, 2011).

As a result, the researcher is interested in studying the factors of elderly foreign tourists' selection in Hua Hin District to provide additional information in hotel and accommodation's marketing strategy in order to fulfill elderly needs. Moreover, these also help in promoting the development of tourism industry in Hua Hin District, Prachuap Khiri Khan Province.

Research Methodology

1. In this research, we applied quantitative research methods to analyze Hotel Selection of Foreign Elder Tourists in Hua-Hin, Prachubkirikhan. The pilot study included a small sample size (N=30). We then analyzed the pre-test data by adjusted and removed questions. The data was collected by convenience sampling to 180 samples (Alpha 0.1) (Yamane 1967).

2. The major source of data was the secondary data which have been collected, analyzed and discussed by prior research. The questionnaire was given to the respondents. The first section of questionnaire deals with the demographic variables of the respondents which included four items as gender, age, marriage status, and nationality. The second section focuses on behavior of the respondents and the last section focuses on thirty items to measured factors of the hotel selection in elderly foreign tourists and applied a five-point Likert-type scale for all items, ranging from 1 to 5

3. The data was collected by questionnaire to foreign elder tourists who more than 50 years old. The questionnaire was distributed around Hua-Hin, Prachubkirikhan on April 2014.

4. In order to evaluate the properties of the measures, we checked the validity of the questionnaire by sending this questionnaire to three professors and edit as per their comments and then we analyzed the reliability of the scales by means of Cronbach's alpha with acceptable levels for reliability are 0.70 or above (Nunnally 1978; Fornell and Larcker 1981; Bagozzi and Yi 1988). The result show alpha 0.876 so the reliability of the scales exceeds the recommended values. Therefore, it appears that the measured have good reliability and validity. The usage statistical techniques employed in this research consisted of frequency, percentage, mean, standard deviation, and factor analysis by principle component analysis and orthogonal rotation by varimax method.

Results

From the data collecting, 180 surveys were used in this study representing an effective response rate 100% then we interpreted and analyzed the data in the form of description which were divided into 3 parts as follows; First part, descriptive statistics for the sample included gender, age, marriage status, and nationality. The second part was about behavior of the respondents. The last part applied factor analysis by using this technique to group 30 variables into 6 components as follows:

1. The result revealed that there were 180 respondents and most of respondents were female at 56.67%, aged range between 50-60 years old at 48.89%, the majority respondents were married, at 59.44%, at come from Europe at 42.78%. See Table 1

Table 1

Frequency and Percentage of General Data of Respondents

General Data	Frequency (n = 180)	Percentage
Gender		
Female	102	56.67
Male	78	43.33
Age		
51 – 60 years old	88	48.89
61 – 70 years old	60	33.33
More than 70 years old	32	17.78
Marriage Status		
Married	107	59.44
Single	39	21.67
Divorced	34	18.89
Continental		
Europe	77	42.78
North America	55	30.56
Asia	35	19.44
Australia	10	5.56
Africa	2	1.11
South America	1	0.56

2. The tourism behavior can conclude that most of respondents came to Hua-Hin with spouse (43.33%), stayed in Hua-Hin 5 – 7 days (46.11%), spent money 5,001 – 10,000 THB per day (61.11%), gathered tourism information from person who have travelled to Hua-Hin (40.00%), and used to come to Hua-Hin 2-3 times (55.00%). See Table 2

Table 2

Frequency and Percentage of tourism behavior of Respondents

General Data	Frequency (n = 180)	Percentage
Who do you come with?		
Spouse	78	43.33
Children	39	21.67
Family	35	19.44
Friend	17	9.44
Alone	11	6.11
Days in Hua-Hin		
1 - 3 days	11	6.11
3 – 5 days	35	19.44
5 – 7 days	83	46.11
7 -10 days	29	16.11
More than 10 days	22	12.22
Money spent in Hua-Hin Per day		
Less than 3,000 THB	4	2.22
3,000 – 5,000 THB	36	20.00
5,001 – 10,000 THB	110	61.11
10,001 – 20,000 THB	25	13.89
More than 20,000 THB	5	2.78
Source of Tourist Information		
Person who have travel before	72	40.00
Internet	71	39.44
Guide Book	20	11.11
Brochure/Advertisement	14	7.78
Fair	3	1.67
Number of Times to Hua-Hin		
First Time	56	31.11
2-3 Times	99	55.00
3-5 Times	20	11.11
More than 5 times	5	2.78

3. The factor analysis can divide 30 variables into 6 components consisted of Convenience, Activity, Safety, Easiness to Travel, Privacy, and Price. The Kaizer-Meyer-Oklin is equal 0.737 while Barlett's Test of Sphericity is equal 1843.064. In overall, it can explain total variance at 71.803%

3.1 The first component "Convenience" consists of 10 variables namely water heater, room service, free Wi-Fi internet access, provide first aid kit, in room safety box, cable TV, soundproof walls to protected outside noise, souvenirs shop, and laundry & dry cleaning services. In this component, the eigenvalue is equal 5.187 and can explain variance at 17.289. See Table 3

Table 3

Variable, Factor Loading, Mean, and S.D. of Component "Convenience"

Variable	Factor Loading	Mean	S.D.
Water heater	0.763	3.59	0.90
Room service	0.747	3.83	0.76
Free Wi-Fi internet access	0.735	3.41	0.90
Provide first aid kit	0.728	3.73	0.87
In room safety box	0.702	3.86	0.71
Cable TV	0.670	3.51	0.84
Soundproof walls to protected outside noise	0.653	3.49	0.84
Souvenirs shop	0.645	3.75	0.79
Laundry & dry cleaning services	0.595	3.75	0.74

3.2 The second component "Activity" consists of 5 variables namely spa & Thai massage, fitness, catering, beauty salon services, and swimming pool. In this component, the eigenvalue is equal 4.280 and can explain variance at 14.266. See Table 4

Table 4

Variable, Factor Loading, Mean, and S.D. of Component "Activity"

Variable	Factor Loading	Mean	S.D.
Spa & Thai massage	0.865	4.00	0.71
Fitness	0.864	3.90	0.76
Catering	0.853	3.82	0.81
Beauty salon services	0.852	3.84	0.77
Swimming pool	0.739	3.70	0.77

3.3 The third component "Safety" consists of 5 variables namely technology security system, fire extinguishers available in various spots, security officer, evacuation signs for emergency, and security guarantee. In this component, the eigenvalue is equal 3.837 and can explain variance at 12.790. See Table 5

Table 5

Variable, Factor Loading, Mean, and S.D. of Component "Safety"

Variable	Factor Loading	Mean	S.D.
Technology security system	0.748	3.90	0.81
Fire extinguishers available in various spots	0.716	3.89	0.87
Security officer	0.690	3.98	0.84
Evacuation signs for emergency	0.686	3.84	0.85
Security guarantee	0.617	3.60	0.84

3.4 The fourth component "Easiness to Travel" consists of 4 variables namely shutter service to Hua Hin attraction, travel guide for Hua Hin, tour guide services, and staff available for tourist information service. In this component, the eigenvalue is equal 3.452 and can explain variance at 11.506. See Table 6

Table 6

Variable, Factor Loading, Mean, and S.D. of Component "Easiness to Travel"

Variable	Factor Loading	Mean	S.D.
Shutter service to Hua Hin attraction	0.862	4.01	0.93
A travel guide for Hua Hin	0.850	3.80	0.80
Tour guide services	0.709	3.85	0.81
Staff available for tourist information service	0.586	4.00	0.68

3.5 The fifth component "Privacy" consists of 4 variables namely concierge service, protection of personal information, a key-card system, and private beach. This component, the eigenvalue s equal 2.579 and can explain variance at 8.596. See Table 7

Table 7
Variable, Factor Loading, Mean, and S.D. of Component "Privacy"

Variable	Factor Loading	Mean	S.D.
Concierge service	0.788	3.60	0.84
Protection of personal information	0.601	3.53	0.93
A key-card system	0.589	3.80	0.82
Private beach	0.503	3.51	0.81

3.6 The sixth component "Price" consists of 2 variables namely reasonable price in staff service and reasonable price in food's quality and quantity. In this component, the eigenvalue is equal 2.207 and can explain variance at 7.356. See Table 8

Table 8
Variable, Factor Loading, Mean, and S.D. of Component "Price"

Variable	Factor Loading	Mean	S.D.
Reasonable price in staff service	0.831	4.11	0.78
Reasonable price in food's quality and quantity	0.763	3.74	0.85

Conclusion

It is found that most of respondents were female, aged range between 50-60 years old, married, and come from Europe. It can also conclude that most of respondents came to Hua-Hin with spouse, stayed in Hua-Hin 5 – 7 days, spent money 5,001 – 10,000 THB per day, gathered tourism information from person who have travelled to Hua-Hin, and used to come to Hua-Hin 2-3 times. The factor analysis can divide 30 variables into 6 components consisted of Convenience, Activity, Safety, Easiness to travel, Privacy, and Price. And in overall, it can explain totally variance at 71.803.

This research can contribute the factors in hotel selection of foreign elder tourists and provide the information for hotel entrepreneurs to prepare the facilities and strategies to support the elder consumers who have a high demand and budget.

The future research could examine additional variables to continue exploring what is driving the effect to decision to select restaurant of elder foreign tourists. In addition, it could examine other groups of sample to understand the effect by comparing among groups of sample.

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The Analysis of Factors Affecting Choosing Health Insurance Packages of Consumers in Bangkok

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Abstract

The objective of this research was to analyze factors affecting choosing health insurance packages. The samples were 400 consumers in Bangkok who bought health insurance packages. The samples were selected by two-stage sampling and collected during April-May 2014. The questionnaire was used as a research instrument. The research statistical techniques were frequency, percentage, mean, standard deviation, t-test, and principal component analysis. It was found that most of the samples were female, 31-40 years old, graduating bachelor degree, working in private company, and earning between 30,001-50,000 THB per month. For buying behaviors, most of them had only one health insurance package, decided to buy the package the agency, paid about 20,001-30,000 THB for the health insurance package, bought package of BUPA, claimed only once a year, and planned to buy the package for family members in the future. While analyzing the factors by principal component analysis, It was found that the 25 factors could be divided into 5 components which were insurance company, promotion, benefit, avoid risk, and price.

Keywords: Insurance Company, Health Insurance Package, Factor Analysis

The Analysis of Factors Affecting Choosing Health Insurance Packages of Consumers in Bangkok

Introduction

Thailand, one of developing countries, most citizens at present are found to have poor health condition. Also, expenses on medical treatments have been considered high which Thai governments have been responsible for and dramatically impacted in terms of national economy. Hence, Ministry of Public Heath on behalf of Thai Government has adjusted concepts and strategies in terms of operations regarding health by emphasizing on having the citizens well-informed and involved with self-health care. This does not only decrease treatment loads but better health of the citizens with strengths leading to national developments afterwards (Kulsuep and Chuathong, 1997).

Self-health care is considered very important as in fact any treatments or health care is individual responsibility, so the self-health care is the most important key factor to the overall health developing success (Boonthong, 1991: 11). Besides, personal behaviors considerably have an effect on the health conditions while the good health behaviors cause the good health conditions. More than that, during illness, faster adjustments towards critical conditions are resulted from the good health behaviors (Suwannakot, 1993: 393). Therefore, the personal behaviors are directly involved with the health conditions for both good and poor conditions.

Health insurance is one of solving alternatives after the aforementioned issues, for the insurance is cooperatively sharing risks of death, losing body parts, being disabled, and/or being retired; a sum of money is compensated for earnings and relieving family members' financial problems. Also, the insurance is an advantageous means as an individual and family financial guarantee (The Fiscal Policy Office, Ministry of Treasury cited in Palee, 2007). The advantages of the insurance consist of security protection, saving protection and tax advantages, and assureds can purchase the health insurance along with the main life insurance in order to gain more protections: patient room charges, treatment fees, medication fees and daily compensations (Chinsawang, 2013).

Being assured by the insurance therefore is a choice for people who expect the protection for unforeseeable health risks caused by accidents or ailments. The questions of this study are retrieved from what mentioned in order to study influencing factors towards decision making on health insurance purchasing of consumers in Bangkok and considered criteria and indicators and to understand marketing concepts influencing decision making on health insurance purchasing of consumers in Bangkok. This study is also useful for those who intend to own the health insurance and for references in any research study afterwards.

Research Methodology

The methodology for this research was divided into 4 parts consisting of population and samples, data collecting, questionnaires, and statistic techniques as follows:

1. The population of this research was people in Bangkok who used to buy health insurance package, however there were not any private or public organizations collecting the data. On general basis, there were a lot of people buying the health insurance package. Hence, when the sample was calculated by Yamane (1967) at significant level at 0.05, the sample was equal 400 people.

2. The sampling used for this research was two-stage sampling. At the first stage, Bangkok was divided into 5 zones and 1 district was selected from each zone while the second stage was selecting 80 people from each district by purposive sampling. The samples, who used to buy the health insurance package, the questionnaire was distributed and collected in April 2014.

3. The questionnaire was separated into 3 parts: general data, buying behaviors, and factors affecting buying behaviors. In order to evaluate and check the validity of the questionnaire, this questionnaire was sent to three professors and edited regarding their comments and then analyzed the reliability of the scales by Cronbach's alpha which was equal 0.844. It was at accepted levels for reliability (Malhotra, 2010)

4. The statistics employed in this research consisted of frequency and percentage for general data and buying behaviors. For factors affecting buying behaviors, the factor analysis by principle component analysis and orthogonal rotation by varimax method was used (Heir et, al., 2010).

Results

1. It was found that most of the samples were female (72.25%), 31-40 years old (42.00%), graduating bachelor degree (70.75%), working in private company (43.00%), and earning between 30,001-50,000 THB per month (33.00%). See Table 1.

Table 1
Frequency and Percentage of General Data

General Data	Frequency (n = 400)	Percentage
Gender		
Female	289	72.25
Male	111	27.75
Age		
21 – 30 years old	126	31.50
31 – 40 years old	168	42.00
41 – 50 years old	56	14.00
51 – 60 years old	35	8.75
More than 60 years old	15	3.75

General Data	Frequency (n = 400)	Percentage
Education		
Lower than Bachelor	31	7.75
Bachelor Degree	283	70.75
Upper than Bachelor	86	21.50
Occupation		
Employee in Private Company	172	43.00
Own Business	115	28.75
Government Officer	84	21.00
Students	24	6.00
Others	5	1.25
Monthly Income		
Less than 20,000 THB	58	14.50
20,000 – 30,000 THB	102	25.50
30,001 – 50,000 THB	132	33.00
50,001 – 100.000 THB	93	23.25
More than 100,000 THB	15	3.75

2. For buying behaviors, it was found that most of them had only one health insurance package (75.75%), decided to buy the insurance by agency (63.25%), paid about 20,001-30,000 THB for the health insurance package (48.25%), bought the package of BUPA (33.00%), claimed only once a year, and planned to buy for the family members in the future (78.50%). See Table 2.

Table 2
Frequency and Percentage of Buying Behaviors

General Data	Frequency (n = 400)	Percentage
Numbers of Package the Sample Have		
1 package	303	75.75
2-3 packages	88	22.00
More than 3 packages	8	2.00
Buying Channel		
Agency	253	63.25
Company	119	29.75
Website	18	4.50
Telephone	10	2.50
Price of Health Package		
Lower than 20,000 THB	163	40.75
20,000 – 30,000 THB	193	48.25
30,001 – 50,000 THB	37	9.25
More than 50,000 THB	7	1.75
Company		
BUPA	132	33.00
AIA	94	23.50
SCB Insurance	71	17.75

General Data	Frequency (n = 400)	Percentage
Thai Life Insurance	56	14.00
Krungthai-Axxa	14	3.50
ING Insurance	14	3.50
Others	19	4.75
Frequency of Claiming per Year		
Never	36	9.00
1 time	144	36.00
2 – 3 times	114	28.50
4 – 5 times	83	20.75
More than 5 times	23	5.75
Planning to Buy for Family's Members		
Yes	314	78.50
No	86	21.50

3. The factor analysis could divide 25 variables into 5 components which were insurance company, promotion, benefit, avoiding risk, and price. The Kaizer-Meyer-Oklin was equal 0.788 while Barlett's Test of Sphericity was equal 2841.077. Overall, it could explain total variance at 67.753%

3.1 The first component "Insurance Company" consisted of 10 variables namely reliable and trusted agents, availability of alternative insurance packages, providing protections and health insurance advice to individual clients, company employees and employees' family members, availability of compensation claim follow-ups, decreasing family loads in case of high-expense treatments, availability of CSR projects, enthusiastic staff in providing services, an acquaintance once was serviced by the chosen company, literate staff providing complete and correct information, and health guaranteeing and quality life encouraging. For this component, the eigenvalue was equal 5.728 and could explain the variance at 22.911%. See Table 3

Table 3
Factor Loading, Mean and S.D. of all variables in Component 1 "Insurance Company"
(Eigenvalue = 5.728 explaining the variance at 22.911%)

Items	Factor Loading	Mean	S.D.
1. Reliable and trusted agents	0.820	4.34	0.79
2. Availability of alternative insurance packages	0.776	4.33	0.75
3. Providing protections and health insurance advice to individual clients, company employees and employees' family members	0.772	4.25	0.71
4. Availability of compensation claim follow-ups	0.765	4.21	0.75
5. Decreasing family loads in case of high-expense treatments	0.755	4.49	0.70

Items	Factor Loading	Mean	S.D.
6. Availability of CSR projects	0.736	4.18	0.79
7. Enthusiastic staff in providing services	0.732	4.26	0.75
8. An acquaintance once was serviced by the chosen company.	0.732	4.21	0.74
9. Literate staff providing complete and correct information	0.685	4.30	0.75
10. Health guaranteeing and quality life encouraging	0.520	4.13	0.70

3.2 The second component "Promotion" consisted of 6 variables namely informative activities and/or seminars regarding insurance, discounts/ souvenirs/ premium gifts provided upon an insurance contract, availability of an informative website, regular advertising through varied channels: television, newspaper, website etc., publicizing insurance information: SMS, invoice, call center etc. and helpful staff providing health insurance information. For this component, the eigenvalue was equal 4.645 and could explain the variance at 18.580%. See Table 4.

Table 4
Factor Loading, Mean and S.D. of all variables in Component 2 "Promotion"
(Eigenvalue = 4.645 explaining the variance at 18.580%)

Items	Factor Loading	Mean	S.D.
1. Informative activities and/or seminars regarding insurance	0.885	3.77	0.73
2. Discounts/ souvenirs/ premium gifts provided upon an insurance contract	0.863	3.81	0.87
3. Availability of an informative website	0.859	4.02	0.81
4. Regular advertising through varied channels: television, newspaper, website etc.	0.845	4.05	0.80
5. Publicizing insurance information: SMS, invoice, call center etc.	0.842	3.98	0.81
6. Helpful staff providing health insurance information	0.830	3.99	0.70

3.3 The third component "Benefit" consisted of 3 variables namely developing the best and continuous service for the most advantage of individual client, availability of additional customized advantages: doctor consulting fees, medication fees, x-ray fees, lab fees etc. (maximum once a day; 30 times a month), and availability of excellent investment return policy and no-claim payback policy. For this component, the eigenvalue was equal 2.425 and could explain the variance at 9.698%. See Table 5.

Table 5

Factor Loading, Mean and S.D. of all variables in Component 3 "Benefit" (Eigenvalue = 2.425 explaining the variance at 9.698%)

Items	Factor Loading	Mean	S.D.
1. Developing the best and continuous service for the most advantage of individual client	0.919	4.03	0.81
2. Availability of additional customized advantages: doctor consulting fees, medication fees, x-ray fees, lab fees etc. (maximum once a day; 30 times a month)	0.915	4.03	0.81
3. Availability of excellent investment return policy and no-claim payback policy	0.662	3.87	0.75

3.4 The fourth component "Avoiding Risk" consisted of 3 variables namely providing protections upon any treatments plus specified compensations, Insurance as decreasing risks of an assured, and insurance as risk transferring to others. For this component, the eigenvalue was equal 2.265 and could explain the variance at 9.061%. See Table 6.

Table 6

Factor Loading, Mean and S.D. of all variables in Component 4 "Avoiding Risk" (Eigenvalue = 2.265 explaining the variance at 9.061%)

Items	Factor Loading	Mean	S.D.
1. Providing protections upon any treatments plus specified compensations	0.826	3.25	1.07
2. Insurance as decreasing risks of an assured	0.826	3.38	1.04
3. Insurance as risk transferring to others	0.790	3.66	0.90

3.5 The fifth component "Price" consisted of 3 variables namely availability of insurance premium installation, appropriate insurance premium, and appropriate insurance premium. For this component, the eigenvalue was equal 1.876 and could explain the variance at 7.503%. See Table 7.

Table 7

Factor Loading, Mean and S.D. of all variables in Component 5 "Price" (Eigenvalue = 1.876 explaining the variance at 7.503%)

Items	Factor Loading	Mean	S.D.
1. Availability of insurance premium installation	0.844	3.89	0.88
2. Appropriate insurance premium	0.839	3.82	1.02
3. Affordable insurance premium	0.539	4.41	0.66

Conclusion

From the results above, it could be concluded that most of the samples were female, 31-40 years old, graduating bachelor degree, working in private company, and earning 20,001-30,000 THB per month. For buying behaviors, it was also found that most of them had only one health insurance package, decided to buy by agency, paid about 20,001-30,000 THB for health insurance package, bought package of BUPA, claimed only once a year, and planned to buy for the family members in the future. It was also found that the 25 factors could be divided into 5 components which were insurance company, promotion, benefit, avoid risk, and price.

As it had been observed through the survey that market was very competitive; therefore it was suggested that the player should adopt customer centric approach by 5 components were extracted. Moreover, most of them wanted to buy for the other family members, so insurance companies should maximize satisfactions for consumers to decide to change to other competitors.

In this research, the consumers selected as the samples were not specified whether they paid for the insurance by themselves or were supported by their companies. The research study also studied only the health insurance, thus the other types of insurance would provide more knowledge about the factors affecting insurance package choosing.

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Behavior and Factors that Affecting the Money Saving Choice of Elder Consumers in Hua-Hin District, Thailand

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Abstract

The purposes of this research were to study the behavior of elder consumers in Hua-Hin district through the money saving choice and to analyze the factors affecting the money saving choice in Hua-Hin. This study was quantitative research by using four hundred respondents who were elder people aged over than 60 years old in Hua-Hin district. The instrument used in this study was questionnaire for collecting the data and analyzed by statistic descriptive which were frequency, percentage and average. The first section is about the personal data. The second section is about saving behavior. The third part rating the measurement scale of variable affecting the money saving choice and then it was analyzed by inferential statistic, which was factor analysis to group the factor. The result showed could be classified 25 variables into 6 factors, which consist of awareness of existent insecurity, saving knowledge, saving attitude, payout benefit, reliable of saving type, and easier process of saving. All factors can explain the money saving choice. The suggestion of this study can be used to improve and develop about institution saving method and strategic to make more efficacies and launch the best saving money choice for Thais elder consumer to have a well being life.

Keywords: Hua-Hin, elder, money saving

Behavior and Factors that Affecting the Money Saving Choice of Elder Consumers in Hua-Hin District, Thailand

Introduction

Money saving is one of the significant capital investments in the country. It is an important factor and fundamental in order to develop the growing of national economy. In addition to national savings or regional savings, it is important not to overlook in part of general demography. Due to money saving is an important factor for the future fundamental; as a result, the government also encourages the public to save more money whether in any form. In the economics, these money saving are still circulating in the global economic system due to financial institutions would bring these money for loan. The borrower will invest into the business by buying production factors; as an income to the owners of production factors, which is used to pay for the consumption part and some savings in another part. The flow of these kinds of savings is a circuit as opposed to a case of self-saving, not spending. The amount of self-saving will totally slip out of the economic system; will not circulate back in the economic until the spending has occurred once again.

At this time, Thailand is experiencing a demographic change issues into the aging rapidly. It found that within 20 years (2543-2568) the elder population increased more than 2-fold, from 9.40 to 20 percent. And the elderly dependency ratio to the working age population is up to 2 times, from 15.16 to 31.80 percent. This mean the population of working age of 100 people would have to work and take care of 15 elder people. In the future the working age people will take care of the elder increased to 30 people. This is an obligation of the state to allocate a large budget to support the elder population. Meanwhile, revenues from the taxation of the working people are reduced when its compares with an increasing in the proportion of the elder population. A decreasing in the population of children can be seen clearly that proportion of elder in Thailand increase steadily over the young population by the year 2568, approximately 15 years (National Statistical Office). This makes the elderly population become a group to be focus on the money savings even more.

Likewise, there are many elder populations in the Hua Hin district. In the future, this problem would affecting the elder population for those who are single or their offspring do not have enough money to support the family. Therefore, people who expect to retire in the future should prepare themselves for self-reliance retirement from today by primarily concentrate on the savings. This would be ensure that elder people have adequate money after retirement and can live their life well without reliance on children. The government has set the policy "Sufficiency Economy" to make people aware of the savings. Financial institutions that respond to government policy also have announced through the public media on how to save money constantly. However, there are many way of savings such as deposit money in the bank, buy insurance policy or life insurance policies and so on. Some elder people lack of knowledge on savings and the safety way to save money, thus the saving of some elder people is lack of virtuous saving plan.

Therefore, the researcher is interested in studying the behavior and the factors that effect on savings of the elder in Hua Hin in order to encourage and campaign on savings for the elder in these area and also guideline to solve problems, which has a direct impact on economic development in both present and future in Hua Hin district, Prachuap Khiri Khan Province.

Purpose of study

1. To study the behavior of savings of the elder population in Hua Hin District.

2. To analyze the various factors that effect on the savings of the elder population in Hua Hin District.

Methodology

1. The population in this research is elder people in Hua Hin District.

2. The sample consisted of elder people who live in Hua Hin District, 400 samples, by using random sampling method of Taro Yamane at confidence level of 95% and a deviation of 5% as follows:

$$n = \frac{Z^2}{4e^2} \quad (1)$$

$$n = \frac{(1.96)^2}{4(0.05)^2} \quad (2)$$

The sample size was calculated by using the formula of Yamane (1973). The size of a random sample is 385 samples, where the data were actually collected through 400 samples.

3. This study used the self-administered questionnaires; the questionnaires composed of 3 parts as follow:

Part 1 was the general information of the respondents.

Part 2 was questioned about the savings behavior of the elder.

Part 3 was questioned on the various factors that can be affected on savings behavior of the respondents and score based on the level 1-5 Likert Scale where

(1) is least important and

(2) is less important and

(3) is Neutral and

(4) is more important and

(5) is the most important, and defining parameters were 31 variables.

4. Monitoring

In this study were tested Validity and Reliability as follows:

3.4.1 Validity: The researchers brought up the created-questionnaires to the professor in order to consider and determine the content validity and the appropriateness of the wording to be revised and edit as per his comment before being used in the questionnaires.

3.4.2 Reliability: The researcher used the created-questionnaires with some new adjustment for 30 questions with the respondents who have qualification close to the samples whether the questions can express the accurately and easily to understand the meaning or not. Hence, to test the reliability of the questionnaires by using Cronbach's Alpha method which acceptance's criteria greater than 0.700, the derived value was 0.899 (Sarayuth Kunlong, 2555).

5. Statistical Analysis

The samples are identified by Factor Analysis and computed with SPSS Program (SPSSInc, Version 11.5). Factor analysis is a technique to gather or include variables that are related in the same factors. The variables in the same group are more related in a relationship whether the relationship would be positive or negative (Kanlaya, 2549). The analysis consists of 3 steps:

1. To determine the correlated variables by using statistics of Kaiser-Meyer-Olkin (KMO) to measure the data's appropriateness.

2. Factor Extraction, to quantify the factors that can be used for substitute all the variables or convert a set of observations of possibly correlated variables into a set of values by using Principal Component Analysis (PCA) where Eigenvalues is 1.

3. Factor Rotation either the factor loading of the variables are high or low, until those variables can be informed on any factor.

6. Interpretation of the Mean.

Interpretation of each question from the questionnaire by using interpretation guidelines from Mr. Prasopchai Pasunonta (2553) were scored as follows: 4.51 – 5.00 is very high, 3.51 - 4.50 is high, 2.51 - 3.50 is average, 1.51 to 2.50, is low and 1.00 – 1.50 is very low.

Finding

1. Demographic analysis on behavior and the factors that effect on money saving of the elder in Hua Hin district revealed that the most of respondents were male at 65.0 %, aged range between 65-69 years old at 28.6%, married which is the first marriage or married only once at 36.7%, graduate bachelor degree level at 23.8%, retirement but still working extra at 37.8%, and have income per month between 5,000 - 20,000 baht at 48.5%, work in government office currently or previous career before retired at 46.3%.

2. Analyzing the saving behavior of the elder people showed that the reason of the savings due to high returns at 37.2%, emergency use at 57.2%, savings frequency 1-2 times per month at 82.5%, deposits with commercial banks at 46% and the decision making on how to save money for their own use at 60.8%. See Table 1

Table 1

Shows the number and percentage of the savings behavior of the elder population in Hua Hin district.

The savings behavior of the elder people	The major saving behavior of the elder people	Number of people	Percentage
Purpose of savings	High return	149	37.2
Objective of savings	Emergency use	229	57.2
Frequency of savings per month	1 - 2 times per month	330	82.5
Method of savings	Deposits with commercial banks	184	46.0
Decision making on savings.	Self-usage	243	60.8

3. The factor analysis shown that the researcher has determined the suitability of the data where the value of KMO (Kaiser-Meyer-Oklin) equal to 0.899, which value tends to 1 and the value of Barrert's Test of Sphericity was 8818.359 (Sig. =0.000). This means that data analysis is appropriate to be used for analyzing (Kanlaya Vanichbuncha, 2549).

The measurement of KMO (Kaiser-Meyer-Oklin) from sampling (MSA) = 0.899> 0.5 and Barrert's Test of Sphericity Sig = 0.000 <0.05, therefore the factor analysis can be used to analyze this data.

Moreover, Table 2 shows 25 variables of them were classified into 6 factors which have eigenvalues greater than 1. The researcher has group into 6 factors which have cumulative variance of 68.108%. As well, these 6 factors can explain all the variables at 68.108% (about 70% at the appropriate level).

Table 2:

Shows the value of Total Variance Explained

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.162	39.232	39.232	11.781	38.003	38.003
2	2.608	8.413	47.644	2.266	7.309	45.312
3	2.231	7.198	54.842	1.833	5.913	51.225
4	1.541	4.972	59.814	1.148	3.704	54.929
5	1.372	4.426	64.240	.982	3.167	58.096
6	1.199	3.869	68.108	.772	2.490	60.585

4. In the process of analyzing the factors by the variables' classification using factor analysis techniques to group 25 variables that affect brand loyalty found that variables could be grouped into 6 factors only. It consists of factors in the recognition of insecurity or existing risk, factors of knowledge on savings, factor in their attitudes on savings, factor of the return from savings, factor of the reliability form of savings and factor of simple way for savings.

Table 3:
Factor Loading, Mean and Standard Deviation of the variables that affect the activity.

Factors	Factor Loading	Mean	S.D.	Meaning
The recognition of insecurity or existing risk	Eigenvalues = 12.16 and Variance = 39.23 ($\overline{X}$ = 3.88, S.D = 0.82)			
Create safety on savings, no devalue.	0.72	3.79	0.82	High
Can be collateral by the law.	0.71	3.74	0.88	High
Easily converted into cash.	0.66	3.75	0.86	High
Coverage in many ways.	0.66	3.88	0.81	High
Can be applied to the annual tax deduction.	0.60	3.85	0.89	High
For stability in the elder age.	0.58	3.85	0.88	High
Financial stability and reliability.	0.58	4.08	0.75	High
The knowledge on savings.	Eigenvalues = 2.61 and Variance = 8.41 ($\overline{X}$ = 3.89, S.D = 0.83)			
Publicity of news and information.	0.57	3.96	0.71	High
Persuaded by others.	0.51	4.01	0.80	High
Have adequate documented on the benefits of money saving.	0.68	4.00	0.79	High
Government's Officials educate and induce on savings.	0.63	3.73	0.83	High
Savings campaign through the media.	0.63	3.89	0.82	High
Reduce reliance on government.	0.61	3.85	0.90	High
The attitudes on savings.	Eigenvalues = 2.23 and Variance = 7.19 ($\overline{X}$ = 3.73, S.D = 0.87)			
For their children.	0.58	3.95	0.83	High
For sickness or oldness.	0.57	3.93	0.82	High
For cremation ceremony.	0.76	3.66	0.90	High
For serenity in the future.	0.68	3.74	0.88	High
For financial collateral.	0.65	3.76	0.85	High
The return from savings.	Eigenvalues = 1.54 and Variance = 4.97 ($\overline{X}$ = 3.75, S.D = 0.87)			
Return rate received.	0.56	3.76	0.85	High
Time of return.	0.74	3.78	0.90	High

Factors	Factor Loading	Mean	S.D.	Meaning
Consistency in return.	0.69	3.88	0.84	High
Available in several return forms.	0.57	3.59	0.86	High
The reliability form of savings.	Eigenvalues = 1.37 and Variance = 4.42 ($\overline{X}$= 4.02, S.D = 0.76)			
Clear and definite guarantee.	0.70	4.01	0.76	High
Saving form is famous and popular.	0.60	4.02	0.75	High
Simple way for savings.	Eigenvalues = 1.19 and Variance = 3.86 ($\overline{X}$= 4.02, S.D = 0.78)			
The operating procedure is very fast and easy to understand.	0.60	4.02	0.78	High

4.5 From Table 3 the values are factor loading which shown the relationship of 25 variables with new 6 factors after Factor Rotation

The first factor is factor in the recognition of the existence of insecurity or high risk ($\overline{X}$= 3.88, S.D = 0.82) given value of Eigenvalues equal to 12.16. This explains the variance of the factors that affect the savings of the elder at 39.23 percent which consists of 7 variables; create safety savings, no devalue, can be collateral by the law, easily converted into cash, coverage in many way, can be applied to the annual tax deduction, stability in the elder age, and stability and reliability in financial.

The second factor is factor in high knowledge on savings ($\overline{X}$= 3.89, S.D = 0.83) given value of Eigenvalues equal to 2.61. This explains the variance of the factors that affect the savings of the elder at 8.41 percent which consists of 6 variables; publicity of news and information, persuaded by others, have sufficient documented on the benefits of money saving, government's officials educate and induce on savings, provide savings campaign through the media, and reduce reliance on government.

The third factor is factor about the high attitudes on savings ($\overline{X}$= 3.73, S.D = 0.87) given value of Eigenvalues equal to 2.23. This explains the variance of the factors that affect the savings of the elder at 7.19 percent which consists of 5 variables; savings for their children, savings for sickness or oldness, savings for cremation ceremony, savings for serenity in the future, and savings for financial collateral.

The fourth factor is factor about the return from savings ($\overline{X}$ = 3.75, S.D= 0.87) given value of Eigenvalues equal to 1.54. This explains the variance of the factors that affect the savings of the elder at 4.97 percent which consists of 4 variables; return rate received, time of return, consistency in return, and the return available in several forms.

The fifth factor is factor about the high reliability of the savings form ($\overline{X}$= 4.02, S.D= 0.76) given value of Eigenvalues equal to 1.37. This explains the variance of the factors that affect the savings of the elder at 4.42 percent which consists of 2 variables; clear and definite guarantee and savings' form is famous and popular.

The last factor is factor about the simple way for savings ($\overline{X}$ = 4.02, S.D= 0.78) given value of Eigenvalues equal to 1.19. This explains the variance of the factors that affect the savings of the elder at 3.86 percent which consists of 1 variable; the operating procedure is very fast and easy to understand.

Conclusion

5.1 A study of savings behavior of the elder population surveyed by questionnaire in Hua Hin district found that the major savings reason is high return on savings at 37.2%, saving for emergencies used at 57.2%, the frequency in saving is 1-2 times per month at 82.5 percent%, mostly deposits with commercial banks at 46.0% and the decision to save money by themselves at 60.8%. These are consistent with the research named "Factors that affecting the households' savings in the Harnkaew Subdistrict, Hang Dong District, Chiangmai Province" by Thanin Udomsri. The results of this research showed that most samples are saving money every month. Moreover, the purpose of money saving is to deposit for the children's education and for the emergencies' used. In addition, the majority of the samples save their money with the commercial banks as well as the results of this study.

5.2 This study analyzes the factors that affect the savings of the elder population with 25 variables, after analyzed the study found that there are 6 remaining factors which are factor in the recognition of the existence of insecurity or high risk, factor in knowledge about savings, factor about attitudes of savings, factor about the return on savings, factor about the high reliability form of savings, and factor about the simple way for savings. Therefore, the major factors from sampling that affect the savings of the elder population is the perception of insecurity or risk. It is because the current corruption and fraud are relatively high in financial circles thus these factors are affecting the savings of the elder in Hua Hin district. The next factor from sampling that affects the savings is the knowledge on how to save money. This is an important factor because some elder people do not have enough knowledge about savings, thus this factor is extremely important as well.

Suggestions

The recommendation for applicable.

The study found that majority samples save their money due to the high returns from deposit. Hence, it is suggested that financial institutions should be considered on the return from deposit of the elder populations by increasing the interest   or adapting other policies with the aim of encouraging seniors to save even more. It's also found that the factors that the most affecting on savings of the elder is the perception of insecurity or risk. So, Government agencies should provide more clarify, more education and support on how to save money to the elder.

The recommendations for further research.

　　　　- This study has collected the sample from the population within Hua Hin district only. Therefore, it should be expand the scope of research such as metropolitan area to get more information from the sampling. Hence, to get clearer information, it should also have in-depth interviews with some samples as well.

　　　　- The questions in the questionnaire may not cover inclusive; thus, next research should be extended more clearly to the specific scope of the question.

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The Analysis of Factor that Related in Foreign Food Restaurant Selection of Thais Teenagers in Bangkok

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Abstract

The purpose of this research was to analyze the factors related the foreign food selection of Thais teenager in Bangkok and guides the restaurant entrepreneurs to provide the strategic to develop the marketing plan. This research applied quantitative research method to analyze the data. The questionnaire used as a research instrument which consists of three parts – the first part surveyed about the personnel data of the respondents, the second part focused on the eating habit and the third part rated on 28 items scale about the factors related to international food restaurant selection. The data was collected by convenient sampling method from 400 teenagers who have eaten the foreign food. The data in the first and second parts were analyzed by descriptive statistic including frequency, mean, percentage and standard deviations and the third part was analyzed by inferential statistic, which is factor analysis. The result showed that the foreign food restaurant selection was related by 5 factors: 1) image factor, 2) attitude factor, 3) value factor, 4) product factor and 5) convenient factor. All factors component provided variance explain by rotation technique. The most explanation was image factor and followed by product factor. Thus, the image factor will be the most important, follow by product factor, attitude factor, value factor, and convenient factor that would be the least explanation.

Keywords: foreign food, factor analysis

The Analysis of Factor that Related in Foreign Food Restaurant Selection of Thais Teenagers in Bangkok

1. Introduction

Dining outside the home reflects the culture of the local community. Many countries in Asia features on dining outside their home which is the socialization of their family, friends or colleagues. At the earliest stage, dining outside the home or dining in the restaurant is only a place for the certain upper class. Now a day dining in the restaurants became a common way. So far, there are many class of restaurants with different value, thus people can choose to dine out in restaurants as affordable funds for their own. (Boybdream Webdesign, 2008)

Regarding to the past, it found that Thais prefer to cook and dine in their home rather than go out for dining. This reveals that dining outside is not the real culture of Thais people due to Thais social is a postmodern society, which concerns on the noticeable, rush-able, simple transformed form. This postmodern society, which derived from abroad, is becoming one of Thais' cultures that commonly popular in both capital and provinces nowadays. Moreover, this is a scramble for advantage between consumers and business owners by way of each believes that they can take advantage. (Chairat Charoensin-olarn, 2013)

In decision making of consumer's choice of restaurants is comprised of a variety factors. However, the traditional factors that consumers mostly choose the restaurant are the well-known brand, product quality, and the restaurant's decoration or present a good atmosphere. In the present day, customers have more choices; hence the entrepreneur must emerge with new campaign to attract more customers. Moreover, the entrepreneur has to move primarily into customers' choice by creating choices that support the customers' needed as many as possible.

The way to get to the restaurant is another factor that contributes to the decision making for customer to dine out as the transportation is at ease way. If the restaurant is located near the household or convenient to access, consumers will be more likely to choose that restaurant rather than the one that far away.

Presently, most consumers continue to dine out more often within a month because of the ease of having their meals rather than cooking at home. Restaurant is also the place where the consumer choose for comfortably and fulfill their needed through reasonable priced. What gives a successful business is to provide high quality and nutritious foods regarding to the worthiness and the reasonable price, which is the beginning of the restaurant business. Start from Thai restaurant, since then a variety of foreign restaurants has arisen. These are caused by the community, economic and globalization, which created variety restaurants (Kittipob Songkroh, 2555). The restaurant has expanded with the development in many styles with the purpose to fulfill consumer's satisfaction. Consumers used to catering at home but now they either buy from the restaurant and dine at house or dine at

the restaurant. As consumers have to work for earning money to support their families, they do not have enough time to cook. Dining in the restaurant is also comfortable, quickness and creates social gatherings among family, friend or colleague (Danurat Jaidee, 2010).

Food is one of four factors that are essential to life, which support the body to grow up with fully healthy in order to do many activities. If lack of nutrient, it will make life difficulty. There are choices of foods that humans consume today whether meat dish or dessert as a result of the restaurant business has originated up (Pornpis Phunsrisawat, 2011). Nutrient or what we consume that produce the benefit to the body in various way such as meat, rice, flour, vegetable, fruit, milk, fat and so on but not including medicines. The human body needs these nutrients more or less depending on the age and behavior of living.

Teenagers are a group of consumers whose has purchasing behavior in multiplicity. They always come up with new ideas. They also have maturity in decision-making, capable to purchase and decision making in buying process. Their process starts from the recognition of the needed or problem, information seeking, and evaluating alternative before and after in buying behavior (Kotler, 2009).

Currently, most teenagers choose a place for dining as their convenience preference because they do not have much time. They also focus firstly on the image of food which to be their motivation especially such as famous restaurants, in particular foreign restaurant due to an indication of their appearance.

Foreign restaurants those are popular today such as Chinese restaurants, Japanese restaurants, Korean restaurant, Italian restaurant, American restaurant, Vietnamese restaurants, etc.

From the above research, researcher has chosen the teenagers as a sample for the study of The Analysis of Factor that Related in Foreign Restaurant Selection of Thais Teenagers. Consequently, the result from this research will be useful for the entrepreneur of foreign restaurants in the marketing policy and improves problem to meet the consumers' needed.

2. Purpose of Study

The purpose of this research was to analyze the factor related the foreign restaurant selection of Thais teenager in Bangkok and guides the restaurant entrepreneurs to provide the strategic to develop the marketing plan.

3. Research Methodology

To explore the behavior of teenagers in order to inquire the factors related to the restaurant selection of Thais teenager in Bangkok. In this survey, the questionnaires consists of 3 parts; Part 1 was the personal data of the respondents which included four items as sex, age, education and income. Part 2 was questioned on consumer behaviors. Part 3 was questioned about factors in the selection of foreign restaurants. The score based on the level 1-5 Likert Scale where (1) is least important and (5) is the most important (Worawut Romeratanaohan, 2006) and defining parameters were 28 variables.

The consumer testing technique is sampling from the population of 400 people. This research did not know the exact number of samples. Therefore, the researcher has used a formula to determine the unknown sample size of the population where $n=z^2/4E^2$ (Kanlaya Vanichbuncha, 2546: 26).The sample size was calculated to be 385 people and reserved for 15 people, the total sample size is 400 and using cluster sampling (Cherdsak Kowasin, 2002).

The questionnaire used for collecting the data has been questioned by the technique of creating the questions, based on the objectives of the cognitive domain of Bloom. Moreover, the questionnaire must pass the test, improvement from experts to check on the accuracy of Validity of a question by using statistical methods. After the questionnaire has been validated, the questionnaire need to check for the Reliability into the process of testing on consumers 30 set of questionnaires, to evaluate the errors that may be occurred by misunderstanding the question or instructions in each parts of the questionnaire in order to get quality's questionnaire. Then, analyses the questionnaire with the value of Alpha-coefficient according to Cronbach found that Alpha-coefficient equal to 0.9271 which close to 1, that's mean the questionnaire has high confidence. Afterward, the researchers have conducted a survey and data collection by using a validated and accuracy questionnaire to collect data from July 5, 2557 until July 28, 2014.

Statistical analyzes as follow:

The samples are identified by Factor Analysis and computed with computer program. Factor analysis is a technique to gather or include variables that are related in the same factors. The variables in the same group are more related in a relationship whether the relationship would be positive or negative. However, the variables of different factors are not correlated or less correlated (Kanlaya Vanichbuncha, 2004). The analysis consists of 3 steps:

1. To determine the correlated variables by using statistics of Kaiser-Meyer-Olkin (KMO) in order to measure the data's appropriateness.

2. Factor Extraction, to quantify the factors that can be used for substitute all the variables or convert a set of observations of possibly correlated variables into a set of values by using Principal Component Analysis (PCA) where Eigenvalues ≥ 1.

3. Factor Rotation either the factor loading of the variables are high or low, until those variables can be informed on any factor. And eliminate the variables in this factor which give value lower than 0.7 to get more efficiency.

Interpretation of the Mean

Interpretation of each question from the questionnaire by using interpretation guidelines from Mr. Prasopchai Pasunonta (2010), ranging from 1 to 5

Average score	Interpretation
4.51 - 5.00	very high
3.51 - 4.50	high
2.51 - 3.50	average
1.51 - 2.50	low
1.00 - 1.50	very low

4. Research Finding

4.1 The result showed that there were 400 respondents and most of the respondents were female at 66.80%, aged range between 15 - 18 years old at 57.50%, graduate bachelor degree level at 50.30%, and have income per month between 8,000 – 10,000 baht at 41.00%.

4.2 Analyzing the behavior of selection foreign restaurants of the respondents showed that the most time to dine out were 4-6 time per week at 55.50%, have a dinner at 56.80%, have a reason to dine out for spending time with friends at 51.50%, price per meal between 501–1,000 baht at 56.00%, make a payment by cash at 90.80%, make decision together in a group at 64.80%, and affecting by media in decision making at 71.30%.

4.3 The factor analysis shown that the factor in the selection of foreign restaurants of teenager in Bangkok consists of 5 factors can be explained as follows:

4.3.1 The image factors, the overall rate is at high level given value of Eigenvalues equal to 14.81. This explains the variance of the foreign restaurant's selection of Thais teenager in Bangkok at 52.89 percent comprise of; 1) The restaurant has a proper decoration with modern style which match with their foods, and 2) The restaurant has a very good image constantly.

4.3.2 The attitude factors, the overall rate is at high level given value of Eigenvalues equal to 2.69. This explains the variance of the foreign restaurant's selection of Thais teenager in Bangkok at 9.62 percent comprise of; 1) Staffs take care and provide a service to customers correspondingly, 2) Staff recommend the menu and new promotion to customers, and 3) The restaurant is spread by customers' words to others with good recommendation.

4.3.3 The value factors, the overall rate is at high level given value of Eigenvalues equal to 1.61. This explains the variance of the foreign restaurant's selection of Thais teenager in Bangkok at 5.74 percent comprise of; 1) Customers are impressed and satisfied to have foreign food and 2) The food value is worth at their price.

4.3.4 The product factors, the overall rate is at high level given value of Eigenvalues equal to 1.32. This explains the variance of the foreign restaurant's selection of Thais teenager in Bangkok at 4.72 percent comprise of; 1) There are a variety of foreign restaurant can be choose and 2) The food is fresh, clean with hygienic condition.

4.3.5 The convenient factors, the overall rate is at high level given value of Eigenvalues equal to 1.11. This explains the variance of the foreign restaurant's selection of Thais teenager in Bangkok at 3.95 percent comprise of; 1) Easy access to the restaurant, and 2) The restaurant has a good management system. (see Table 1)

Table 1

Factor Loading, Mean and Standard Deviation of the factor analysis in the selection of the foreign restaurant of Thais teenager in Bangkok.

Factor	Factor Loading	$\overline{\text{X}}$	S.D	mean
Image factors	Eigenvalues =14.81 and Variance =52.89 ($\overline{\text{X}}$= 3.70, S.D= 1.05)			
The restaurant has a proper decoration with modern style which matches with their foods.	0.73	3.75	1.00	High
The restaurant has a very good image constantly.	0.87	3.65	1.09	High
Attitude factors	Eigenvalues=2.69 and Variance =9.62 ($\overline{\text{X}}$= 3.92, S.D= 0.87)			
Staffs take care and provide a service to customers correspondingly.	0.70	3.89	0.79	High
Staffs recommend the menu and new promotion to customers.	0.84	3.77	0.82	High
The restaurant is spread by customers' words to others with good recommendation.	0.77	4.10	1.02	High
Value factors	Eigenvalues =1.61and Variance=5.74 ($\overline{\text{X}}$= 3.93, S.D= 0.88)			
Customers are impressed and satisfied to have foreign food.	0.78	4.04	0.78	High
The food value is worth at their price.	0.72	3.81	0.98	High
Product factors	Eigenvalues=1.32 and Variance =4.72 ($\overline{\text{X}}$= 3.94, S.D= 0.79)			
There are a variety of foreign restaurant can be choose.	0.84	3.92	0.84	High
The food is fresh, clean with hygienic condition.	0.77	3.95	0.74	High
Convenient factors	Eigenvalues=1.11 and Variance =3.95 ($\overline{\text{X}}$= 3.92, S.D= 0.91)			
Easy access to the restaurant.	0.71	3.98	0.74	High
The restaurant has a good management system.	0.74	3.86	1.07	High

5. Conclusion

A study of the Analysis of Factor that Related in Foreign Restaurant Selection of Thais Teenagers in Bangkok surveyed by questionnaire with Thais teenagers in Bangkok total of 400 consumers found that respondents were male at 33.20%, respondents were female at 66.80%, and most of meal was having a dinner at 56.80%. For the study of factors that affecting in the selection of foreign restaurants of teenager in Bangkok with 28 variables, after factor analysis to group similar variables into one group, the study found that there are 5 remaining factors which are Image Factors (the restaurant has a proper decoration with modern style which matches with their foods and also has a very good image constantly); Attitude Factors (staffs take care and provide a service to customers correspondingly, also recommend the menu and new promotion to customers and the restaurant is spread by customers' words to others customers with good recommendation); Value Factors (customers are impressed and satisfied to have foreign food and the food value is worth at their price; Product Factors (a variety of foreign restaurant can be choose and the food is fresh, clean with hygienic condition); Convenient Factors (easy access to the restaurant and restaurant has a good management system).

6. The recommendations for further research.

6.1 This research was sampling only the population in Bangkok. Therefore, researcher suggests that it should be expand the scope of research by sampling other groups such as the sample outside Bangkok or other groups except teenager sample to get research information in a variety way and more comprehensive on research result.

6.2 This research can be helpful for the entrepreneur of foreign restaurant in order to develop and improve their foods to meet the customers' needed and satisfaction. Moreover, this research should be studied more on other factors to be used in determining a marketing strategy in higher quality.

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Humanistic Care Behavior on Nursing Student Volunteer in Health Service: A Service Learning

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Abstract

Background: Humanistic care in nursing should be well equipped in the teaching-learning process and supportive learning environment. Community service learning is excellent educational process; however, it has not well explored on student participation in community health service learning in Boromarajonani College of Nursing Chonburi, Thailand.

Objective: This study was to explain and evaluate humanistic behavior change on student participation by volunteer in community health services.

Methods: This study was quasi-experimental research with one group pre- and post-test. There were 127 nursing students who volunteer to work in community health service in Chon Buri and Chachoengsao provinces for 60 hours. Participants and preceptors from allied hospitals were trained with humanistic mind and service and small group discussion. At baseline and the end of health service, volunteer students had measured with humanistic care behavior questionnaires developed by Prabormarajchanok Institute, Ministry of Public Health. Journal writing was recorded every day and service-learning experience was collected by focus group at the end of health service.

Results: Mean scores on humanistic care behavior were 4.23 (SD= .23) at baseline and 4.51 (SD= .31) at the end of community service. Humanistic care behavior were significantly increased (Z=-5.35, p< .01). From focus group, volunteer students perceived high values on service mind, critical thinking and patient participation in service on humanistic care behaviors.

Conclusion: Nursing students had recognized and gained humanistic care behaviors in health services. Therefore, service learning should be integrated in educational process of nursing curriculum to promote humanistic care behaviors.

Keywords: *humanistic care behavior, service mind, critical thinking, and patient participation*

Humanistic Care Behavior on Nursing Student Volunteer in Health Service:

A Service Learning

The recent higher education is focusing on the development of students and knowledge coupled with morals for university graduates due to variables such as knowledge, moral pride in the profession, entrepreneurial consciousness and ability to adapt to the environment. Professional nursing ethics and standards have a unique identity where the expression of moral behavior can help regulation (Rattanasatchatham, Sereekhajonkitcharoen, & Sathitsathian, 2004). Nurses working efficiently and safely can meet the needs of service recipients while building social confidence in nursing.

Learning in classroom is inadequate for development of professional nurses who are physically, intellectually, and spiritually. The Education Act of 1999 and its amendment in 2002 contain guidelines for nursing administration whereby the article 244; section 4 establishes guidelines for organizing the learning process. Educational institutions and agencies need to arrange learning process with real experiences for nursing students. Nursing practicum and instilling good, desirable moral values are essential to all subjects. Furthermore, coordination is required to be established with parents, guardians and communities in order to develop potential learning process and social activities. It is encouraging the training students to recognize and internalize the sacrifice of "volunteers" that can foster student development of the social responsibility (Jungsathiansap, 2008). Family and community environments also affect moral development. Moral and volunteering is the point that the researchers aim to explain the students' social responsibility. When nursing students see people who are in trouble with difficult situation and tears out, they will help in turning it into smile. Their mindset is full with "merit" or called in Thai "boon", it is feeling of calm and peace. Power of goodness (Wisalo, 2006) expresses in the manner that they are willing to volunteer of a community service, help out without expectation. Therefore, students' moral development should be trained in school to have awareness of the sacrifices a "volunteer" and social responsibility. Learning from the real experience will be training process for students to recognize sacrifice. A nursing student with qualifications of social responsibility is the identity of nursing profession that may respond to the community need of health system.

As a higher education institute, Boromarajonani College of Nursing Chonburi draws the youth from the community to be trained in nursing and return to the community. Humanized care is the unique and identity of our college and the institutional identity of Praboromrajchanok. Humanistic care is to be training continuously in all subjects of the curriculum and other student affairs. Rakphaka, Rodphan, Phadungsong, and Treeraphee (2010) demonstrated that the psychological traits development program had improved the moral sense in nursing practices.
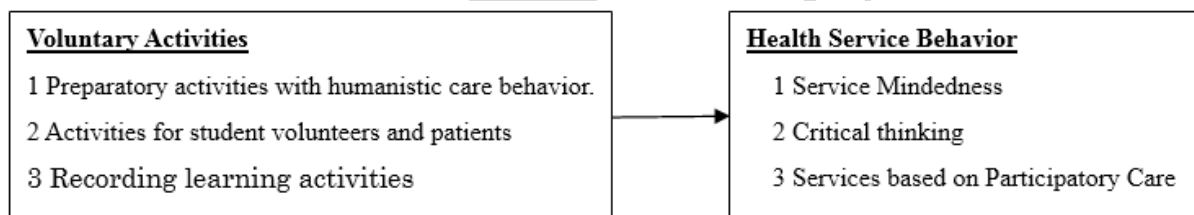
We hypothesized that social responsibility and volunteer and engagement in community health services might cultivate humanistic care. We conduct a mixed method research to investigate the effects of student volunteer and engagement in community health services on humanistic care behaviors. The finding is basic information

Objectives

This study is to compare the behaviors pre- and post-participation in volunteering in community health services in Thailand among nursing students.

Conceptual Framework

As purposed identity of the nursing college, humanistic care behaviors derive of three components, including service mind, critical thinking, and patient participation related to volunteering in community health services (Mano, 2010; Minanon, Ninpeng, Wiwatkamonchai, & Kemathad, 2013). The nursing students are expected to develop humanistic care behaviors by participation in the program of community health services and writing a self-reflectio .

Voluntary Activities	Health Service Behavior
1 Preparatory activities with humanistic care behavior.	1 Service Mindedness
2 Activities for student volunteers and patients	2 Critical thinking
3 Recording learning activities	3 Services based on Participatory Care

Research Methodology

This study was a quasi-experimental, one-group research design with pre- and posttest of students participating in community health services as volunteers, with integrated of qualitative study.

The sample of this study included 127 nursing students who were studying the second year at Boromarajonani College of Nursing Chonburi. It is the 36 batches.

Interventions

The research intervention derived from three steps: 1) a 3-day of preparation, 2) a 10-day volunteering activities on health services, 3) daily writing a self-reflection from their experience.

Instruments and data collection

Quantitative and qualitative data were collected at baseline and at the end of intervention.

For quantitative data, it was collected by using the questionnaire which was modified from "Humanistic Care and Service Behaviors" of the Phraboromchanok Institute. The questionnaires covered the demographic data of the respondents (5 items), and 36-item of

humanistic care behavior/services which responses were 5-Likert rating scale ranged from highest, high, medium, low, and lowest. The version of modified questionnaire was examined content validity by 5 experts. In this study, the reliability was tested with 30 nursing students; the Conbrach's alpha coefficient was 0.97.

Scoring scale was ranged from 4.50 to 5.00 as highest humanistic behaviors, a mean score of 3:50 and 4:49 belongs to high, a mean score of 2.50 and 3.49 was moderate; a mean score of 1.50 and 2.49 indicated a low, and a mean score of 1.00 and 1.49 indicated the lowest level.

Qualitative data was conducted a focus group by using the open-end structure questionnaire.

Data analysis

The quantitative data was analyzed by using percentage, mean and standard deviation with comparison of humanistic care behavior at baseline and at the end of intervention. Using the Wilcoxon Signed-Rank test performed comparison before and after intervention. The qualitative data from the focus group discussions were transcribed and quoted for description.

Research Ethics

The ethic review committee of research approved this study at Boromarajonani College of Nursing Chonburi, Thailand.

Research Findings

Quantitative data

The majority of the samples were females (97.64%); they were residents in the province that they volunteered to work in the health care settings (98.43%). At baseline and the end of intervention, scores on the humanistic care behaviors had increased after participating in the volunteer program (*p < 0.01*).

Table 1
Comparisons of individual and overall humanistic care behaviors at baseline and the end of intervention (N= 127)

Humanistic Care Behaviors/Services	Pre-test			Post-test			Z
	$\bar{x}$	SD	level	$\bar{x}$	SD	level	
1. Service Mindedness	4.37	0.34	high	4.60	0.35	highest	-6.40*
	4.23	0.36	high	4.38	0.42	highest	-3.87*
2. Critical Thinking	4.37	0.38	high	4.54	0.43	highest	-4.36*
3. Service Provision							
Total	4.23	0.32	high	4.51	0.37	highest	-5.35*

*p < 0.01

Qualitative data

The data demonstrated that humanistic care behaviors could be summarized into three main themes as follows:

Service Mindedness

Most of the participants reflected that they had more diligently taking health care services and as description below.

"*I want to feel excited and energized in the morning and in the ward to make it voluntary*" (C1).

"*One of the older ladies told me the nursing staff and I speak politely and are very friendly. I feel glad to have full provided services to build confidence and happiness among our service recipients.*" (C2)

Pride

Developing of nursing practice skills made them a pride of their achievements and self-confidence. The pride obtained was insightful and valuable, thereby reflecting that they recognized their own self-worth, which is essential to maintaining a sense of love and respect for self and others.

"*I felt so tired and achy after coming back from the first day but my pride is deep. We were able to ease the care-giving burdens of older people. I was able to take the best care of patients I could and that made me feel really glad.*" (C3)

"*I have only two more days left with my volunteering. It has helped me so much. I am proud to have eased the burdens of others. I feel very proud of myself for spending my time usefully*" (C2, P1)

"*One of the older ladies told me the nursing staff and I speak politely and are very friendly. I feel glad to have full provided services to build confidence and happiness among our service recipients.* " (C1, P2)

"*Once I had helped one of the patients, he thanked me. He kept thanking me over and over again. It was like he was really glad. That made me felt really happy and proud.*" (C1)

Self-Worth/Spending Time Usefully

The participants were appreciated with the program and felt happy and thankful for spending the time spent as volunteers. Voluntarily performing good deeds helped them recognize and be willing to spend the time for an extremely valuable lesson with social responsibility.

"*We feel that life is very valuable when we realize that the breaths were take each day can help other people. Learning from life experiences made us care. I have to think carefully about what to say in practice each day. It is not easy at all.* "

"*feeling good when I spent my time usefully in patient counseling and patient care to some extent. I felt happy to have helped.* "

"*I feel that we can take care of patients We have so many useful things to offer others* "

"*I am proud of being useful in easing the burdens of others. It's a great way to spend the summer break rather than not doing anything.*"

"*Thank you for this project. I feel like I gained so much more than I offered in training a group of volunteers as well as creating happiness for others.*"

"*I thought we were giving without expectation of return, but I unexpectedly gained so much.*"

Critical Thinking

Participants reflected that they could learn from their volunteering experience in nursing practice with patients in the hospitals. These experiences obtained from real situation by contemplating thoughts from situation analysis and engagement with the surroundings.

Knowledge was concrete summary of experiences through writing a self-reflection.

"*On a Day 3 of the training for the volunteers, I realized what the volunteer spirit is all about. When patients were unhappy, I felt proud to be able to be a part of helping mitigate the suffering of patients.*"

"*I gained a good experience with potential to develop more self-confidence and courage to think more. We feel more empathy. I am very happy.*"

"*Learning from experience sometimes feels like something much more wonderful than the textbooks. In this case, we see and touch. Remembering these experiences is better than just memorizing a textbook.*"

"*We specialize in social skills by learning to socialize, make decisions or judge by actions rather than outward appearance or first encounters Through this development, we learn better social skills.*"

"*When viewed from the perspective of a volunteer, you realize the distance between patients and nurses as well as the pathway to close care and attention in nursing practice. Sometimes, performing nursing duties involves daily nursing practice in helping patients who are suffering from diseases. Just how well can that turn out? But what patients receive from nurses is care in terms of eating, sleeping, relaxation and excretion. Serving as a volunteer helped me clearly realize that working as a mediator reflects the perspectives of nurses and service recipients. That enables us to use what we learn as we become practicing nurses in the future. We will try to close the gap and cooperate with patients as we give them more attention.*"

"*Volunteering to do with a service oriented mind involves more than just performing routine work without much thought. When we graduate as nurses, we should have a volunteer spirit and more empathy in our hearts.*"

Moral and Good Conduct

Participants have to consider benefits of humankind, instead of personal advantages where it is important for being professional nurse.

"*Voluntary action is a lot more than you think. We are aware of the patients more than ever. We are more careful that in-patient care should be taken seriously with no exercise of improper actions*"

"*Building people up makes me feel happy here. And that has been the case for many people at the hospital. We see other people happy and we are happy....as for the burden on nursing staff, I feel that our lives have no value in our minds; we decided to take action to help others without expecting results and it has been a pleasure to do so.*"

"*I gave without expecting anything in return, but I have unexpectedly gained so much.*"

Coming attitude/better thought

Understanding other- and self-behavior became a fundamental of development of a positive attitude towards human life.

"*In participating in this event, we are thinking more and more. There is a new angle to understand more. More attention to details viewed from another angle in thinking outside the box more to adapt in daily lives and live happily.*"

"*Having gotten to talk with patients on a regular basis made me realize problems and so many things to be done. When we encounter obstacles, we do not work very well. However, we should recover and gradually confront those barriers. I think the solution is to step up our empathy.*"

"*The patient lying on the bed was moving with relatives. The first day we met a patient and took care by bathing, feeding, encouraging the patient to sit, stand and sit in a wheelchair. Later we could see the smiles and patient cooperation as the patients tried to help themselves under the guidance of students. This makes us feel great and I have no doubts about where I want to help other people anymore.*"

"*The act itself is done based on the right perspective with a humanistic approach to care.*"

Relationship between Patient and Health Care Providers

Patients and participants as a healthcare provider developed the relationship through volunteering in the program. This is the possibility that participants built relationships with healthcare team and patient, patient family members and relatives based upon love and unity, generosity, altruism, and consideration of the benefits of humankind, instead of personal advantages where it is important for being professional nurse.

"*One of the Cambodian patients attempted suicide because he was taking offense. I saw him cry and I went in to ask what was wrong. At first, he denied everything. But then he talked to me. He did not open his mind; so I thought I would just sit and listen to him speak. He said he was more at ease. I was glad to be part of the care of patients and reduce their suffering.* "

"I am happy to practice nursing care. I have good relationships with all of my friends, relatives, nursing staff and other patients. The patients are very happy. "

"Learned how to work systemically from preceptor, it is very useful."

"It is easy to work"

"Today is a Day 4 of my volunteering. I have had more fun when we are being trusted by our trainers and we get more job assignment."

"I talked a bit more to patients, to build relationships and trust, so patients tell their feelings and express their needs. "

"The people here are hospitality, friendly and very nice."

"I was very happy to talk to the parents of one patient. At first, the young patient was suffering with depression and kept nothing done, so we went into mental care. From that time on, even the other patients seemed to trust us more. In daring to interact, I felt even more different. Finally, they talked to us. I'm glad the kids like to say I care so that I cannot describe my feelings for them. I feel more like we are also delighted to be a part of rehabilitation."

"Today was a lot of fun. I enjoyed talking with friends and colleagues in the same profession. It makes us feel good together and we have taken up new friendships. Everything starts with interacting with one another"

"I felt empowered and delighted. This is the last day of student volunteers. But it feels like it has helped me. It's very nice to be trained to be teaching a lot of things. "

"I learned about the love of parents, relatives, and people around you. Although they are not ill themselves, and the other person might have just stepped into their lives for a few months or a few days, we can learn about the lives and values of individuals no matter how old they are. This can be used to sustain our own lives. Thoughts about life and taking into account the value of all other lives are born."

"The patient lying on the bed was moving with relatives. The first day we met a patient and took care by bathing, feeding, encouraging the patient to sit, stand and sit in a wheelchair. Later we could see the smiles and patient cooperation as the patients tried to help themselves under the guidance of students. This makes us feel great and I have no doubts about where I want to help other people anymore."

Discussion

This study indicates that volunteering program in community health services is the way to promote humanistic care behaviors. The volunteering program with a period of 13 days (90 hours) was able to develop humanistic health behavior.

Consistent with the previous study, applying the psychological traits development program could motivate the moral sense in nursing practice and development of health behavior (Rakphaka et al., 2010). In addition, the volunteering program encourages the students to learn about social service mind and sacrifice (Ruengsakoon, 2010). **A** spiritual service mind was performed that they will proud of their own. The volunteering program allows students develop strategy to problem solving and critical thinking (Rattanasatchatham

et al., 2004) afterwards the good conduct and mercy were performed in caring patients. Service mind may originate with a good relationships with clients and health professionals that has demonstrated in the study earlier (Wangthong, Wnagthong, Watlen, & Suttharangsee, 2013).

However, the nursing students could find themselves more comfortable to do nursing practice with support from preceptors. On the other hand, they learnt and review the theory to better perform nursing practice. The volunteering program has advantages on educational process as extra-activities couple with the core curriculum.

Limitation of this study, the samples drew from a small number of nursing students at Boromarajonani College of Nursing Chonburi, this findings may not eligible to generalize to the other populations. This study had a short period of volunteering program which may not able to build a permanent social responsibility. We measured the attitudes from self-report questionnaires and opinion from focus group; our findings may obtain response biases of participants.

Conclusion and Implications

The volunteering program allows development of humanistic care behaviors, moral sense, and critical thinking by participation with health care team; therefore, the nursing colleges might consider promoting the student activities.

Recommendations for future research

To extend the knowledge from this study, a larger sample size for development of health services with humanistic care should be performed in the other colleges.

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Monitoring Activities of Daily living by Thai family Caregivers for Older Adults with Functional Disabilities: In-house and remote monitoring

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Abstract

Background: Previous researches on family caregiving have demonstrated the various types of caregiving for older adults with functional disabilities and various strategies to get the care done. However, little is known about monitoring care, a type of caregiving, which related to changes of activities of daily living (ADLs) of the older adults.

Aim: To explore how family caregivers monitor ADLs of older adults with functional disabilities

Design: The grounded dimensional analysis approach was applied in this study.

Methods: Fifteen family caregivers were recruited using the method of theoretical sampling: Data were collected through face-to-face in-depth interviews. Dimensional analysis proceeded with data collection.

Findings: The 'monitoring ADLs' was a caregiving, which aims to ensure the older adults get what they needs, to know what caregivers should do, and to prevent negative consequences of performing care. The five integrated strategies of monitoring ADLs included 'Keeping eyes on', 'Questioning', 'Listening', 'Demonstrating', and 'Assuming were discovered. These strategies were influenced by a variety of conditions such as time availability and types of care which the caregivers were performing. The consequence of providing monitoring ADLs was benefit for both caregivers and care recipients.

Conclusion: Findings delineate the key dimensions of monitoring ADLs by family caregivers and show the deep understanding on how care needs were met. These findings can guide nurses and health personals in supporting caregiving families in or to keep the home care continue.

Keywords: *caregiving, monitoring, older adult, activities of daily living*

Monitoring Activities of Daily Living by Thai family Caregivers
for Older Adults with Functional Disabilities

Introduction

Caregiving by families is widely acknowledged to serve as the primary support for older persons (Keith, 1995). Thailand provides a good example of providing family care to their elderly relatives, where it is a common practice that people in old age are taken care of by younger people, generally their relatives and family members (Wongsith & Siriboon, 1999). According to the demographic and social changes, there is now growing recognition among service providers and researchers that family caregiving is becoming more significant and the role of the family as caregiver will become much more prevalent (Browning & Hogstel, 1994).

Family caregiving is a dynamic process, which is suggested that monitoring care is a type of care provided for frail older family members (Wongsawang et al., 2013). In relation to care monitoring, abilities of dependent older adults to perform activities of daily living (ADLs) were commonly assessed. The reason is that ADLs is abilities which able to reflect the person' capacity of self-care and to reflects on their ability to live independently with in the community. Generally ADLs composed of feeding, grooming, transferring, using toilet, mobility, dressing, going up or down the stairs, bathing, defecating and passing urine.

 ADLs monitoring with in home environment can provide a means to assess an elderly person's well being and in certain situations can be used to measure both physical and cognitive decline. The measurement of older adults' activities of daily living (ADLs) performance in certain circumstances also allows the assessment of treatment effects, caregiver burden, the targeting of interventions and care packages along with the elucidation of the link between cognitive and everyday functional ability (Bucks et al., 1996).

Noticing dependency was a threshold of dependent caregiving, (Wongsawang et al., 2013).   Therefore, it is important to know how family caregivers notice dependency in term of how family caregivers monitor daily activities of older adults. However, little is known about monitoring care, a type of caregiving, which related to changes of ADLs of frail older adults. In order to achieve the understanding of how Thai family caregivers monitor ADLs of older adults with functional limitation, a grounded dimensional analysis, a form of grounded theory (Bowers, 1987) was applied as the method of inquiry.

Methods

Study participants and setting

The data for this study were generated through in-depth interviews with 15 family caregivers. Family members were recruited personal contacting with nurses and health personnel who work at health centers in the Ratchaburi province. To accomplish this, access to participants was obtained by individual verbal invitations for participation at place where they live and where the researcher met them. Additionally with informal conversation with whomever around, the research would gain the information of individuals, family units, conditions and other information that related mostly to theoretical sampling. To protect the rights of human research subjects, the proposal, research procedures, and subject consent form was approved by the ethic committee of Boromarajnoni, College of Nursing, Ratchaburi.

Participants for this study were self-identified as providing care to a parent/in-law or spouse with functional disabilities. The majority of the participants were female (13 of 15), got married (14 of 15). Half of them (15 of 15) were daughters. Most of them live with older adults (11 of 15) while 2 of them lived in the commutable distance (less than 10 kms), not far from older persons. More than half of them work outside the home (8 of 15). The participants provided care to 10 older members who were primarily male (6 of 10). Most of the older members were bed bound or totally dependent (8 of 10) and all of them had at least one offspring living in the same house.

Data Collection and Analysis

Interviews, 20 – 30 minutes in length, were conducted in-person. The interviews were taped, note and transcribed verbatim by the researcher. The three phases of grounded dimensional analysis was used for data analysis. The early phase consists primarily of open coding, the middle phase uses axial coding for integration of categories and dimensions, and the final phase uses selective coding to form a theory or conceptual model. Practically, processes of doing the research were not linear rather than simultaneously occurred during data collection and data analysis. The trustworthiness of this study was ensured by consistency use of the grounded dimensional analysis, member checking, peer debriefing and mooring.

Findings

The findings of this study demonstrated that monitoring activities of daily living (ADL) of older adults with functional disabilities was a type of care which aims to ensure the older adults get what they needs, to know what caregivers should do, and to prevent negative consequences of performing care. Two distinct types of ADLs monitoring, 'in-house monitoring' and 'remote monitoring' were indicted. In order to provide these two types of monitoring, five integrated strategies included observing, listening, questioning, and demonstrating were applied. Consequences of ADLs monitoring were influenced by both monitoring strategies and the perception of caregivers on information which they gain.

In-house monitoring: Keeping an eye-on

Family caregivers described that as their parents or spouse get older and became dependent, they will not allow them to be alone in their house. The older adults need to have someone to be- with during days and over nights. By being-with the older adults, the caregivers will be able to monitor what it was going on with the older adults, to know what older persons needs and to make sure the older persons get what they need. Moreover, the purpose of monitoring is to prevent accidents, particularly falling, in and around their living place. Activities of older persons on the daily basis which normally observed were feeding, mobility, defecating and passing urine.

If any caregivers were not available for in-house monitoring, finding someone to replace this task was necessary. It could be replacement by a short home visit during the absent of the ordinary caregivers. In case, there was no family member available for replacement, the ordinary caregivers mostly could not go outside or need to wait until the care was replaced by someone.

Family caregivers indicated that in- house monitoring was 'keeping an eye-on older persons'. All dependent older adults had at least one family member to look after them during a day and over a night. A caregiver who was being-with older person described what she checked during the day.

"I check her often during the day. I check her groves. I check her dressing. I check her Foley's catheter. I checked whether it is retained…." (Da, 21 years old)

In order to keep an eye-on the older adults during a day, it allowed caregivers to do work in their house and take some time to watch the older persons.

"I took care of him. I did things in a house for a while then I come to watch him. When he want to defecate, he want to go to the…….. I have to look over him to make sure that he would not fall or get any other problems.(Pun, 68 years old)

For the night, the reasons were to protect the older persons from crucial situation which leading to fall and dying (such as breathing obstacle). By sleeping nearby or close to the older persons, the caregivers will be able to listen what older persons do during the night.

" When he sleep, if there are any sounds, sound of coughing, blowing the nose, or whatever sound, I would watch and checked. Sometime I ask; 'Why you did not sleep?' (Pun, 68 years old)

In many occasions, integrated of in-house monitoring methods were used in order to make sure that data that the caregivers gain was right. In order to keeps an eye on the older adults, observing, questioning, listening, and demonstrating were integrated to carry out the monitoring tasks.

'Rang' (energy to do works and daily activities) was a significant component of what caregivers observe. 'Rang' was chanced on a daily basis. Caregivers indicated that daily activities of dependent older adults were primarily observed with the intention of identifying how much "Rang" the older adults had for each day. This would permit caregivers to detect changes on the older adults.

"She has less "Rang". In case, she has "Rang" she does each and every things. Suppose, she has no "Rang" she would lie on her bed. I could notice it. Commonly, she is an active person." (Niece, 30 years old)

The information in relation to daily activities of older persons were sometime was evaluated by circumstance observation. For example, caregivers did not observe how much food was taken by older persons but what they observe was how much food was left in containers.

"I check the boiled rice. If the rice pot was empty, that mean she ate a lot. By doing this I would know how much rice that I should cook for the next meal (Niece ,30 years old)

Questioning was supplemented when occurrences were hard to observe such as physical symptoms, the needs for toileting, hungriness.

"I ask him, sometime: 'Are you headache?'. I ask him when I saw him touch his head or I found that his skin was hot." (Pun, 68 years old)

Pass experiences of caregivers was a condition of what to ask. When the caregivers evaluated that they will got answers after asking older adults some question, they will used this method for monitoring. It was a supplement monitoring method to conform the information which the caregivers previously gain from observing.

In relation to listening, caregivers listened what their older family members said and what sound was made when the older adults do daily activities. Generally, the older adults speak their voice out when their physical symptoms were presented. Moring is the usual time which most of family caregivers hear the voices from the older adults.

"She tells me directly what she is being. She would tell me she got this, she got that   (what she feel)"(One, 30 years old)

Caregivers asked older care-receivers for demonstrating some daily activities such as eating and walking. By watching how the older persons perform their daily activities, the caregivers make sure that the information which they got from observing or listening was correct. There were some activities which caregivers never ask for demonstrating. These included for example, toileting, grooming, dressing, and going up and down stairs.

A various consequences of providing in-house monitoring were explained among the caregivers. In-house monitoring decreased caregivers' personal time and ability to care for them. Moreover, it would able to changed caregivers 'emotion. For example, one caregiver explained her feeling when she was keeping her eye-on older adults during a day and was not able to go outside.

"Boring, when I go outside, I always worry about him. I could go outside for a while. Then I have to come back home. I could not spend much time outside the house. When it is mealtime, I have to be at home. I am worry that he might hungry" (Pun, 68, first interviews)

The caregivers experienced angry in case the dependent older persons gave no respond by not answering. A caregiver mentioned that she was not able to attend social activities outside the house.

"It would like to join an elderly club. But I could not. He got……… So I could not go. In case I would like to go wherever, I could be outside for a short time." (Tonglor, 75, first interviews)

Another caregiver indicated that providing care limited her for taking care of herself.

"I would like to have eye operation. I can not go for it. Who will take care them (my husband and my adult son)."…I have many diseases. I have DM., clolesteral, hypertension, and kidney problem. Sometime I have medication on time. Some time I do not. I have to cook for them. ... (Tonglor, 75 years old)

A consequence of keeping an eye-on older person at night was not having enough sleep.

"I have not enough sleep sometime. I feel dizzy when I woke up. It happened sometime. It was about once a couple months." (Pun, 68 years old)

Remote monitoring

The remote monitoring mostly was done by family members who living separately with the older persons. Phone calling was a general method for routine checking. During phone calling, questioning and listening by distant caregivers would permit the caregivers to get what information they need.

The question that was generally asked by distance monitoring caregivers were: 'How about mother or father?'

"Every morning, I call Lek and Yai (elder sisters) and ask about any day-to-day matters such as whether she has woken up, she has done anything, and she had food. (Napa, 45 years old)

As caregiving in Thai families were done by more than on family members, most of family caregivers in each family communicated with each other to report or get the information in relation to the change of older adults. However, the remote monitoring was often supplemented by visiting and through reports from in-house monitoring caregivers. This would allow the distant caregivers to confirm what they got through phone call.

*"When they have issues regarding Grandma, they will always call me to let me know how things are going. I normally go back home once a month.**" (Napa, 45 years old)*

Any conflict could occur if both, the in-house and the distant monitors did not understand the role of each other even the role of them self. The remote monitoring was not always provided positive consequences on in-house caregivers. Some of them feel uncomfortable when they were called for checking what caregivers and dependent older adults were doing.

"I am not feeling good, she do not thing but she always call and check what is going on with mom. It seem like she is checking what I am doing."(Pee-Noy, 45 years old)

Consequences of ADLs monitoring: What to do for older adults

As a result of ADLs monitoring, identifying what to do base on the ability of the older adults to perform ADLs and care needs. The identifying of care needs was mostly, individual caregivers' identification, based on their perception which related to their past experiences. The characteristic of daily physical activities of older persons was recognized as "common and uncommon daily activities". The example situations that most frequently noticed by family members as 'uncommon activities' were not active, eating less, suffering from constipation.

Even through, the respond to the change of ADLs might not be the same across families and with in the family, the properties of responding to the ADLs monitoring generally composed of doing nothing, providing what care-receivers need, reporting information and organizing what need to be done.

The caregivers may do nothing if they perceive that the occurrence on those older adults was common. For example, a caregiver did not give any respond to the daily behavioral changes of the older persons as she indicated that it was a common behavior.

"I do nothing. I did not tell anyone. He did like this for a long time. I think his brain did not work. ...Someday, he disappointed. I told him that you could not eat this food. Suddenly, he threw the food away." He became like this since he had brain operation" (Pun, 68 years old)

It was a case where the older person's request not believed, respected or responded to.

One male older adult was judged by his family to be much less dependent than he 'pretended' to be. His requests for assistance to the toilet were ignored.

"…My father, he is lazy. ..He did not want to help him self. … Whenever we tell him to do thing, he argue. He disobeys. … He always lies on his bed. When he need toilet he would move up and walk but he did not." (Tik,41 years old)

The respond to the information after monitoring would made if the caregivers perceive that it was uncommon. For, example, a caregiver found that it was uncommon when someone did not stool for 2-3 days. Instead of waiting for some more days, the caregiver assisted the older persons by giving him a medication.

"I would observe. Suppose he did not stool for a couple day, I would give him a laxative." (Pun, 68 years old)

A participant described how it different among proving care when the care-receiver was able to take care by their own and when the caregiver found that she need to involve more in caregiving as the older person really need cares from her.

"The difference is, I have to come to feed her on time by this tube. I used to prepare meal for her in the morning and then gone. … Right now, we have to give food to her by the tube because she was not able to feed herself. … "(Ni, 30 years old)

Information gained from monitoring was often passed on to other caregivers in the family. After having seen any significant situation some of the caregivers would call the others regardless of the distance. It was not unusual for those in-house monitor to report

to distance monitor about what they could see occurring problems unmet needs. When monitoring caregivers were different from hands-on caregivers, the hands-on caregivers would often report directly to those monitoring caregivers. If the monitoring caregiver and the managing caregiver were different persons, they generally kept very close contact.

For some caregivers, they did not provide hands-on when the care was need. But they involve in family caregiving by organizing what need to be done. Contacting some other family members, getting medication, purchasing personal belongings were example strategies for organizing. This mostly explained by distant caregivers who identify themselves as primary caregivers.

Discussion

Monitoring care was indicated as a type of care in previous study (Wongsawang et al., 2013). This finding adds more understanding on how the monitoring care was performed and what consequences of monitoring care were. The finding of this study was confirm that "keeping an eye on" is a significant strategies for providing home care for older adults with functional disabilities (Dangdomyouth et al., 2008).

According to the present findings, increased attention should begin to find ways of how to assist individuals and families to provide in house monitoring. Planning should aim to support them in order to replace in-house caregivers when they did not available for in-house monitoring or short time replace to provide a self-time for caregivers. Supportive service for home care should aim to find outsiders who will be able to take roles of both in-house and remote monitors. Preparing technology for remote monitoring is essential. Nurse in any community should educate understanding on common and uncommon activities of older adults. The new knowledge from this study will assist nurses and health policy makers to conduct a monitoring guild line which aim to ensure that the quality of care for each individual older adult will be met.

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Reflection on postpartum clinical learning experiences guided by KORAT Model of reflection among nursing student, Thailand.

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Abstract

This qualitative research aimed to examine the student nurse clinical learning experience through the reflection model: KORAT Model. This model employed the city's short name both to guide and to make the model easy for the student from the Boromarajonani College of Nursing, Nakhonratchasima, to reflect on their experiences. The model was based on student college Identity, 3 dimensions: standard practice, discipline, and humanistic consideration. The student reflected on their postpartum clinical learning experiences by journal writing by the end of the day. The KORAT model guided 5 main experiences of clinical learning. The K was knowledge both theory and knowledge applied on the clinical practice performed. The O was either output or outcome of student performance to student's client. The R was either responsibility of nurse job or respect to client. The A was either attitude or authentic gained during learning. The T was either technique or sufficient technology (sufficient economic) or teamwork of nursing performance. Samples were 10 reflection papers per person from 83 fourth year students (78.1 % of population) who volunteered to analyze their experiences (the journal writing) through focus group, and then content analysis methods were used to analysis data from the focus group of reflection writing.

Results showed. The student experienced learning the content of postpartum mother care and 10 more nursing crucial elements. The content covered holistic care, self-understanding of student strength and weakness. Knowledge covered 1 more element: the power of two ways communication in particular between nurse and client considered client health literacy. Outcomes were 2 elements: awareness increasing after more experience, and working in team were very good support to learning. Responsibilities or respects were 3 elements: risky or severity of patient sickness, learning plan, and time management were crucial to self-directed learning. Attitude had 4 focuses: humanistic care, open minded of positive thinking while learning, learning barrier from students stress where there was limit chance to practice learning, and burnout /energy consuming came with more chance of case practice. Sufficient economic or appropriate technology covered applied and adjusted tool for clinical practicum from any available with consider the quality of care among the physical learning environment barrier, in particular hot weather.

Result suggested that The KORAT model could be used to guide self-directed learning in real life practicum on postpartum nursing care, for self- explored and self-development upon experience considering learning aimed.

Key word: KORAT model of nursing reflection, learning postpartum nursing care, practicum model, nurse clinical education.

Reflection on postpartum clinical learning experiences guided by KORAT Model of reflection among nursing student, Thailand.

Introduction

Nurse education aims to instill knowledge both theory and practice in order to work in hospital and community care unit. After theory learned, nurse student needed to transform knowledge gained from theory into practice in the real situation. Thus knowledge gained from practice would include client account into theory knowledge. This learning was difficult in term of integrating theory knowledge and real situation to make their practice knowledge appropriate for each unique client, in particular novice.

Novice learning needed both learning guideline and clinical instructor or mentor to guide, share and support (work and mental).

Literature reviewed

Due to the shortage of nurses, nursing program paid more attention to factor contributing to success (Hopkins, 2008). Self- directed learning had to be meaningful learning which and engage student into active learning. An important account of self-directed learning was the understanding of the students' learning (Spiers et al, 2014). Thus learning tool which foster self-directed learning was needed in particular providing assessment and self –feedback (Embo et al, 2014). On strategy that promote student learning was reflection on their experience (Lachmann et al, 2014). This research used guideline: KORAT model to provide student learning through reflection on learning experience focusing on self -assessment and feedback.

Objective:

This qualitative research aimed to examine the student nurse clinical learning experiences through the reflection model: KORAT Model.

Research method

Study design

This qualitative research explored the student learning experience through guideline namely KORAT model. This model was a learning tool, employed to guide the student from the Boromarajonani College of Nursing, Nakhonratchasima, Thailand, to reflect on their experiences of clinical learning practicum. The KORAT was this city's short name. This model use 5 focuses of Knowledge, Outcome or Output, Responsibility or Respectfulness, Attitude or Authentic, and Technology to encourage students to focus their learning.

Sample

The population who reflected on their experience of this class was 140 students. Samples were 83 fourth year students, each student wrote 10 reflection papers (78.1 % of population) who volunteered to analyze their experiences (the journal writing) through focus group. And then content analysis methods were used to analysis data from the focus group of reflection on their writing papers.

Data Collection

Instrument and Procedure
KORAT Model Development for learning guideline reflection
The KORAT model, designed by considering the chance of study, was a learning tool to guide the focus of learning and questioning of day by day learning development of each student. This model of reflection on clinical learning, employed this city's short name, in order to make the guideline easy for the student to follow the guide, and make the model easy for the student from the Boromarajonani College of Nursing, Nakhonratchasima, to reflect on their experiences. The model was developed based on student college Identity, which were 3 mains expected characteristics: standard practice, being discipline, and humanistic consideration. The student reflected on their postpartum clinical learning experiences to guide their journal writings by the end of the day of clinical learning practicum. Such characteristics of standard practice were focused on letter "K" and "O". The letter "K" referred to Knowledge gained after experience. The letter "O" referred to output or outcome of the nursing care of a day. The second characteristic was discipline, focusing on letter "R" which was scope on either responsibility of nursing role or Respectfulness to client. The last characteristic was latter "A" reflecting understanding of client humanistic account which was either Attitude or Authentic gained during learning. . For the letter "T", it referred to appropriate technology which were either Technique or Sufficient technology (sufficient economic) or Teamwork of nursing performance in the Thai nursing care context that students found during they transformed knowledge into practice.

Ethic consideration

In accordance with ethical considerations, it was explained to the students that their participation (or non- participation) would not affect their evaluation of the learning course. Written and informed consent was obtained from the students for their participation in this research and data collection. And anonymity and confidentiality were assured for the use of data submitted. The reflection writing, which completed by the students, were numbering different from the student's identification at the college list. The data from student focus group will be analyzed in overview information. The data were kept locked and separate from the students' name.

Data analysis

Data from focus group were analyzed by Theming analysis. First the students sat together and assign 5 students to help note taking of the theme of conversation. The students talked about their experience according to their reflection on their experience guided by KORAT Model. When the one student said one topic, other students who had the same topic were co-sharing of the same idea and added more detail or example or clarify scope of such same topic.

Result

Student characteristic

Majority of the students participated in this study was female. The sample were 84 forth year nursing student. Their ages were 20 to 23 years old. The majority age group was 21.

Student reflection on clinical learning practicum guided by KORAT Model

Results showed that the KORAT model could guide the student experienced learning practicum. "K" was knowledge in 12 focuses.

First, majority of knowledge was the theory which was content of postpartum mother care. These were covered holistic care of the postpartum mother care, mainly in prevention of postpartum hemorrhage, infection, other postpartum complications, mother needs and what mother want nurse to support.

"Prevention of postpartum hemorrhage was the first thing I learned."

"I had conversation on prevention of infection such as flush and pad changed, I would help mother do it. I also care mother to practice complication preventions, given detail covered her issue, explain more when mother want more detail."

Second, knowledge was self –ability: self-understanding of student strength and weakness, and time need for capacity development.

" Now I know what I need to learn or prepare more. I saw that what is my strength and what is my weakness, needed to fix."

" On my third day of practice, I get used to place, can adjust with the clinical practice, and confident of nursing care."

Moreover, the student learned 10 more knowledge applied on clinical practice performance of nursing crucial elements.

Third, knowledge was learning barrier. The barrier had 3 elements: 1) novice, 2) new to ward, case, and situation, 3) used positive thinking to overcome barrier.

"Novice learning needed to revise theory related to tomorrow case study."

"The first day, it was hard to recognize everything, case nursing care tools, and what to do. Now I know that tomorrow what I must prepare."

Forth, knowledge of learning important skills for postpartum nursing care.

"Practice learning was part of practice of staying focus and concentrate on your practice, among voice, many health professions and mother walking, baby crying, it was so distract."

Fifth, solving client problem was aimed of learning motivation.

"Difficulties during practice was good, it challenge me to overcome such difficulties. It motivates me to learn."

Sixth, time management was crucial to nursing care procedure.

"Today is the 3rd day, I am so happy that I done many nursing care faster than the first day."

Seventh, risk management to prevent complication was crucial to nursing care procedure

"Every time I care the (postpartum) mother, I remind myself that I must practice risk management at the same time. I want to make sure that there was no harm occurred."

Eighth, knowledge was cross infection prevention such as aseptic technique.

"When I practice nursing care, I applied aseptic technique too."

Ninth, knowledge of learning, learning in nursing practicum had 3 steps: plan before practice, nursing care performance and reflected on the performance.

"…after reflection on today practices, I know, I must read practice handbook again and more knowledge related to tomorrow case. During such care, I will reflect during my care and then after the practice done."

Tenth, knowledge was finding of evidence based for postpartum clinical practice which was critical elements necessary to successful performance.

"Pain management is important care. Evidence of pain was used for my nursing care plan."

Eleventh, knowledge was gained from critical thinking of nurse practice from each individual client, in particular level of health or diseases risk. Each client had her own level of disease severity, which needed different level of care and raising nurse awareness.

"…each mother had different health risk, caring need to cover level of mother severity, such as exhausted, and anemia. I must critical analyze the case before care providing."

Twelfth was the power of two ways communication in particular between nurse and client considered client health literacy. The majority of problem of communication was miscommunication. As Thai (Asian communication) was not straight forward.

"… when I talked with postpartum mother, she got different meaning from what I said. I explained more until she got it. Communication was important, as it could come out wrong meaning."

The second letter "O", as Outcomes, had 2 elements: awareness increasing after more experience, and "working as a team" were very good support to learning.

"After a few days practice, awareness is part of everyday performance as it supported mine complete mother care."

"I had no confident today, but I can finish many jobs from the support by my friend who done it sometime before me. "Team work" was a good support."

The 3rd letter of the model was "R". Responsibilities or respects had 3 elements. Risky or severity of patient sickness, learning plan, and time management were crucial to self-directed learning.

"I practice care with respect and polite to mother. Consider her uterus painful and tired, rest on bed, she thanked me for my good manner."

"In my learning plan, it had 2 important parts: bedside nursing care and all related record and notes."

"It is my responsibility to finish all the works planed on time before leaving ward. When I involved in caring practice until the care was done, even though it time for lunch."

"A" as Attitude had 4 focuses: 1) humanistic care, 2) open minded of positive thinking while learning, 3) learning barrier from students stress where there was limit chance to practice learning, and 4) burnout /energy consuming came with came with more chance of case care practice.

" …(postpartum) mother is human so her need and her lifestyle is an important information for client understanding. My client, she did not familiar with the hospital food menu. She ate more when she got her home food."

"During postpartum, mother exhausted, she did not concentrate of what I said, which mean she need very close up care."

"While practice, I cannot learn when I stress. Day by day, I must practice stress control. I can control it at some level."

"My nursing care today is working load, I am tired. But more practice is more chance to gain knowledge and practice skill."

"T" as Sufficient Economic or Appropriate Technology covered applied and adjusted tool for clinical practicum from any available with consider the quality of care among the barrier of physical learning environment, in particular hot weather. As Thailand weather is more hot than cold. In Thai cold season weather is not really cold, in the ward location, was at almost middle in the city of Nakhon Ratchasima Province, which is in Northeastern part of Thailand, temperature between 27 to 35 or more degree Celsius. Nursing care performance had many activities and body movement led to body warmer. Thus nurse student doing nursing care performance could get dehydration, body heat and sweat, which was not easy compared to do nursing care in nice weather such as air conditioning environment.

"Team work is good technology which guided my practice and support me to overcome hot weather, get sweat and feel sticky any time I move or care activities."

"…care management by grouping bedside nursing care and provide rest time for mother is the good way of provide care."

"… equipment is expensive, the nurse at the postpartum ward applied something lower price instead, the applicable tool work well."

Result suggested that The KORAT model could be used to guide self-directed learning in real life practicum on postpartum nursing care, for self- explored and self-development upon experience considering learning aimed.

Conclusion & Discussion

In order to guide self-directed learning among nursing student, the KORAT model was useful as it set focus for learning aimed related to the College student expected identity. Nursing program need to pay more attention to factor contributing to success (Hopkins, 2008). This guideline can contributed to student learning both knowledge and crucial skills covered the nurse capacity need.

Transferring learning achievement through reflection guided by the model

The model, which was introduced the focus of what needed during practicum point out the crucial elements to learn. In student view, self-learning was clear understood of big picture of learning achievement.

Involving student motivation to learning practicum

During learning, students founded they were motivated which encourage their learning. As long as the students setting their aims to learning achievement, they governed their learning together with learning about self- strength and weakness. Barriers, at the first time, were no longer blocked their learning. In fact, it lead to positive thinking and changed to be motivation factor.

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Uses of Mass Media and Online Media among Students in Colleges under Jurisdiction of the Praboromarajchanok Institute of Health Workforce Development

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Abstract

Background: Currently, mass and social media are significant ways for sharing information to people; in particular, is an alternative way to convey health message to people. Therefore, the uses and opinions of nursing and public health students should be examined.

Purpose: This research aimed to investigate: 1) uses of mass media and social media, 2) purposes of use and time spent, and 3) differences between gender and educational levels on the use of mass and social media.

Methods: Descriptive research: online cross-sectional surveying was used in this study. The samples comprised of 3,588 bachelor's degree nursing and public health students under Praboromarajchanok Institute of Health Workforce Development. Questionnaire included. Data were analyzed using frequency distribution, percentages, mean and standard distribution. T-test and F-test were used to compare media uses and perceived benefit of online media among students with different gender and educational level.

Results: The result reveals that respondents used mass media and online media at moderate level weekly ($\bar{X}$ = 1.77, SD=1.165), TV had the highest mean score of all mass media use ($\bar{X}$ = 2.49, SD=1.218). Similarly, they reported that they used the online media at moderate level ($\bar{X}$ = 1.86, SD=1.217). Specific online media use at high level were Facebook® ($\bar{X}$ = 3.33, SD=0.888), Line® ($\bar{X}$ = 2.83, SD=1.293) and searching information and download file ($\bar{X}$ = 2.78, SD=1.100). Use of Twitter® was low with the lowest score ($\bar{X}$ = 0.85, SD=1.329).

There were statistically significant differences of online media use and perceived benefit of online media scores comparing between different gender and levels of education (p< 0.05).

Keywords: *Social media, Mass media, Use of social media, Nursing, Public health, Students*

Uses of Mass Media and Online Media among Students in Colleges under Jurisdiction of the Praboromarajchanok Institute of Health Workforce Development

I. INTRODUCTION

As technology is rapidly changing and media exposure open window for its user to keep update with the world outside. Today more than ever, students want their learning experience to be relevant. They live and learn in a media-saturated environment where information abounds, but wisdom is often lacking. Use of scientific thought and reason could help them make sense of their worlds (Sperry 2012). Mass communication and online platform are channels that provide convenient massage sharing tool and enable response or reaction of broaden population through internet of overcome limitation found in traditional media (Larry 2009; Safko, Brake, and David 2009). Likewise, improving learning and synthesis of new knowledge is often a challenge in nursing education in the twenty-first century. Faculties are urged to use new technologies and to embrace methodologies that include more interactions by the student. Today's students are less adept in written and oral communication and, consequently, they are hesitant to speak out or write independently. Thus, support in using these same mechanisms to improve their communication skills is needed.

The theories in the different subjects changing so are pedagogy within nursing education. Researchers indicated benefits of using information technology to improve quality of teaching and learning in nursing (Schmitt, Sims-Giddens, and Booth 2012). Online competence was a significant challenge for nursing students as Nicola Braid and Samuel Abdulla (2012) found that social interactions and the discovery of shared or unique experiences could increase use of social media networks and discussion forums, which in turn enhanced feelings of cohesion in the group among nursing students. Thus, social media is a key vehicle for global communication.

This study examined media uses of nursing and public health students in Thailand. In particular it aimed to investigate: 1) uses of mass media and social media, 2) purpose of use and time spent, and 3) differences between gender and educational levels on the use of mass and social media.

II. METHODS

This survey collected data using online questionnaire during April – May 2014. Institution Review Board was approved from Boromarajonani College of Nursing Saraburi.

A. Participants

Participants were 3, 582 students in Nursing and Public Health Program in Colleges under jurisdiction of the Praboromarajchanok Institute for Health Workforce Development (PIHWD) across Thailand who agreed freely to take part in this study answered the online survey, posted on the colleges' websites

B. Measurement

The online survey on media uses comprised of personal information, media uses, and opinion on benefit of online media use:

• ***Personal data*** include gender, age, years in nursing or public health program,

• ***Media uses*** include:

1) Level of mass media and online media use. Students were asked to estimate their use for 4 mass media channel and 11 online media channel per week using five response options; never, 1-2 day(s), 3-4 days, 5-6 days, and every day. The estimated use score range from 0 (never) to 4 (every day). Average mean scores were categorized into 3 groups, low level use (0.00=1.33), moderate level use (1.34-2.66), and high level use (2.67-4.00), respectively.

2) Purposes of online media use and time spent for each purpose. Students were asked to indicate time to use online media and time use for each purpose: 1) Time use in average on the internet to search information for your study/assignment/ research; 2) Time use in average on the internet for your recreational leisure entertainment purposes (media clips, listening to music, online games, etc.); and 3) Internet use for each online communication (email, chat, line, and other social media). Response options for time use were 1) less than 1 hour, 2) between 1-2 hours and 3) more than 2 hours.

• ***Opinion towards social media use.*** There are 10 questions assess perceived benefit of online or social media use. Students were asked to indicate level of agreement on 5-point rating scale. Response options were: 5 = Strongly agree, 4 = Agree, 3 = Neither agree or disagree, 2 = Disagree, and 1 = Strongly disagree.

C. Data analysis

Descriptive statistics included frequency distribution, percentage, mean, and standard deviation were used to describe the students' media uses and perceived benefit of online media uses. T-test, Analysis of Variance and Post Hoc Test were used to test the media use and perceived benefit of online media use among respondents with different gender and educational level.

III. RESULTS

A. Respondents' Profile

The majority of respondents were female (90.52%), age 20 years old (32.18%), 2nd year students (32.55%), and nursing students (94.37%) as seen in Figure 1
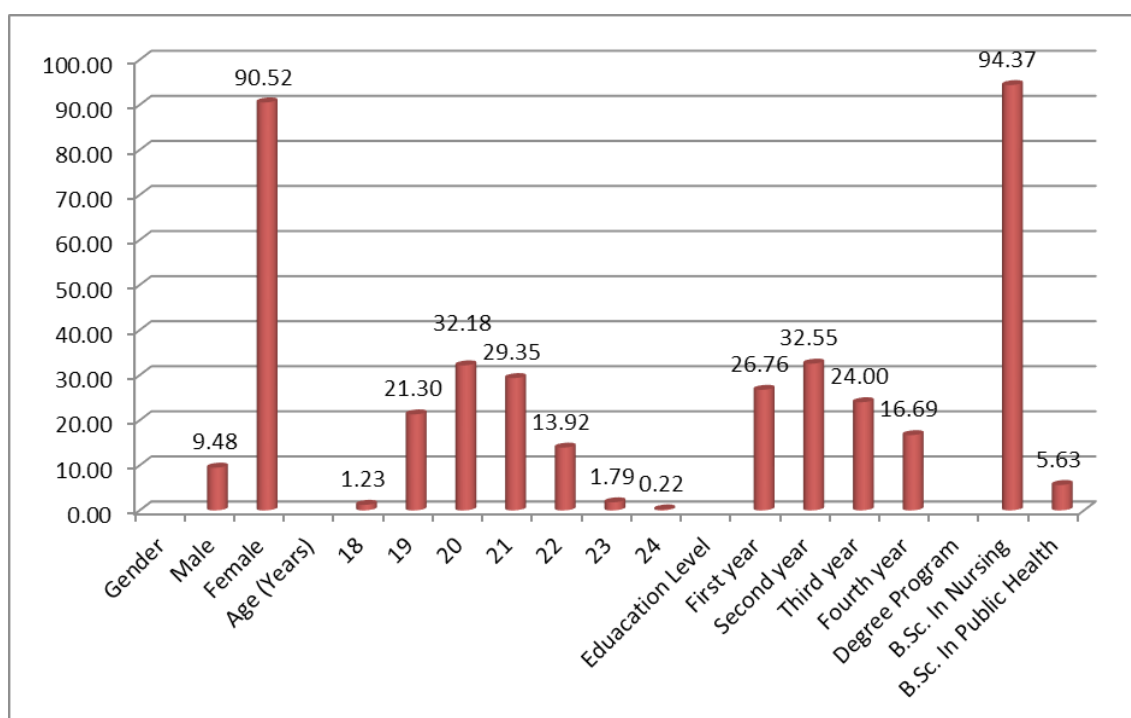

Figure 1

Characteristics of the respondents by gender, age, educational level and program of study

B. Level of Media Uses

Overall media use.

Finding revealed that overall, respondents used media at moderate level weekly ($\bar{X}$ = 1.77, SD=1.165), average mean score of overall media use among male students ($\bar{X}$ = 1.87, SD=1.249) was higher than that of their female counterpart ($\bar{X}$ = 1.76, SD=1.155). The fourth year students had the highest average mean score ($\bar{X}$ = 1.81, SD=1.161), follow by the second year student ($\bar{X}$ = 1.79, SD=1.165) and the first and the third year students had similar average mean score ($\bar{X}$ = 1.76, SD=1.164 and $\bar{X}$ = 1.76, SD=1.162).

Mass media use

Use of mass media of the students was at moderate level ($\bar{X}$ = 1.52, SD=1.023), male students had higher average mean score of mass media use than female counterpart ($\bar{X}$ = 1.56, SD=1.118 and $\bar{X}$ = 1.52, SD=1.012, respectively), and the first year students had the highest average mean score of mass media use ($\bar{X}$ = 1.56, SD=1.007) where the third year students had the lowest average mean score of mass media use ($\bar{X}$ = 1.49, SD=1.029). The Television had highest average mean score of use in every group (mean ranged between 2.36-2.72). Only the first year student had the average mean score of use of television at high level ($\bar{X}$ = 2.72, SD=1.173) where the average mean score in other group were at moderate level. Radio and magazine were used at low level in every group (mean ranged between 1.00-1.16). Use of daily newspaper for male students was moderate ($\bar{X}$ = 1.48, SD=1.029) and low use among the rest.

Online media use

Students also had moderate use of online media ($\bar{X}$ = 1.86, SD=1.217) which was higher than the average mean score of mass media use. Male students had higher average mean score of online media use than female counterpart ($\bar{X}$ = 1.98, SD=1.296 and $\bar{X}$ = 1.85, SD=1.207, respectively), the fourth year students had the highest mean score of online media use ($\bar{X}$ = 1.92, SD=1.205) and the first year students had the lowest average mean score ($\bar{X}$ = 1.81, SD=1.221). Similarly, it should be noted that every group used Facebook®, searching information and download file and Line® at high level (average mean score ranged between 3.26-3.44, 2.68-2.94, and 2.73-2.97, respectively). Overall, SocialCam, Twitter, Blogs and online game were used at low level. Details are shown in Table 1.

Table 1
Level of mass media and online media uses by gender and e level of education of the respondents

Media Channel	Gender				Educational Level (Year)								Total (n=3,582)	
	Male (n=338)		Female (n=3,244)		1st year (n=956)		2nd year (n=1,167)		3rd year (n=860)		4th year (n=599)			
	X̄	SD	X̄	SD	X̄	SD	X̄	SD	X̄	SD	X̄	SD	X̄	SD
Mass Media	**1.56**	**1.118**	**1.52**	**1.012**	**1.56**	**1.007**	**1.52**	**1.017**	**1.49**	**1.029**	**1.51**	**1.037**	**1.52**	**1.023**
Television	2.51	1.268	2.49	1.213	2.72	1.173	2.47	1.205	2.37	1.246	2.36	1.224	2.49	1.218
Radio	1.04	1.066	1.06	1.027	1.00	1.012	1.06	1.016	1.05	1.028	1.16	1.089	1.06	1.031
Daily newspapers	1.48	1.138	1.26	.948	1.27	0.978	1.30	0.973	1.28	0.962	1.27	0.960	1.28	0.969
Magazines	1.23	1.001	1.26	.859	1.23	0.864	1.28	0.875	1.27	0.879	1.24	0.876	1.26	0.873
Online media	**1.98**	**1.296**	**1.85**	**1.207**	**1.81**	**1.221**	**1.89**	**1.219**	**1.85**	**1.211**	**1.92**	**1.205**	**1.86**	**1.217**
Email	1.57	1.164	1.38	1.067	1.28	1.006	1.42	1.084	1.41	1.089	1.53	1.144	1.40	1.078
Line	2.73	1.428	2.84	1.278	2.68	1.397	2.85	1.264	2.87	1.255	2.94	1.208	2.83	1.293
Instagram	1.83	1.657	1.95	1.574	2.00	1.619	1.95	1.557	1.85	1.584	1.98	1.567	1.94	1.582
SocialCam	1.10	1.467	.85	1.314	0.84	1.308	0.89	1.352	0.86	1.319	0.90	1.344	0.87	1.331
Twitter	0.95	1.428	.84	1.318	0.94	1.375	0.83	1.332	0.80	1.291	0.80	1.293	0.85	1.329
Facebook	3.44	0.850	3.32	0.892	3.26	0.953	3.36	0.876	3.34	0.875	3.36	0.818	3.33	0.888
Blogs	1.39	1.346	1.24	1.269	1.24	1.264	1.29	1.291	1.21	1.253	1.26	1.303	1.25	1.277
Read Webboard (e.g. Pantip, Dekdee, Sanook,etc.)	2.67	1.170	2.60	1.061	2.47	1.068	2.67	1.081	2.62	1.080	2.68	1.034	2.61	1.072
Searching information and download file	2.97	1.113	2.76	1.097	2.80	1.114	2.80	1.097	2.73	1.127	2.79	1.044	2.78	1.100
Watch Video/ listen to music online	1.65	1.216	1.38	1.108	1.24	1.054	1.46	1.136	1.40	1.101	1.58	1.187	1.41	1.121
Play Online Game	1.44	1.414	1.20	1.305	1.19	1.272	1.22	1.335	1.21	1.345	1.26	1.319	1.22	1.317
Total	**1.87**	**1.249**	**1.76**	**1.155**	**1.75**	**1.164**	**1.79**	**1.165**	**1.75**	**1.162**	**1.81**	**1.161**	**1.77**	**1.165**

*Low level use = 0.00-1.33, Moderate level use = 1.34-2.67, High level use = 2.67-3.00

C. Purposes of Use and Time Spent

Overall, majority of the students used online media for entertainment and study. About sixty five percent (64.57%) spent more than 2 hours a week in average surfing the internet for recreational leisure entertainment purposes (media clips, listening to music, online games, etc.) and 62.17% of the student also spent more than 2 hours a week on the internet to search information for their study/assignment/ research. Proportion of student spent time spent for online communication such as email, chat, line, and other social media was distributed almost even for between 1-2 hours (37.48%), more than 2 hours (35.76%), and less than an hour (26.76%), respectively.

Comparison of purpose and time spent among the respondent with different gender revealed that proportion of female student who spent more than 2 hours a week surfing online media for entertainment and study were bigger than that of their male counterpart. Among respondents with different level of year in the program, it should be noted that students in the second year had highest percentage of average time spent more than 2 hours a week using online media for study (66.64%) and entertainment (66.09%).
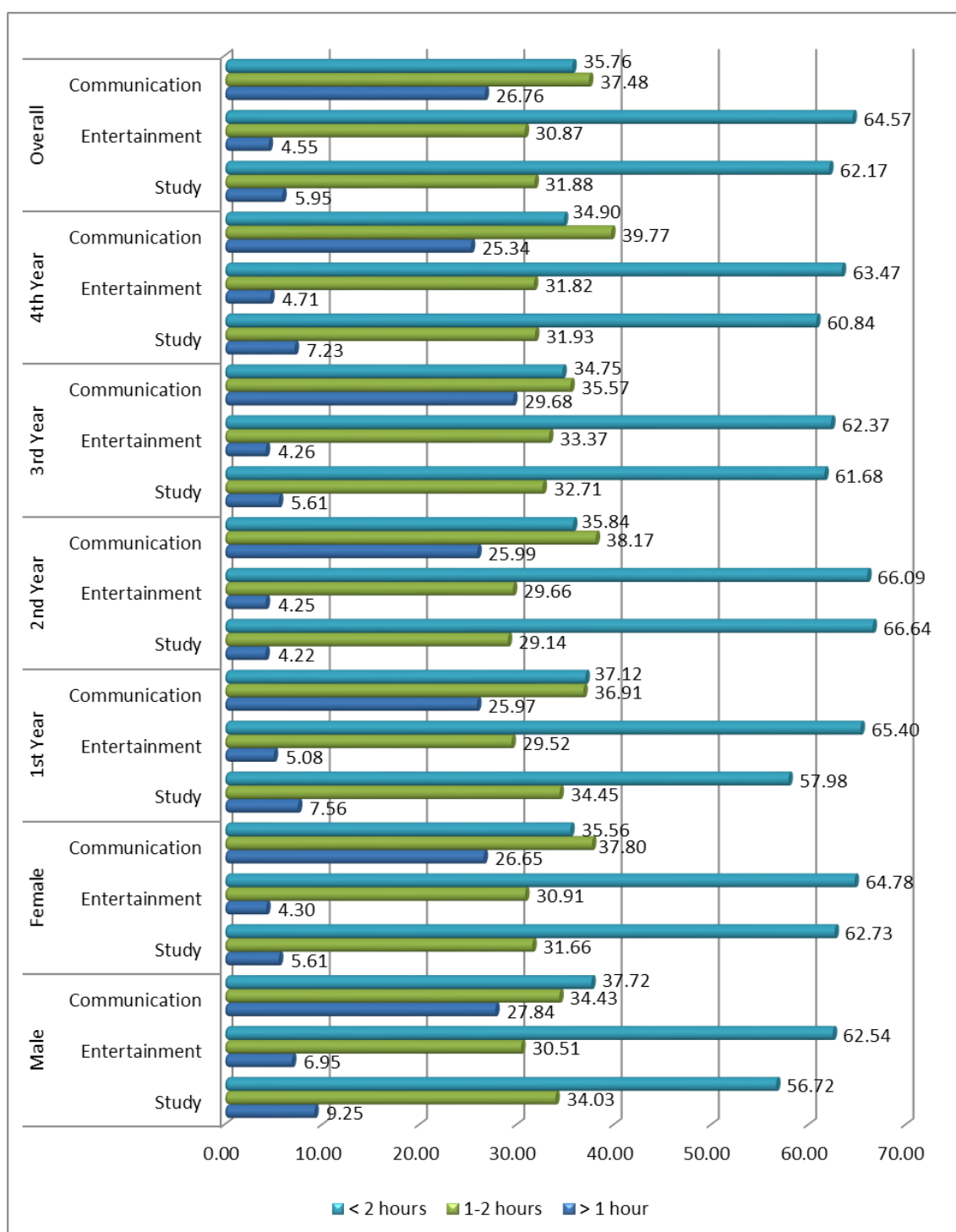
Details are shown in Figure 2.

Figure 2

Percentage of respondents on purposes of online media use and time spent by gender and level of education (n=3,582)

D. Perceived Benefit of Online Media Use

Findings revealed that students perceived benefits of online media at high level ($\bar{X}$ = 4.02, SD=0.542). The perceived benefit at highest level indicated by respondents were online media provide quick access to all information/sources ($\bar{X}$ = 4.64, SD=0.633), online media keep me informed and updated ($\bar{X}$ = 4.54, SD=0.633), social media help release stress from study load ($\bar{X}$ = 4.42, SD=0.750), and social media help setup network in similar interests/topics ($\bar{X}$ = 4.25, SD=0.761), respectively. Online media provide trust/ verified information had the lowest average mean score but the perceived benefit was at moderate level ($\bar{X}$ = 2.84, SD=0.992).

Comparison of perceived benefit of online media use among respondent with different gender and level of education revealed similar pattern, respondents in all gender and level of education perceived high benefit of online media (average mean score ranged between 4.01-4.09). Male and fourth year students had similar highest average mean score (($\bar{X}$ = 4.09, SD=0.555, $\bar{X}$ = 4.09, SD=0.527, respectively). Respondents with different gender and level of education had similar highest perceived benefit on online media provide quick access to all information/sources (average mean score ranged between 4.60-4.69 which is at the highest level of perceived benefit). The lowest average mean score (ranged between 2.82-2.91) was online media provide trust/verified information, the perceived benefit was at moderate level. Details are shown in Table 2.

Table 2

Perceived Benefits of Online Media by Gender and level of education of the Respondents

Benefits of Online Media	Gender				Level of Education								Total (n=3,582)	
	Male (n=338)		Female (n=3,244)		1st year (n=956)		2nd year (n=1,167)		3rd year (n=860)		4th year (n=599)			
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
1. Online media keep me informed and updated	4.58	0.737	4.53	0.706	4.51	0.729	4.53	0.737	4.54	0.710	4.61	0.612	4.54	0.709
2. Online media provide quick access to all information/sources.	4.63	0.641	4.64	0.632	4.60	0.672	4.64	0.638	4.64	0.636	4.69	0.544	4.64	0.633
3. Online media provide rich information ready for searching.	4.14	0.874	3.99	0.924	4.07	0.869	3.97	0.934	3.94	0.961	4.08	0.901	4.01	0.920
4. Online media provide easy to search/access information.	4.20	0.829	4.09	0.866	4.12	0.822	4.07	0.886	4.06	0.900	4.19	0.824	4.10	0.863
5. Online media provide trust/ verified information	2.91	1.057	2.83	0.985	2.79	0.922	2.87	0.996	2.82	1.031	2.90	1.032	2.84	0.992
6. Social media help improve study and report writing.	3.96	0.852	3.85	0.845	3.82	0.811	3.83	0.870	3.86	0.863	3.96	0.820	3.86	0.846
7. Social media provide quick reference experts on issues.	3.84	0.883	3.67	0.912	3.67	0.846	3.65	0.924	3.68	0.936	3.78	0.941	3.68	0.911
8. Social media provide opportunity to present works/ opinion/identity.	3.99	0.863	3.89	0.852	3.88	0.812	3.87	0.857	3.90	0.879	3.97	0.867	3.90	0.853
9. Social media help setup network in similar interests/topics.	4.28	0.789	4.25	0.758	4.24	0.755	4.22	0.775	4.27	0.763	4.30	0.741	4.25	0.761
10. Social media help release stress from study load.	4.38	0.831	4.42	0.741	4.42	0.755	4.41	0.765	4.41	0.745	4.44	0.720	4.42	0.750
Total	4.09	0.555	4.02	0.541	4.01	0.518	4.01	0.557	4.01	0.556	4.09	0.527	4.02	0.542

*Lowest = 1.00-1.80, Low = 1.81- 2.60, Moderate = 2.61-3.40, High = 3.41-4.20, Highest = 4.21-5.00

E. Comparison of Media Uses and Perceived Benefit of Online Media Use

Comparison by Gender

Findings of T-test analysis revealed that respondents with different gender had statistical difference of average mean score on online media use, overall media use, and perceived benefit of online media at significant level .05 as seen in Table 3.

Comparison by Level of Education

Findings of F-test analysis revealed that respondents who had different educational level use online media and perceived benefit of online media differently. Comparisons of average mean score of mass media use, online media use, overall media use and perceived benefit of online media use revealed that there were statistical difference of online media use and perceived benefit of online media use at significant level .05 as seen in Table 3.

Table 3

Comparisons of average mean score of media uses and perceived benefit of online media among respondents with different gender and level of education

Variables	Gender		Level of Education	
	t-test	Sig. (2-tailed)	F-test	Sig.
Mass media use	1.363	.174	1.426	.233
Online media use	2.884	.004	3.457	.016
Overall media use	2.806	.005	2.064	.103
Perceived benefit of online media	2.332	.020	4.015	.007

($p < 0.05$)

Post hoc test revealed that first year students and the fourth year students had statistical difference of average mean score on online media use at significant level .05 (Mean difference = -.10950*, SD=.03787, Sig. = .039). As for the perceived benefit of online media, it was found that he first, the second and the third year students had statistical difference of average mean score with the fourth year student at significant level .05 (MD = -.08005*, SD=.02823, Sig. = .045; MD = -.08745*, SD=.02723, Sig. = .016; and MD = -.08316*, SD=.02883, Sig. = .040, respectively).

IV. DISCUSSION AND SUGGESTIONS

Finding from this study indicated the trend of media uses among nursing and public health students in Thailand. As we are moving toward web 4.0 Era where social media is embracing the life of individual in society, traditional media are used lesser than new and online media. Print media use is less and less although TV is still viewed by Thai nursing and public health students but only at moderate level.

As this study focus on investigating the use of online media among the students in nursing and public health programs, the finding shed light on innovation adoption among this group which should be similar to others. Overall, the respondents used online media at moderate level but there are online services, Facebook® and Line®, which were used at high level. This finding is in consistent with a large increase in social media adoption in Thailand where Facebook® is the biggest social network in Thailand, with 26% of the population using it with average use 4 hours daily (Kritsch 2013). It was found that their uses were more for entertainment not for study; they spent average time more than 2 hours weekly on the internet for recreational leisure entertainment purposes (media clips, listening to music, online games, etc.). Interestingly, Instagram which is the second most popular among the Thai is not popular among the respondents. Their second most use was Line® which is a messaging application where the respondents spend considerable time for this activity.

Comparison of average mean score revealed that there were statistically significant different of online media use and perceived benefit of online media among male and female respondents and fourth year students to other level. These differences were not unexpected of as male and female are different and being in the final year close to graduation, life of this group will be at another transition to true professional world. However, similar pattern of online media use and perceived benefit of online media were found in similar direction.

As a nursing and public health student, the respondents also use online media to search for information and download file as they perceived that online media is quick and ready access point to all information sources although proportion of the respondents who spent more time for study purpose was lesser than a proportion of the respondents who spent more time using online media for entertainment purpose. This finding is in consistent with their perceived benefit towards online media where the a highest level of average mean score were on the following: online media provide quick access to all information/ sources; online media keep me informed and updated; social media help release stress from study load; and social media help setup network in similar interests/topics. Similarly, Betton (2013) indicated that benefits from social media such as interactivity, engagement enable people to share information and ideas, and interact with each other online.

Online media and social media channels may not be right for everyone but trends suggest their use will continue to increase. Although using online social media and social network in nursing and public health education of Thailand may be at the beginning stage, there should be more effort of integrating popular media channels often used by nursing and public health students in today teaching. As anyone else, they have a responsibility to become familiar with these new media so they can incorporate them into practice where this would be of benefit to service users. Technology becomes a medium through which educators can instruct and students can learn. Through online and social media, students can learn outside of the traditional classroom, creating a professional voice, expanding technological abilities, and enhancing their ability to professionally and clearly communicate despite barriers of time and distance. These new media offer mechanisms for collaboration,

networking, and learning not previously available to faculty or students. Beside Facebook®, nurse and public health instructors should consider using other social networking sites such as Twitter® and LinkedIn®; blogs (Roland, Johnson, & Swain (2011) ; and file sharing of scholarly works. Schmitt, Sims-Giddens, and Booth (2012) indicated that such integration was to emphasize professional communication; better improve student comprehension and use of technology and enhance student networking and collaboration with other nurses globally. This kind of change require culture shift in the way professionals think, work and interact (Neal 2013). As members of an innovative profession, findings indicated that PIHWD's students have embraced online and social media, thus it is important for the instructors to use this opportunity to engage them in classroom and ensure that they are actively utilizing new media's potential to enhance practice and improve learning ability and education.

As information in online sources grew at exponential rate information literacy skill should be taught so they could keep pace with technology, information sources and resources. Technology has double edge which can be good or bad (Barry and Hardiker 2012; Skiba 2011), therefore nursing and public health student should be on alert to carry along proper uses. Innovation is seen as vital for a brighter future, therefore understanding to gain the maximum benefit and avoid risk uses among nursing and public health student should be taken into consideration. Online and social media use policies should be discussed and students should be caution about negative consequences from media use such as nurse-patient and co-workers relationships.

V. Acknowledgment

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Family support to self- care behaviors for teenage pregnancy

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Abstract

Pregnancy in teenage making to develop with age, halt or slow down. Be responsible for acting as the mother in quick time too. The purpose of this study was to study the family support and self-care behaviors of teenage pregnancy and the relationship between family support and self-care behaviors of teenage pregnancy. The samples consisted of 162 teenage pregnancy who attended antenatal care clinics at Photaram hospital, Ratchaburi province, Thailand. Data were collected by questionnaire. The data were analyzed by percentage; mean, standard deviation, and correlation analysis were used.

The study found that teenage pregnancy the majority living with their families (98.1%) .The graduated high school (57.4%). The first time of pregnant (88.9%) And not employed (51.9%). The family supports for teenage pregnancy was most likely include the information support ($\overline{X}$ = 4.94, S.D. = 2.67). And self-care behavior in teenage pregnancy having in the most were universal self - care requisites ($\overline{X}$ = 3.93, S.D=0.65). The family support was significant positively correlated with self-care behaviors of teenage pregnant. (r = .286, p < 0.05). The family support were significant positively correlated with developmental self - care requisites and health - deviation self - care requisites (r=527, p<.05,r=.198, p<.05). There was no significantly correlated between family support and universal Self - care requisites. Best on study findings, nurses and health care professional should promote patient's family to play a role to care for teenage pregnancy when developmental change and health deviation .For Quality of pregnant and prevent complication that may occur.

Keywords: family support. Self-care behaviors, Teenage pregnancy

Family support to self- care behaviors for teenage pregnancy

Background

Thailand has the highest teenage pregnancy in Asia. And was ranked second in the world from South Africa. The government has announced national agenda and implements strategies to prevent and tackle youth unwanted pregnancy, along since 2010. (Office of the Permanent Secretary, Ministry of Social Development and Human Security, 2013) from the statistics of the rate of births among mothers aged less than 20 years from 2008-2012 15.51,16.05,16.17,16.70 and 16.59 percent, respectively, which showed a higher number so as well the rate of births among mothers aged less than 15 years since 2008-2012 was the percentage 0.35, 0.38,0.40,0.43 and 0.46 of births in maternal age every group (Cluster for information and health information Office of Policy and Strategy Division of Health Statistics, 2010). The current situation Thailand is different from the past. The family is not a extended family as before. The communication technologies are developed over time. Communication technologies are developed over time. The communication of social media surfing the internet is affecting the lives of young people to transcend through the ages should be before the time is right. During the past decades, the lives of adolescents Thailand is changing rapidly and radically. The use of common every day for competed and to absorb the culture and social change. The focus on materialism and far from family and religious, these may be the major turning point of the trajectory of their lives in sexual behavior.

When a pregnant, teenage pregnancy often not received inadequate antenatal care. Because start antenatal care late or not antenatal care. Some teens cannot distinguish the difference of bleeding in early pregnancy with normal menstruation and have issue costs, negative attitudes of staff. Some deny that they conceive and trying to close it up, and about 30-60 % of pregnant teens decided to terminate the pregnancy by abortion. (Benjaporn Panyayong, 2010). After those teenage girls who have been diagnosed as pregnant. Should be advised of the alternatives opportunity to abortion and antenatal care. The early antenatal, from the first quarter or early second quarter, with the objective to determine the gestational age is accurate. And treat various diseases or complications (Perayuth Sanukool and Pengjith thanprisant, 2009).The pregnancy and to role as a mother of teenagers, making development of adolescents stop or slow down. Some people had to leave school and separated from their peers. Teenage pregnancy will be conflicts, stress with the pregnancy. Moreover, social pressure, which focused on roles and responsibilities mothers in child care more than fathers. These cause the mother's anxiety and stress. Affect physical and psychological Dulrudee petchkwang and et al, 2011). Teenage pregnancy needs to be taken care of sympathy from family members and hearing problems uneasy. Family members will contribute to the pregnant teenagers has attitude good the role of a mother in the future. Thailand is a society where the family lived together. Although the transition from the extended family to the single family more. But the family in Thailand is not truly

independent. Because social Thailand although are separately located, but also to come and dependence between relatives sibling. And counseling on self-care and child (Unya Plodpluang, 2009). The family is a social support that has been used extensively. Because this is a source of support that close relationship and can provide ongoing care. (Kane, 1988).

Due to the importance of such families, the researchers are interested in learning about family support to self-care behaviors in teenage pregnancy. In order to know the support of the family that affect self-care behaviors to teenage pregnancy. As a guide to help pregnant teenagers have appropriate self-care behaviors and through the period of pregnancy is safe for both the pregnant woman and the fetus.

Objectives

There are two main objectives of this study. First, to study the family support of teenage pregnancy and self-care behaviors of teenage pregnancy. Second, to study the relationships between family support and self-care behaviors in teenage pregnancy.

Method

Research design: Descriptive research
Population and sample:
Population of this study was teenage pregnancy at antenatal care department, at Photaram Hospital, Ratchaburi province. From October 2013 - June 2014 was 280 people.

The samples of this study were teenage pregnancy at antenatal care department, at Photaram Hospital, Ratchaburi province by purposive sampling. They were aged between 13-19 year, can read and write and to cooperated in research.

Sample size calculation:
The sample size was calculated the sample size using the open a table Krejcie and Morgan (Krejcie & Morgan, 1970) had a sample size of 162 people.

Instrumental tools
There were three instrumental tools collect the data for this study:
Personal characteristics, including age, occupation, education, number of pregnancies, abortion, disease history and living.

The questionnaire of the family support, adapted from a measure of social support from the family by Kanya Malikeaw (2003) and the concept of social support of Schafer et. Al. (Schaefer et al., 1981), including emotional support, support of information, and material and service support. The questionnaire had 20 questions. There are five points on rating scale, including 1=strongly disagree, 2 = disagree, 3= neutral, 4 =agree, 5= strongly agree. The total score for this questionnaire were from 4.50-5.00. This score has been shown that received most of family support.

The questionnaire self-care behaviors, adapted from self-care behaviors of teenage pregnancy by Rudee Pungbangkradi (1997) and the theory of self-care by Orem (Orem, 2001), including universal Self - care requisites, developmental self - care requisites and health - deviation self – care requisites. The questionnaire had 30 questions. There are five points on rating scale, including 1=strongly disagree, 2 = disagree, 3= neutral, 4 =agree, 5= strongly agree. The total score for this questionnaire were from 4.50-5.00. This score has been shown that having very good self-care behavior.

Validity and reliability

Validity of the questionnaire was tested term of content validity based on the congruence of expert's opinion. To determine the content validity (IOC: Item Objective Congruence Index), these opinions or agreement of experts, were interpreted with the score 0.98.After the questionnaire were test for content validity, then trying out 30 questionnaire to test the internal consistency with alpha Cronbach Coefficient and the result of this internal consistency family support was at 0.71 and self - care behaviors in teenage pregnancy was at 0.85.

Ethical approval

This research was approved by the Ethics committee of Boromarajonani College of Nursing Chakriraj. All participants agreed freely to take part in the study after they understood clearly about the research procedures and they had a right to withdraw from the study of they want without any negative impacts on the treatment or support from others. The data or information, which may identify participants, was removed for the privacy and the results of this study were reported as a whole.

Data collection: This study was conducted during May – July 2014

Data analysis

Data analyzed using the SPSS version 15.The level of confidence in the statistical significance level of 0.05 was used. The data were analyzed by percentage, mean, standard deviation, and Pearson product moment correlation.

Results

Personal characteristics of participants

Most teenage pregnancy, aged 19 years (36.4%), married (96.3%) , Most of them were employed(51.9%), graduated high school(57.4%), the first time of pregnant (88.9%), never abortion(95.7%) ,had no congenital (94.4%) and living with their families (98.1%).

Family support

The study found that teenage pregnancy received most family support was to information support. ($\overline{X}$ = 4.94, S.D. = 2.67), as shown in table 1.

Table 1

Mean, Standard Deviation of family support of teenage pregnancy (n=162)

Family support	$\overline{X}$	S.D.
1. Emotion support	4.31	0.65
2. Information support	4.94	2.67
3. Material and service support	4.60	1.26

Self- care behaviors

The study found that teenage pregnancy having very good self-care behavior was to universal   self - care requisites. ($\overline{X}$ = 3.93 S.D.=0.65), as shown in table 2.

Table2

Mean, Standard Deviation of Self- care behaviors of teenage pregnancy (n=162)

Self- care behaviors	$\overline{X}$	S.D.
1. Universal self - care requisites	3.93	0.66
2. Developmental self - care requisites	3.85	1.26
3. Health - deviation self - care requisites	3.86	0.51

Family support with self – care behaviors

The study found that family support had positively and significant correlations with self- care behaviors of teenage pregnancy(r=.286, p<.05), as shown in table 3.

Table3. The relationship between family support and self- care behaviors of teenage pregnancy. (n=162)

	Family support	Self- care behaviors
Family support	1	.286**
Self – care behaviors	.286**	1

Family support with self –care behaviors (Universal self - care requisites, developmental   self - care requisites and health - deviation   self – care requisites)

The study found that family support had positively and significant correlations with developmental self - care requisites (r=527,p<.01) and health - deviation   self – care requisites(r=.198p<.05), as shown in table 4.

Table4

The relationship between family support with universal self - care requisites, developmental   self - care requisites and health - deviation   self – care requisites (n=162)

	Family support	Universal self – care requisites	Developmental self - care requisites	Health – deviation self – care requisites
Family support		-.086	.527**	.198*
Universal self – care requisites.			.092	.363**
Developmental self - care requisites.				.325**
Health – deviation self – care requisites				1

**p<.01,*p<.05

Discussion

There were three main topics for this discussion part.

The family support of teenage pregnancy attending antenatal care at Photaram hospital, Ratchaburi province. This results showed teenage pregnancy received the most family support all side. Explained that the family in Thailand is not truly independent. Most teenage pregnancy lives with their families. The family is an informal social support (House, 1981), which this study had found that most teenage pregnancy living with their families (98.1%), making the family the opportunity to caring and support teenage pregnancy in various fields. This is consistent with study of Committee on Maternal and child at Khundon district, Satul province (2012), this a qualitative study about the care needs of teenage pregnancy in Khuandon district, Satul province. Found that teenage pregnancy had relationships with the family quite well and her husband were glad to get it. As with the study of Dulrudee Phechkwang et al (2011) study about teenage pregnancy and factors associated with pregnancy in adolescents had found that caring from the family at the highest level, (77.1%). Therefore, teenage pregnancy receiving antenatal care, acceptable pregnancy. It has been taking care of her family and husband as well.

Self-care behaviors of teenage pregnancy. These results showed that teenage pregnancy had good self-care behaviors. This is consistent with study of Dulrudee Phechkwang et al (2011) found that teenage pregnancy was good self – care during pregnancy. And the importance of self-care requisites. There was based on the theory of self-care of Orem (Orem, 2001) found that human as an individual. The process of growth and development to get to maturity. This process can occur from the care of and responding to the needs of self-care , learning from family and society, and when a person to the maturity to be responsible to their own needs has been met. By them self or by engaging of family and this action to maintain the lives and health called action of self-care .To promote and maintain the health and welfare of individuals by their own care.

Family support and self-care behaviors of teenage pregnancy found that positively and significant correlations with self- care behaviors of teenage pregnancy. Family support had positively and significant correlations with developmental self - care requisites and health - deviation self-care requisites. This is consistent with Orem's Self-Care Theory (2001) regarding developmental self-care requisites is a self-care by the process of evolution of human life in different stages such as pregnancy, childbirth, self-care is essential for the development, maintaining the economic well-being to support processes of life. And the development of life and development that help people grow into maturity during pregnancy and care to prevent adverse effects on development. For the health - deviation self – care requisites such as pregnancy was to self- care for the assistance of a trusted person, such as doctors, nurses perceived attention to the impact on the development of pregnancy, pregnancy efficiency, to prevent discomfort. Learning outcomes of pathological conditions that may occur and promoting their ability to best meet the rest. Consistent with study of Tongpab Narong (2014) study about the effect of promoting maternal role in the recognition and family support to success in their role as mothers, teenage mothers postpartum results showed that the average scores of perceived family support. And the average score achieved in the maternal role in the experimental group than the control group with statistical significance. 05th.

Conclusion

The results of this study shown that the support family influence self-care behaviors of teenage pregnancy. Therefore, to encourage family to care for teenage pregnancy. So that teenage pregnancy was pregnant quality.

Recommendations

1. For nursing practice, these results disseminate to the antenatal department of hospitals. To demonstrate the importance and promotion of the family took part in the care of teenage pregnancy.
2. For education, this study to be included in the teaching on Maternal and child and Midwifery 2. Students aware of the importance of the family to care for pregnant adolescents. To guide the activities of the service.
3. For research, Should study and develop treatments for pregnant women, the family took part. Pregnant teenagers to get quality care.

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The Thai version of Kogan's Attitude toward Old People (Kogan's OP): Evaluation of validity and reliability assessment

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Abstract

Background: Thailand faces a disproportionately large older population, who will be cared by the youth of today. Negative attitudes can make adolescents more uncomfortable relating to older people

Objectives: The objective of this study was to evaluate validity and reliability of the Thai version of Kogan's Attitude toward Old People (Kogan's OP).

Methods: Content validation of the 34-item Kogan's OP Thai version was examined by three Thai geriatric nursing experts. The reliability was evaluated on 700 nursing students, years 1-4 from 19 Nursing Colleges under Praboromrachanok Institute, Thailand Ministry of Public Health.

Findings: Scores of attitude towards elderly were at moderate level (mean = 150.14, SD = 15.79), score range 70 to 200. All of the 34 items were found to have significant item-to-total correlations ($p < .05$). Cronbach's alpha was .75 for the total scale. Exploratory factor analysis indicated that Kogan's OP consisted of 5 factors. The five factors identified were old people's interest in work and society, negative effect, appreciation, personality and prejudice.

Conclusions: These findings suggest that Kogan's OP is reliable and valid for Thai nursing students and also requires no special training for users.

Keywords: Attitude, Elderly, Nursing students, Kogan's Attitude toward old people

The Thai version of Kogan's Attitude toward Old People
(Kogan's OP): Evaluation of validity and reliability assessment

Introduction

As we start the 21st century, the number of older adults in Thailand is increasing at a higher rate than ever before. A number of the older adults in Thailand was 7 million or 11.5 percent of the country's population. It is expected that a number of the older adults will reach 9 million in 2020 (Sriwanitchakorn as cited in Dumrikarnlert, 2012: p. 11). At this rate, in 2050, it will be the first time that older people will outnumber the young people all over the world (Winker & DeAnglis, 2010). The decline has resulted in a reduction in family size and in the number of children who will be future caregivers of the growing older adults. In addition, many older adults return to their family homes when they become frail and dependent. In the near future, Thailand will face a proportionally large older adults with chronic illnesses, who in many instances will be cared for by the youth of today (Jitapunkul, 2000). Concluding that, older people in Thailand tend to live in multi-generational households. Registered nurses' care of older people has the characteristic of long-term (Caffrey, 2005) and palliative care (Johnston and Smith, 2006) around the clock and is defined as gerontological nursing and community nursing.

Experts believe that negative attitudes may result from misconceptions about the aged and the aging process (McGuinn & Mosher-Ashley, 2002; Lambrinou et al., 2005). The negative attitudes and misconceptions make adolescents more fearful and uncomfortable relating to older adults. The first step in correcting the misconceptions is to have accurate instruments to assess adolescents' attitudes toward older adults. Research concerning attitudes toward older adults began over 40 years ago. The most suitable instrument for this study appears to be the questionnaire about aging called "Attitudes Toward Old People Scale" (OP) developed by Kogan in 1961. Using an instrument cross-culturally requires a process that follows translation theory. The process must ensure that the tool is adequately translated and also is a reliable and valid measure for the target population.

Objective

The objective of this study was to evaluate validity and reliability of the Thai version of Kogan's Attitude toward Old People (Kogan's OP) on Thai Nursing students.

Method

Data collection was performed in April and May 2014 using online survey through websites of Nursing colleges under Praboromrachanok Institute, Thailand Ministry of Public health. The study was approved by the ethic committee review board for human protection of research at Boromarajonani College of Nursing Saraburi in 2014.

Sample

The sample participated in this study was 700 hundred of nursing students, years 1-4 enrolled in 19 Nursing Colleges. The required sample size for psychometric property evaluation of this 34-item questionnaire is 340 students.

Instruments

Two questionnaires for psychometric evaluations of the Thai version of Kogan's OP were:

1. Personal data form contains questions related to gender, years in Nursing program, school location, and prefer age group of clients to work with.

2. The Kogan's Attitude toward Old People (Kogan's OP) was previously translated according to Brislin's model by (Runkawatt, 2007). The content validity and cultural appropriateness were established. Reliability in previous study were 0.70 (Runkawatt, 2007) and 0.73 (Runkawatt&Gustafsson and Engstrom, 2011). The Thai version of Kogan's OP comprised of 34 statements. Students were asked to express their opinions on 7-point rating scale 1 = Strongly disagree , 2 = Disagree, 3 = Somewhat disagree , 4 = Neither agree or disagree, 5 = Somewhat agree, 6 = Agree, and 7= Strongly agree .

Scoring and interpretation of individual item and total score were ranged from 1-7 and 34 – 238. The criteria for interpretation of each item are: poor = 1-3, moderate = 3.1-5, and good = 5.1-7. For total scale the interpretation criteria are poor = 34-102, moderate 103-170, and good = 171-238.

Results

Participant characteristics

Students in this study were 91.9% female, similar distribution of studying in nursing program years 1 – 4 (26.9%, 32.7%, 25.1%, and 15.3%). They represented students from the central (39.1%), north (13.1%), northeast (32.9%), and south (14.9%). The top three prefer age ranges of clients were age 22-35 (45.1%), 36-59 (18.4%), and 60-79 (13.9%) as showed in Table 1.

Attitude towards elderly

Analysis of mean scores of attitude towards elderly was performed according to student characteristics including gender, years in nursing program, and age of client preference. Findings revealed attitude towards elderly at moderate level among male (mean = 152.5, SD = 16.6) and female (mean = 149.9, SD = 15.7), students in different years in nursing program from mean = 147.1 (SD = 13.6) in 1st year to 150.9 (SD = 17.7) in 4th year. Students lived in different regions and prefer to work with clients in different age group were found to have attitude towards elderly at moderate level as showed in Table 1.

Table 1
Characteristics and mean attitude score of nursing students (N = 700)

Characteristics	n	%	mean	SD	Level
Gender					
Male	57	8.1	152.6	16.6	moderate
Female	643	91.9	149.9	15.7	moderate
Years in Nursing program					
1	188	26.9	147.1	13.6	moderate
2	229	32.7	149.6	15.6	moderate
3	176	25.1	153.3	16.5	moderate
4	107	15.3	150.9	17.7	moderate
Regions					
Central	274	39.1	151.3	15.8	moderate
North	92	13.1	152.2	16.9	moderate
Northeast	230	32.9	148.2	14.4	moderate
South	104	14.9	149.5	17.4	moderate
People want to work with					
< 12 years	28	4.0	152.4	15.1	moderate
13-21 years	27	3.9	144.1	11.1	moderate
22-35 years	316	45.1	148.8	14.4	moderate
36-59 years	129	18.4	150.1	17.7	moderate
60-79 years	97	13.9	152.8	15.1	moderate
> 80 years	6	.9	145.0	26.6	moderate
Cannot decide	97	13.9	153.1	18.0	moderate

The Kogan's Attitude toward Old People

Item and total mean score

The 34-item Kogan's Attitude toward Old People was analyzed for mean attitude towards elderly. The total score of attitude towards elderly of these nursing students was at moderate level (mean = 150.1, SD = 15.8). Among the 34 items, mean scores of 12 items were at good level, 21 items were at moderate level, and one item was at low level as showed in table 2.

Table 2
Mean score of attitude towards elderly in each item and total scale of nursing students (N = 700)

Statements	Mean	SD	Level
1. It would probably be better if most old people lived in residential units with people their old age.	5.8	1.5	good
2. It would probably be better if most old people lived in residential units that also housed younger people.	5.7	1.4	good
3. There is something different about most old people; it's hard to figure out what makes them tick.	4.5	1.5	moderate
4. Most old people are really no different from anybody else; they're as easy to understand as younger people.	3.9	1.4	moderate
5. Most old people get set in their ways and are unable to change.	3.5	1.5	moderate

6. Most old people are capable of new adjustments when the situation demands it.	4.1	1.3	moderate
7. Most old people would prefer to quit work as soon as pensions or their children can support them.	3.4	1.5	moderate
8. Most old people would prefer to continue working just as long as they possibly can rather than be dependent on anybody.	5.0	1.6	moderate
9. Most old people tend to let their homes become shabby and unattractive.	5.6	1.4	good
10. Most old people can generally be counted on to maintain a clan, attractive home.	5.2	1.5	good
11. It is foolish to claim that wisdom comes with old age.	4.8	1.5	moderate
12. People grow wiser with the coming of age.	5.6	1.3	good
13. Old people have too much power in businesses and politics.	3.4	1.3	moderate
14. Old people have too little power in business and politics.	3.1	1.4	moderate
15. Most old people respect others' privacy and give advice only when asked.	4.8	1.4	moderate
16. If old people expect to be liked, their first step is to try to get rid of their irritating faults.	3.7	1.6	moderate
17. When you think about it, old people have the same faults as anybody else.	5.5	1.4	good
18. In order to maintain a nice residential neighborhood, it would be best if too many old people did not live in it.	5.5	1.4	good
19. You can count on finding a nice residential neighborhood when there is a sizable number of old people living in it.	5.1	1.4	good
20. There are a few exceptions, but in general most old people are pretty much alike.	4.0	1.4	moderate
21. It is evident that most old people are very different from one another.	3.1	1.3	moderate
22. Most old people should be more concerned with their personal appearance; they're too untidy.	5.1	1.4	good
23. Most old people seem to be quite clean and neat in their personal appearance.	4.5	1.2	moderate
24. Most old people are irritable, grouchy, and unpleasant.	5.1	1.4	good
25. Most old people are cheerful, agreeable, and good humored.	4.4	1.3	moderate
26. Most old people are constantly complaining about the behavior of the younger generation.	3.2	1.4	moderate
27. One seldom hears old people complaining about the behavior of the younger generation.	3.3	1.3	moderate
28. Most old people made excessive demands for love and reassurance.	3.5	1.5	moderate
29. Most old people need no more love and reassurance than anyone else.	3.5	1.4	moderate
30. Most old people make one feel ill at ease.	5.3	1.3	good
31. Most old people are very relaxing to be with.	4.4	1.3	moderate
32. Most old people bore others by their insistence on taking about "good old days."	2.7	1.5	low
33. One of the most interesting qualities of old people is their accounts of their past experiences.	5.5	1.4	good
34. Most old people spend too much time prying into the affairs of others and in giving unsought advice.	4.3	1.5	moderate
Total	150.1	15.8	moderate

Construct of Kogan's Attitude toward Old People

Exploratory factor analysis with varimax rotation of Kogan's Attitude toward Old People revealed 5 factors that account for 56% of variances. Factor loadings of the 34 items ranged from .360 - .860. The 5 factors identified were 1) prejudice (5 items), interest in working and society (8 items), 3) personality (3 items), 4) negative effect (5 items), and 5) appreciation (11 items). Reliability test of the total scale of 34-item Kogan's Attitude toward Old People Thai version was acceptable with Cronbach's alpha of .75 as showed in Table 3.

Table 3
Scale construct, factor loadings, and reliability of the Kogan's Attitude toward Old People Thai version

Factors	Factor loading				
	1	2	3	4	5
Factor 1: Prejudice					
Item 1				.649	
Item 3				.551	
Item 5				.424	
Item 11				.401	
Item 20				.522	
Factor 2: Work and society					
Item 7					.707
Item 8					.560
Item 9					.694
Item 10					.688
Item 22					.540
Item 23					.427
Item 13					.755
Item 14					.860
Factor 3: Personality					
Item 4			.616		
Item 6			.601		
Item 25			.505		
Item 27			.676		
Item 29			.566		
Factor 4: Negative effect					
Item 16		.360			
Item 18		.619			
Item 24		.759			
Item 30		.767			
Item 34		.677			

Factor 5: Appreciation					
Item 2	.548				
Item 12	.655				
Item 15	.587				
Item 17	.725				
Item 19	.647				
Item 21	.649				
Item 26	.619				
Item 28	.501				
Item 31	.518				
Item 32	.762				
Item 33	.799				

Discussion

The nursing students in this study had positive attitudes (M = 150.14, SD = 15.79) toward older adults on Kogan's OP scale. Additionally, Thai nursing students were found to have more positive than negative attitudes toward older adults, having the same score as previous studies (Runkawatt, 2007; Runkawatt&Gustafsson and Engstrom, 2011). The alpha coefficient of Thai version of Kogan's OP was 0.75 Cronbach's alphas of Kogan's OP in previous studies were in the range of 0.70 to 0.88 (Runkawatt, 2007; Lambrinou et al., 2005; Runkawatt&Gustafsson and Engstrom, 2011). The exploratory factor analysis using principal component analysis of the Thai version of Kogan's OP suggested five components The five factors identified were old people's interest in work and society, negative effect, appreciation, personality and prejudice. Additionally, the five factors solution made it possible to interpret the factor content. In summary, the results of this study show that the Thai version of Kogan's OP scale is reliable.

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Perceptions of Stroke Risk Factors and Warning Signs of Nursing Students under Praboromarachanok Institute, Ministry of Public Health, Thailand

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Abstract

Significance: The increasing number of stroke as the non-communicable diseases (NCDs) in Thailand required early detection and effective prevention and treatment among public healthcare. Stroke survivor suffers from the adverse affects with poor quality of life.

Objective: This study explored students' perception on stroke risk factors and warning signs in colleges under Praboromarachanok institute. There were 3,574 nursing students on the 1st – 4th year from 19 nursing colleges.

Methods: The set of questions related to stroke risk factors and warning signs knowledge was launched through online survey in April to May 2014. Descriptive data were computed.

Results: Findings revealed that 10.9% of students reported of family history with stroke. For knowledge of stroke risk, the three lowest risks were parents or siblings having a stroke (53.7%), drinking (56.5%), and diabetes (71.3%). Three highest risks were hypertension (90.6%), dyslipidemia (88.9%), and stress (88.2%). Three lowest knowledge of warning signs were trouble seeing (71.3%), trouble speaking (78.5%), and weakness of face (78.7%) and the three highest knowledge of warning signs was weakness at one side of body (88.8%), sudden and severe headache with no known cause (82.8%), and sudden dizziness (81.6%).

Conclusion and Implication: Some nursing student identified risk factors and warning signs of stroke as the most common risks and symptoms correctly; some students were still incorrect recognizing and understanding the knowledge of risk factors and warning signs of stroke. Findings suggest that stroke knowledge of risks and warning signs should be integrated in teaching and learning of nursing.

Keywords: Stroke, Nursing student, risk factors, warning signs, Thailand

Perceptions of Stroke Risk Factors and Warning Signs of Nursing Students under Praboromarachanok Institute Ministry of Public Health, Thailand

Introduction

Stroke is the first commonest cause of death globally and adult disability (World Health Organization, 2014). According to the World Health Organization, 15 million people have stroke globally each year; 5 million people die and another 5 million people are left permanently disabled (Mackay & Mensah, 2004). About 7 (3.0%) million people in the US have stroke; however, the highest prevalence of stroke is in China ranged between 1.8% (rural areas) and 9.4% (urban areas) (Sousa et al., 2009). Without intervention, the number of global deaths will increase to 6.5 million in 2015 and to 7.8 million in 2030 (World Health Organization, 2014).

In Thailand, stroke prevalence was increasing over the past 20 years from **1.12%** in a study among 3,036 elderly Thai over *60* years old in 4 regions of the country conducted in during 1994 and 1996 (Viriyavejakul et al., 1998), with the highest prevalence of stroke found in the central region of Thailand. The most recent report revealed **1.88%** prevalence of stroke in populations over the age of *45* years old; prevalence of stroke in men had a greater than did in women in all age groups (Hanchaiphiboolkul et al., 2011). Among five regions of Thailand, stroke prevalence was the highest prevalence in the capital city, Bangkok (3.34%) followed by central (2.41%), southern (2.29%,), northern (1.46%), and north-eastern regions (1.09%). As increased stroke survivors, the dependency ratio will shift with fewer young people supporting an increasing proportion of elderly people. This will be a tremendous challenge for societies and health systems, including health profession educations (Poungvarin, 2007).

The best way for patients to receive the most effective stroke treatment presents at emergency room of hospitals as quick as possible after warning signs of stroke occur (Kernan et al., 2014). Reducing the time from stroke onset to hospital arrival and improving control of stroke risk factors depend on perceptions of knowledge of stroke warning signs and risk factors. The awareness of stroke warning signs can influence the victims on the delay of presentation in the hospitals (Dearborn & McCullough, 2009; Goff et al., 2014; Hodgson, 2008; Jones, Jenkinson, Leathley, & Watkins, 2010; Kernan et al., 2014; Sug Yoon, Heller, Levi, Wiggers, & Fitzgerald, 2001). This is especially important for health professional education that should contribute to have the nursing student well equipped for the knowledge of risk factors and warning signs of stroke.

However, we have little known how well the nursing student are prepared for health care service in specific to stroke. In this study, we designed to conduct the web-based survey to assess the current knowledge of risk factors and warning signs of stroke among nursing students in the colleges of nursing under the Praboromarachanok Institute where have largely trained the undergraduate students to

serve the hospitals in Ministry of Public Health, Thailand. This is to baseline knowledge as nursing education needed for student regarding the risk factors, warning signs and symptoms, treatment and information resources.

Objective

This study aims to assess the knowledge of stroke, risk factors, and stroke warning signs among nursing students who enrolled in Nursing Colleges under Praboromarachanok Institute.

Methodology of Research

This cross-sectional study was descriptive survey with web-based questionnaire administration during April and May 2014. The ethic committee review board of Boromarajonani College of Nursing, Saraburi approved this study.

Samples

There were 15,733 potential participants of undergraduate nursing students ongoing nursing education program in 29 colleges under the Praboromarachanok Institute (PI), Ministry of Public Health, Thailand. A total of participants included 3,574 nursing students from the 19 colleges where they were studying in the class of the first to the fourth year.

Instruments

The 3-part questionnaires addressed personal information, the knowledge of risk factors and warning signs of stroke that was developed by the American Health Association and the National Institute of Nuerological Disorders and Stroke. (American Heart Association, 2012; National Institute of Neurological Disorders and Stroke, 2009) *Personal information.* The 6-item f personal information was gender, years in nursing education program, school location, family history with stroke, nursing practicum experience in clinical setting and community setting

1. **Stroke risk factor knowledge**. The 9-item of stroke risk factors included smoking, drinking, HTN, high cholesterol, family with stroke, diabetes, obesity, lack of exercise, and stress. Responses were the 6-point Likert scale ranged from very high to very low and don't know.
2. **Stroke warning sign knowledge**. Six questions included: 1) Sudden onset of face asymmetry; 2) Weakness/ numbness of arm/leg/part of body; 3) Sudden difficulty in speaking/understanding; 4) Suddenly blurred/double/loss of vision; 5) Sudden onset of severe headache, and 6) Sudden onset of dizziness/vertigo. Response options were yes (1), no (0), and don't know (0).

Data analysis

Descriptive statistics was used for the frequency, percentage, mean and standard deviation.

Results

Participant characteristics

A total of 3,366 participants in this study, majority of them were female (91.1%) greater than men, and the proportion of studying classes ranged from first year to fourth year as 26.0%, 31.1%, 24.5%, and 18.4% respectively. They were from regions of the country: 47.9% (1,618) in the central, 13.1% (295) in the north, 29.0% (975) in the northeast, and 16% (538) in the south. Some participants (10.9%) reported, "having family history with stroke".

Knowledge of stroke risk factors

For stroke risk knowledge (Table 1), parents or siblings having a stroke disease (53.7%), drinking (56.5%), and diabetes (71.3%) were three lowest risks of stroke, while hypertension (90.6%), dyslipidemia (88.9%), and stress (88.2%) were three highest knowledge risks of stroke.

Table 1

Knowledge of stroke risk factors (N= 3,366)

Risk Factor	Very High	High	Moderate	Low	Very low	Don't know
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)
Smoke	1176 (34.9)	1445 (42.9)	437 (13.0)	138 (4.1)	74 (2.2)	51 (1.5)
HTN	*2018 (60.6)*	*998 (30.0)*	179 (5.4)	63 (1.9)	44 (1.3)	29 (0.9)
High cholesterol	*1908 (57.4)*	*1045 (31.5)*	215 (6.5)	77 (2.3)	45 (1.4)	32 (1.0)
Family with stroke	**664 (19.9)**	**1126 (33.8)**	837 (25.1)	372 (11.2)	192 (5.8)	139 (4.2)
Diabetes	**1019 (30.6)**	**1381 (41.5)**	61.8 (18.6)	175 (5.3)	79 (2.4)	55 (1.7)
Obesity	1300 (39.1)	1415 (42.5)	396 (11.9)	117 (3.5)	57 (1.7)	41 (1.2)
Lack of exercise	1118 (33.6)	1359 (40.8)	649 (19.5)	124 (3.7)	53 (1.6)	28 (0.8)
Alcohol	**1200 (35.7)**	**1415 (42.5)**	464 (14.0)	127 (3.8)	79 (2.4)	41 (1.2)
Stress	*1796 (53.9)*	*1142 (34.3)*	260 (7.8)	79 (2.4)	33 (1.0)	20 (0.6)

Knowledge of stroke warning signs

For stroke warning signs (Table 2), three lowest knowledge of warning signs were sudden trouble in seeing (71%), sudden trouble speaking (79%), and sudden weakness of face (79%). The 3 highest knowledge of stroke warning sign were the sudden weakness on leg or arm, especially on one side of body (89%), sudden and severe headache with no known cause (83%), and sudden dizziness (82%).

Table 2

Knowledge of stroke warning signs (N = 3,366)

Stroke warning signs	Yes	No	Don't know
	N (%)	N (%)	N (%)
Sudden onset of weakness of face	2649 (79.5)	214 (6.4)	470 (14.0)
Weakness and numbness of arm or leg, one side of body	2957 (88.8)	128 (3.8)	244 (7.3)
Sudden trouble speaking and understanding	2613 (78.5)	292 (8.8)	423 (12.7)
Sudden blur, trouble, loss of vision	2376 (71.3)	373 (11.2)	585 (17.5)
Sudden onset of severe headache	2755 (82.8)	250 (7.5)	324 (9.7)
Sudden onset of dizziness and vertigo	2719 (81.6)	264 (7.9)	350 (10.5)

Discussion

This is the first stroke survey in nursing students in Thailand. In this most large database survey among nursing students under the Praboromarachanok Institute demonstrated that stroke risks was i.e., hypertension, dyslipidemia, and stress) and warning signs (i.e., weakness at one side of body, sudden and severe headache with no known cause, and sudden dizziness. However, some students were still not recognizing and misunderstanding the knowledge of risk factors and warning signs of stroke. In the lack of knowledge and risk perception in nursing student is strong call for action that contribute to stroke education a priority for nursing student in the colleges under the Praboromarachanok Institute, Ministry of Public Health, Thailand.

Although over 80% of participants recognized the at least one correct stroke risk factor, > 40% could not identified at least one correct stroke risk factor (Table 1). This is encouraging that hypertension, hyperlipidemia, and stress were the three most reported risk factors given risks to stroke burden, and these risks could be modifiable. When compared to study report of Michigan adults, hypertension was listed as higher commonly risk given to stroke burden (91% vs 32%), smoking was reported less commonly in our study, whereas stress and hyperlipidemia were listed in similar frequency (Reeves, Hogan, & Rafferty, 2002). Knowledge of stroke risk factors among nursing student is important due to they would be health professionals who give health service based on their knowledge. Furthermore, nursing student should identify the modifiable risk factor to change individual behaviors for primary prevention of stroke.

The level of knowledge of warning signs was fair in our survey, although > 80% of participants was able to list the weakness of leg or arm or one side of body, and sudden onset of dizziness and vertigo at least one correct warning signs of stroke (Table 2). Even the Thai nursing student demonstrated higher level of knowledge than the study report in Michigan adults at least one warning sign. However, the level of knowledge of other stroke warning signs was inadequate that may have been related to their ability to distinguish signs and symptoms of acute stroke from heart attack. Nursing students may have confusion that results in differences in the recognition of an emergency situation and response to it that is dependable to their knowledge. Knowledge of stroke warning signs among nursing

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student is important in the early detection and referral of patients who have had acute stroke, even this lack of evidence the relationship of the lack of nursing student knowledge and the delay of presentation at the hospitals in acute stroke patients. This is encouraging that nursing college should provide comprehensive education to all nursing students.

Limitations of this study include possible response bias from web-based survey due to the limited chance to discuss the understanding of some questions, and limit to student in the nursing colleges under Praboromarachanok Institute. Those who did not cover and nonresponses by this survey could have different level of knowledge of risk factors and warning signs of stroke.

Conclusion

Our findings indicate the needs of improvement in the awareness regarding stroke risk factors and warning signs in nursing students. The improvement could be board range of educational efforts, e.g., comprehensive stroke education, school and community-based education program.

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Alcohol Product Placement on Television in Thailand [1,2]

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Abstract

Drinking is the major problem among Thai youth and the law to control alcohol advertising in Thailand was more restricted with the appearance of alcohol brand or logo in advertisement. Alcohol Company used product placement to avoid legal regulations on alcohol advertising, One week television programs (1,176 hours) broadcasted in 7 free TV stations in Thailand were content analyzed to determine how alcohol product placement was used. The visual-audio product placement and visual-only product placement of alcohol products was found using logo brand name similar to non alcohol beverage. It was found that advertising of alcohol products were most frequently placed on news program, and followed by the sports and entertainment variety programs.

Keyword: *alcohol product placement; Television product placement;*

I. INTRODUCTION

Drinking alcohol is a big problem and a significant erosion of the social and economic development in all regions of the world. Problem from drinking also affect performance and quality of population in all genders and ages. Although many sectors launch campaign to create awareness and provide education about alcohol consumption and behavioral problems due to alcohol consumption, alcohol consumption statistics of the various groups has not decreased and the trend of the new face drinkers particularly among teenagers, both female and male has increased (Stapitanon, 2008). The National Statistics Survey reported approximately 20% - 40% teens involved in alcohol consumption.

Product placement is a form of marketing that can display pictures or sample of product as part of a movie or television. The owner of a product or products has to pay for the mentioned or shown brand image to appear in a movie or TV show (Wells and others 2007: 298). Previous study of media monitoring project on alcohol advertising reported product placement in 5 patterns: short VCR at the beginning of program, logos at the screen corner, materials at the scene on air, advertise through the act of program moderator, and placement that integrated with program content (Chuasathapanasiri, n.d.). Gupta and Lord (1998: 47-59) identified that product can be placed in three ways visual only, audio only and visual and audio placements. The visual - only placement is a product, brand or indicate something about the product that may be part of the costume props or backdrop which to draw attention by using images only, no text or voice. Audio - Only placement is an implementation of a product or brand to be part of the content used to draw attention by the sounds, such as the mention of the brand or features links to product. The Visual - Audio placement is the way to draw attention by using picture and audio simultaneously, as discussed features of the product or mentioned brand with a product or indication of the goods in the scene.

Law to control alcohol advertising in Thailand was more restricted with the appearance of alcohol brand or logo in advertisement practically enforce strongly to the public media therefore product placement were used as an advertising technique by companies to cleverly promote their products usually through appearances in film, television, or other media. In this case, Alcohol Company will pay a fee to have their alcohol product used, displayed, or significantly featured in a TV program. Thus, content analyzed the TV program could be a concrete evidence to all concerned parties especially among the policy maker and government to appropriately design policy and campaign to counter balance the alcohol advertisements in the country. This research aims to investigate the alcohol product placement in Thai free TV channels.

II. METHOD

Data collecting from one week television programs (1,176 hours) broadcasted in 7 free TV stations in Thailand. Research instrument was Coding Form constructed from reviews of related literature to collect data on day, time, types and theirs characteristics of

product placement, program which carried product placement and its type, type of presentation, and product brand which carried product placement. It was found during the tryout that alcohol product placement used sponsorships and Tie-in format and mostly intermingled with alcohol and non-alcohol product (water or soda) of the same brand therefore in this research the present of a brand name product with the same name of alcohol product were counted as a form of alcohol product placement. Descriptive statistics were used to analyze and describe the data.

III. RESULTS

A. The frequency of appearance of alcohol product placement of on television.

The finding revealed that alcohol product placement on 6 free television stations in Thailand was minimal. Content analyzed of one week (24x7) programs running in all stations reveal that only ThaiPBS Channel was clean of all product placement. The highest percentage of alcohol products placement was found in the programs broadcasted by Channel 3 (27.9 %) followed by channel 7 (24.4%) and the lowest percentage was by channel 11 (11.7%) as seen in Figure 1.
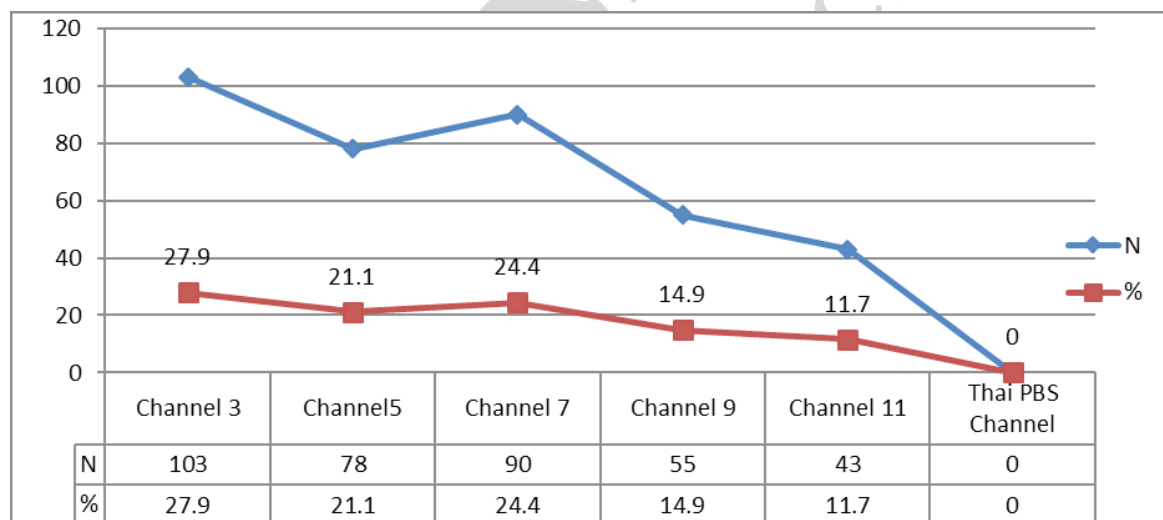
Figure 1

Percentages distribution of alcohol product placement in Thai Free TV stations

B. Broadcasting Time.

Based on analysis of air time slot of the programs that carried alcohol product placement within 24 hours showed that the highest number of product placement presence were found during the night programs between 24.01-01.00 pm. (12.5%), 22:01-23:00 am. (10.3 %), and 01.01-02.00 am. (9.21%). It should be noted that during 12.01-13.00 the considerable percentage of product placement also found (7.59%). Data in Figure 2 showed the detail of percentage distribution of presence of alcohol product placement in television programs.
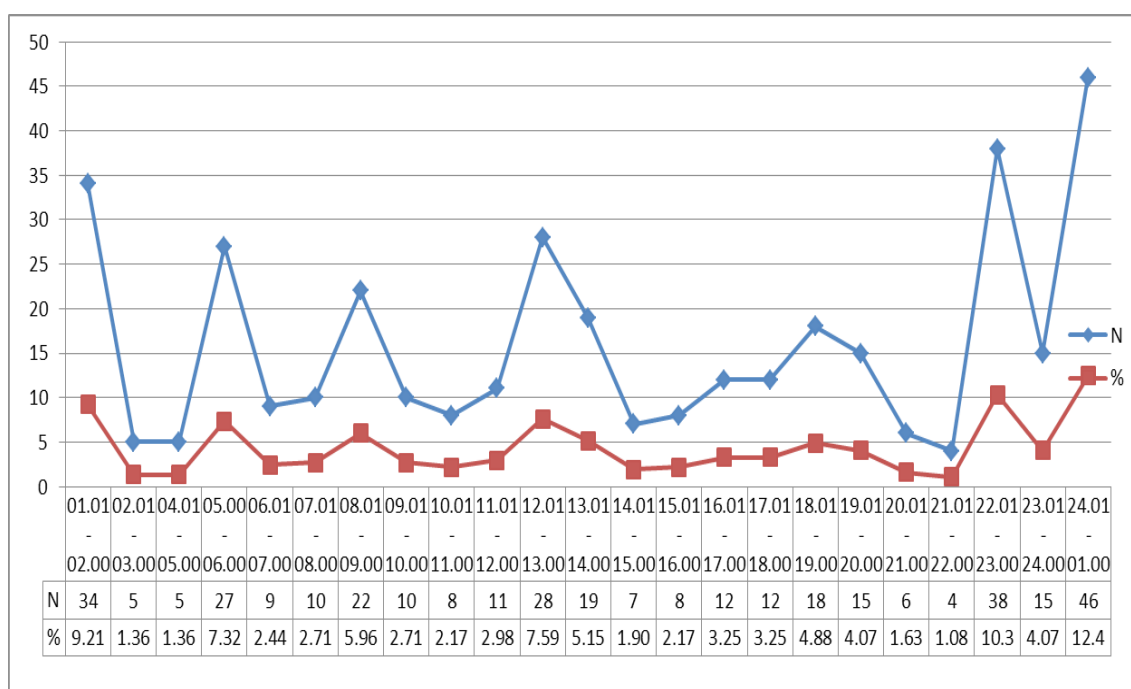
	01.01 - 02.00	02.01 - 03.00	04.01 - 05.00	05.00 - 06.00	06.01 - 07.00	07.01 - 08.00	08.01 - 09.00	09.01 - 10.00	10.01 - 11.00	11.01 - 12.00	12.01 - 13.00	13.01 - 14.00	14.01 - 15.00	15.01 - 16.00	16.01 - 17.00	17.01 - 18.00	18.01 - 19.00	19.01 - 20.00	20.01 - 21.00	21.01 - 22.00	22.01 - 23.00	23.01 - 24.00	24.01 - 01.00
N	34	5	5	27	9	10	22	10	8	11	28	19	7	8	12	12	18	15	6	4	38	15	46
%	9.21	1.36	1.36	7.32	2.44	2.71	5.96	2.71	2.17	2.98	7.59	5.15	1.90	2.17	3.25	3.25	4.88	4.07	1.63	1.08	10.3	4.07	12.4

Figure 2

Distributions of the alcohol product placement in 24 hours' time slot.

C. Type of program that carried alcohol product placement.

Data in Figure 3 showed that overall the alcohol product placement were found in the news and current issues program (51.8%), followed by the sports and entertainment program (17.3%), and contest and competition program had the lowest percentage of product placement in the program (0.27%).

Focus on each station, it was found that the news and current issues in all channel carried alcohol product placement with the highest percentages (between 38.18% - 57.28%) and different distribution. In should be noted that the following program types were clean of alcohol product placement in particular channel; Documentary news and analytics program (Channel 3); Documentary program (Channel 7,9 and 11); Songs and music program (Channel 7, 9 and 11); Drama and sitcom program (Channel 5 and 11); Tourism program (Channel 7 and 9); News talk and talk show program (Channel 3); and Variety program (Channel 3). It should be noted that Sports and entertainment program in every channel also carried alcohol product placement.

	Channel 3	Channel 5	Channel 7	Channel 9	Channel 11	Total
News and current issues	57.28	56.41	48.89	38.18	53.49	51.76
Documentary News and Analytics	11.65	0.00	13.33	3.64	11.63	8.40
Documentary	9.71	1.28	0.00	0.00	0.00	2.98
Songs and Musics	0.00	3.85	0.00	0.00	0.00	0.81
Drama and Sitcom	5.83	0.00	20.00	1.82	0.00	6.78
Contest/Game Competition	0.00	0.00	1.11	0.00	0.00	0.27
Tourism	0.97	3.85	0.00	0.00	11.63	2.44
Sports and Entertainment	9.71	23.08	8.89	36.36	18.60	17.34
Game Show/Quiz Show	2.91	6.41	5.56	9.09	0.00	4.88
News Talks/Talk Show	0.00	2.56	2.22	3.64	4.65	2.17
Variety	1.94	2.56	0.00	7.27	0.00	2.17

Figure 3

Percentage distribution of alcohol product placement by type of programs and channels

D. Format of alcohol product placement and content

The results showed that the highest percentage of alcohol product placement was in the visual only format (86.50%) and very rare on audio only format (0.41%). Display of product logo was the most frequent format used (41.25%). This type of images showed the products or appearance of the product image, the symbol image, slogan or advertising message of any product that uses the same brand name of alcohol product such as sponsor brand name or brand symbol screen on props or clothing. It was found that 24.97% of alcohol product placement displayed supporting message in the form of visual sign in the stadium / golf equipment together with audio captions. It should be noted that audio only format (0.41 %) was found in the form of mentioning product names as a sponsor in the soccer tournaments. Details showed in Figure 4.
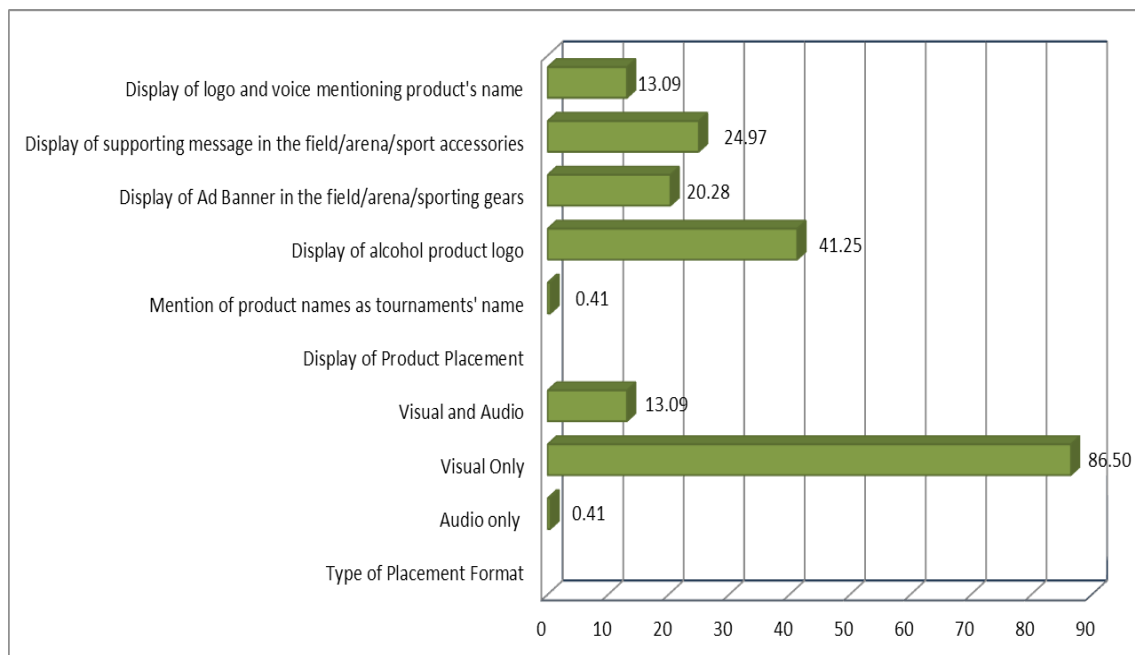
Figure 4

Percentages distribution of type of placement and detail of product placement

E. The position format of alcohol product placement

Findings revealed that most alcohol product placement was shown in blatant placement format (88.2 %) which could be easily of clearly noticed while only 11.8% was placed over the sophisticated placement which was in a softer or more artistic form.

As far as the positioning of the placement is concerned, it was found that the logo placement using visual graphics of logos, or brand names along different parts of TV screen had the highest percentage (47.5%) of placement positioning, followed by person placement through the actors' costumes or activities in the content (17.2%) and only 5.5% was the product placement that was mixed as a part of script or subsumed in program contents. Data in Figure 5 displayed distribution of alcohol product placement position and format.
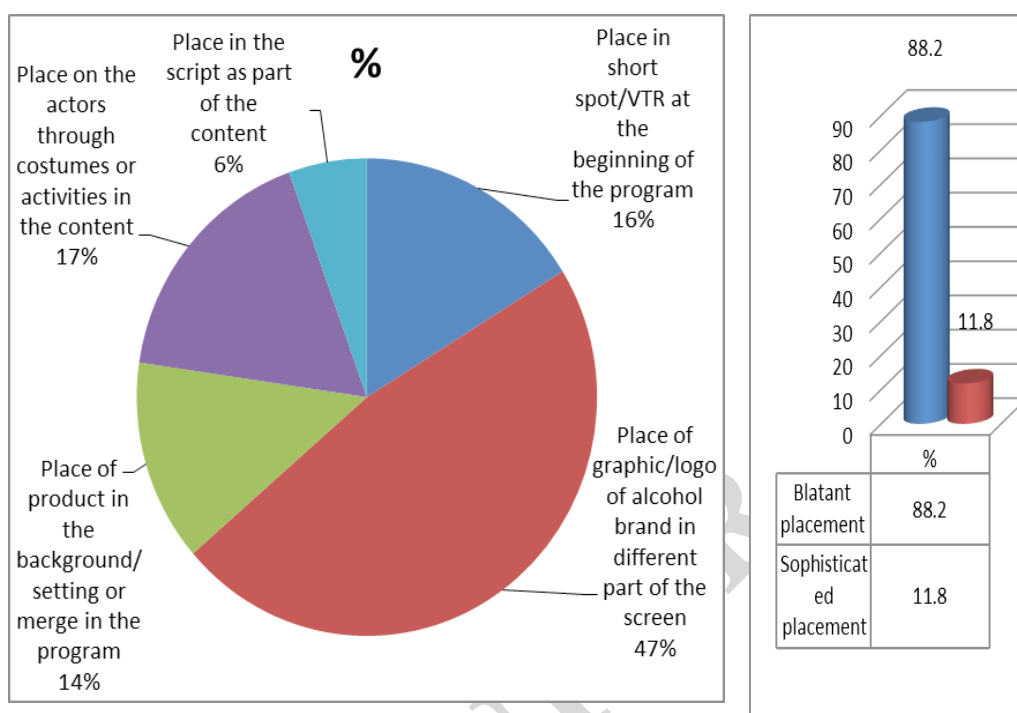
Figure 5

Percentages distribution of alcohol product placement position and format

F. Type and brand of the alcohol product placement.

Considering the type of alcohol product logo brand name used in product placement, it was found that 3 types of logo were used, alcohol, no-alcohol, and corporate logos. It should be noted that 76.15% of non-alcohol product logo was displayed on the screen and alcohol and corporate logos were used at almost even, 12.2% and 11.65% respectively.

Likewise, results showed that there were only 7 alcohol brands that their product placements were traced in the TV program. Chang brand's placement was the most frequently traced, 156 times, followed by a Singha brand's placement, 148 times, and only 1 time of Heineken and Guinness product placement was traced. It should be noted that 100.0% of Regency and 96.2% of Chang brand placements appeared in a non-alcohol logo format. Data in Figure 6 indicated type of logo used by different alcohol brands.
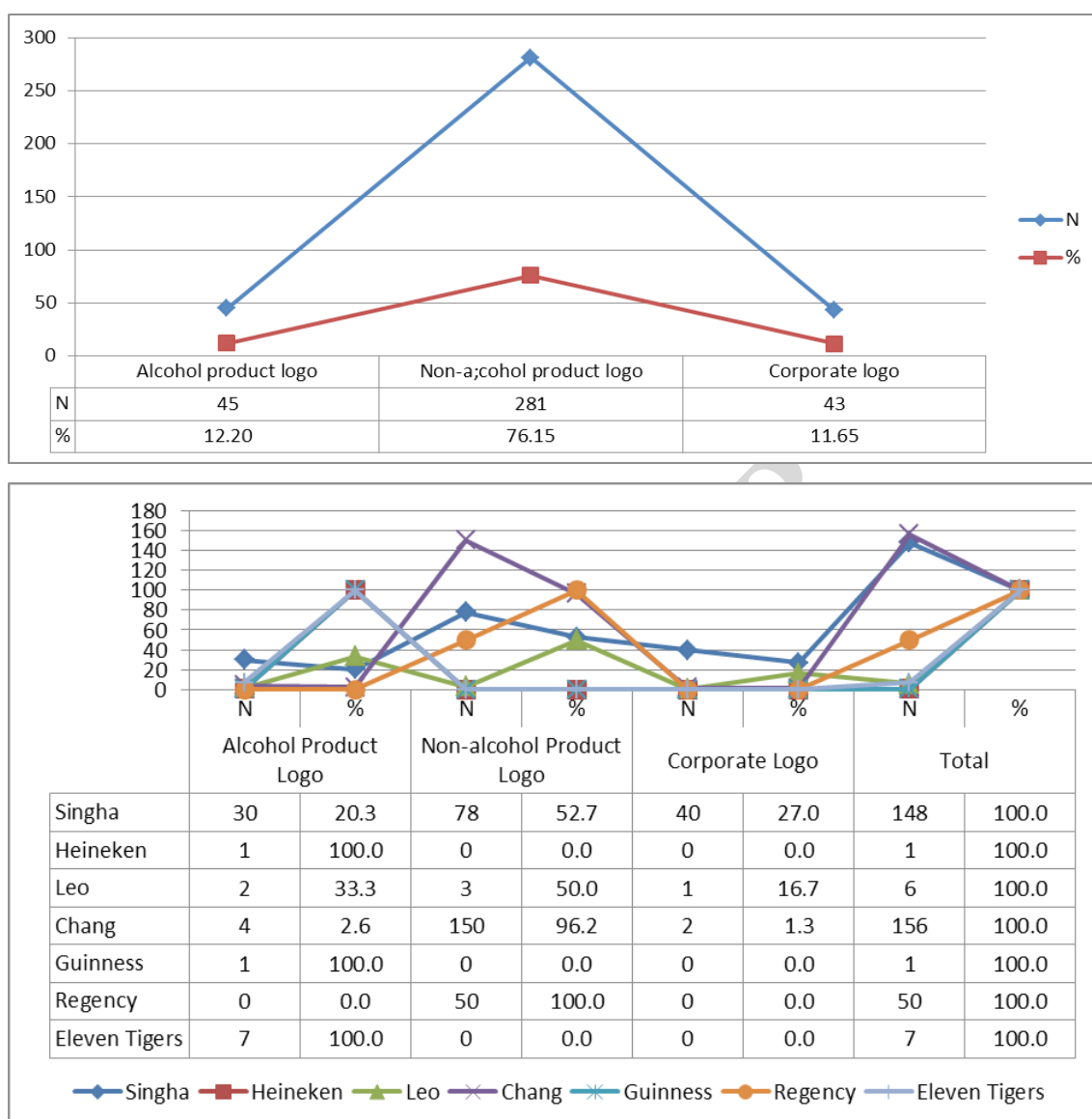
Figure 6

Distributions of type of logo used in product placement by different alcohol brands

Pictures in Diagram 1 compared the different type of logo of the two prominent alcohol brands, Singha by Singha Corporation, Co. Ltd. and Chang by Thai Beverage Public Company Limited ("ThaiBev"). Similar or slightly different in design but different in color format was used by both Singha brand and Chang brand. Singha brand used the same design for alcohol and non-alcohol products and corporate product, whereas Chang brand used different design for corporate logo. However, it should be noted that the colors in corporate logo are green and gold which are the same as color used in alcohol product.

	Singha Brand	**Chang Brand**
Alcohol product logo	SINGHA BEER 1.	Chang BEER
Non-alcohol product logo	น้ำดื่มตราสิงห์ SINGHA DRINKING WATER	Chang DRINKING WATER 1.
Corporate logo	SINGHA CORPORATION Co., Ltd.	ThaiBev

Diagram 1

Design of different product logos of Singha brand and Chang brand

IV. DISCUSSION

The study found that alcohol product brand use advertising technique by combining alcohol brand with other non alcohol brand products logo to create awareness of their alcohol products. The data indicated that two alcohol companies under Singha brand and Chang brand used non-alcohol logo to signify their presence of alcohol product lines.

Chang logos for alcohol and non-alcohol products are similar in design but have different colors. This finding was consistent with the Media Monitor Report of advertising of alcohol monitoring on TV during the 16:00 to 22:00 pm. from November 2006- February 2007. The Report indicated that corporate or products advertising were found 22 times a day, or about 20%, while products advertising including water, soda and alcohol product were found 86 times a day or about 80%. Product placement was found 73 times a day, representing 67%, or about 2 of 3 portions of the total advertising. It was noted that after the Government enforced ban on alcohol advertising, alcohol companies lessened the direct advertising and focus more on indirect advertising and product placement (manager 20 July 2007).

This result show that product placement technique of alcohol product focused attention on the use of image or visual sign of brand, which Gupta and Lord (1998: 47-59) found to be an effective method to realize brand because audience can easily notice. In their experiment it was found that prominent placements elicited higher recall than did advertisements, which, in turn, outperformed subtle placements. The explicit mention of a product in the audio script (without a visual depiction) led to better recall than a subtle visual placement (without audio reinforcement). Andriy (2012) indicated that the use of a Disclose of Persuasive Intent can have demonstrable, if occasionally surprising, impacts on the ways that people understand the placement of risky products such as alcohol and how they feel about this practice. In particular, the study showed that the disclosure facilitated the recall of the placement of risky products, though it had no effect on recognition of the placement of these products. The disclosure also made consumers of risky products more accepting of the placement of risky products than non-consumers of risky products.

In this study, the latent image followed by short spots during entry program which used audio and video presentation could be attractive to the TV audiences. The sound heard and visual sign seen signified the names of the sponsors on that sport tournament which also the brand name of the water product, such as "supported by the X Drinking Water " or "supported by the Y Drinking Water ". This is all in one phenomena for alcohol branding. Similarity of non-alcohol product logo to that of alcohol product logo was a strategy used to abide with alcohol direct advertising ban. Research indicated that the both alcohol company were success in creating alcohol logo awareness among the young audience. Seeing the blue and white logo of Chang and Singha drinking water, they quickly associated them with the companies' alcohol products (Pichedpan 2013). Therefore, non-alcohol product logo was used most in alcohol product placement.

As far as the type of program is concerned, the popularity of the news and current issues and sport and entertainment programs attracted alcohol product placement as the messages can reach larger audiences. The live broadcasting nature of the program gives bigger chances of label of the alcohol product around the sport field/arena inevitably being seen or heard from sport announcer of that program.

In recognition of this strategy being used the Ministry of Tourism and Sports (NaewNa Website 2011) working in collaboration with other bodies such as Department

of Disease Control, Ministry of Public Health. Health Promotion Fund (HPF) , and Youth Development Foundation to raise the campaign " Alcohol-free and non-smoking Stadium ". Awards were presented to the winners of the logo contest for the slogan "Stadium-free of alcohol and smoking". These activities aimed try to increase awareness to alcohol advertising ban and enforcement in regulating the advertisement of alcohol brand advertising in a competitive field. Recently, sales of beer and other alcoholic drinks are prohibited within a 100-metre cordon around the ground - a recognition that sport and drink don't mix happened in Phuket, the tourist destination in southern Thailand (Sidasathian, 2014). The regulation banning alcohol in a 100-metre radius of the Surakul Stadium in Maeluan Road was adopted by the Phuket Provincial Administrative Organization on March 2014. This could inevitably curb the use of banner to send message from alcohol manufacturers indirectly to the TV screen during the live broadcasting or re-run broadcasting of the match.

V. CONCLUSION

Alcohol product placement on television in Thailand is the leeway used to communicate alcohol products to the consumers. Outwardly, it seems that the alcohol companies abide to the law to restrict advertising of alcohol in mass media channel especially on Television. Low percentages to none of alcohol product placement were found during the day. The visual-only product placement uses familiarity of the product logo brand name whether it is alcohol or non-alcohol product logo in visual symbols, product brand name and product image, consumers could find connectivity between the different logo. The product placement through the use of sound is found only minimal as it is difficult in nature to create. Nevertheless, this audio only placement still can be found in the TV program. All this suggested that the alcohol companies put more efforts on creating consumers' familiarity with the brand name and avoid the law by engaging product or brand placement technique in communicating the alcohol product along with the non-alcohol product using the same brand name. Ban on alcohol advertising may not be an effective way to stop the alcohol company from sending direct message to their potential customers, especially among the youngster with low media literacy. There is a will there will be a way to all solution. As technology never stop its advancement, newer strategy with new face of media may come around, an alcohol company will find its way to send persuasive message to potential customers.

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Attitudes toward Elderly of Nursing Students under Praboromarachanok Institute Ministry of Public Health, Thailand[1,2]

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Abstract

Aging population is growing in Thailand that required improvement in gerontological care. Previous studies indicated relationships of attitudes and nursing care quality. This study examined attitude towards elderly of nursing students under Praboromarachanok institute across Thailand. Participants comprised of 3,574 nursing students, year 1-4 from 19 nursing colleges. The online survey was conducted in April – May 2014 using 34 questions.

Findings indicated overall attitude towards elderly of nursing students was at moderate level (mean = 148.45, SD = 15.14). Percentage of students were 55.0% of moderate attitude (mean = 142.27, SD = 10.28) and 44.8% of good attitude (mean = 169.11, SD = 8.93). There were significant different of attitudes among students with different years in nursing program ($F = 9.22$, $p < .01$), clinical practice experience ($t = 5.88$, $p < .01$), community practice experience ($t = 4.53$, $p < .01$), and elderly training experience ($t = 3.82$, $p < .01$). In contrast, there were non significant different of attitude towards elderly among male and female students ($t = .23$, $p = .81$), have and don't have elderly living at home ($t = 1.61$, $p < .11$). This study provides information that can be used in course design and plan for teaching and learning for promoting positive attitude to elderly of nursing students.

Keywords. *Attitude, Elderly, Nursing, Undergraduate, Survey*

Introduction

Aging population is growing in Thailand that account for 14.5% of population (Thai Statistic Office, 2013). Thailand became an aging society according to definition specified by the United Nation which required the elderly proportion of 10% out of total country population. Elderly often face with inevitable illnesses, chronic conditions, and frail that come with aging process. Therefore, country with aging people need to plan and act on the improvement in gerontological care.

Praboromrachanok institute is the largest government sector responsible to produce healthcare personnel especially nurses. There are 28 Nursing Colleges located across country to provide nursing education at undergraduate level. In 2014, the number of enrollments in undergraduate nursing program, 1st to 4th years were 15,733 students. The Praboromarachanok institute produces approximate of 3,000 newly registered nurses to serve country in each year. These newly graduate must have all six qualification according to the Thailand Qualification Framework of undergraduate and specific qualification of undergraduate nurses include nursing skills, service mind, and humanized nursing care. Previous studies indicated relationships of attitudes toward elderly and nursing care quality.

Objectives

To examine attitude towards elderly of students registered in Nursing Colleges under Praboromarachanok institute, Thailand Ministry of Public Health.

Method

This descriptive study was conducted through online survey in April to May 2014. The Institution Review Board was approved from Boromarajonani College of Nursing Saraburi.

Participants

Participants comprised of 3,574 nursing students, year 1-4 enrolled in 19 nursing colleges under Praboromarachanok Institute. They were recruited to participate in online survey through web link placed on their college website.

Instrument

1. **Personal information** was assessed related to gender, years in nursing program, school location, experiences of hospital and community nursing practicum, prefer age of clients to work with, live with elderly at home, frequent contact with elderly, and spend time communication with elderly.

2. **Attitude towards elderly** was assessed using 34 items that ask positive and negative attitudes. Response options were 7-point Likert scale ranged from "1 = Strongly disagree" to "7 = Strongly agree". Total score were 34 – 239 and can be categorized as "poor attitude (mean = 34-102)", "moderate attitude (mean = 103-170)", and "good attitude (mean = 171-238)".

Data analysis

Descriptive statistics was used for data analysis for percentage, mean, and standard deviation of attitude towards old people and personal characteristics.

Results

Participant characteristics

Participants in this study were a total of 3,366 with female (91.1%), years of studying in nursing program raged from 1st year nursing (26.0%), 2nd year nursing (31.1%), 3rd year nursing (24.5%), and 4th year nursing (18.4%). Majority of students had clinical (72.9%) and community practice (78.7%) experiences, and elderly training (61.9%). Proportion of students preferred to work with adult patients was the highest (65.5%) followed by aging (13.9%) and youths (7.5%) as showed in Table 1.

Table 1

Personal and educational characteristics (N = 3,366)

Prefer working age group (years)	n	%
< 12	112	3.3
13-21	142	4.2
22-35	1,567	46.6
36-59	636	18.9
60-79	424	12.6
> 80	43	1.3
Not sure	442	13.1

Attitude towards elderly

The overall attitude towards elderly of nursing students in this study was at moderate level (mean = 148.45, SD = 15.14). When categorized mean score revealed that 55.0% were found to have attitude toward elderly at moderate level (mean = 142.27, SD = 10.28) and 44.8% were at good level (mean = 169.11, SD = 8.93) as showed in Figure 1.
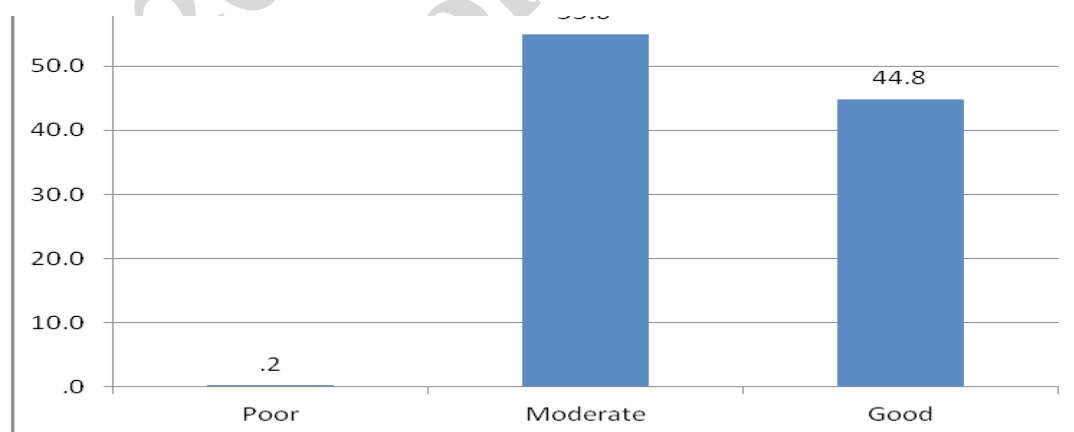
Criteria: poor = 34-102; moderate 103-170; high = 171-238

Figure 1.

Percentage of nursing students according to attitude towards elderly

Attitudes towards elderly according education and gender

Male and female students had similar attitude towards elderly at moderate level. Students in longer years of studying had higher attitude score although all mean scores of 1st to 4th years were at moderate level. Comparisons of attitudes towards elderly according to participant characteristics, found non-significant different attitude among male and female gender ($t = -.23$, $p = .82$) and significant different of attitude among students in 1st to 4th years in nursing program ($F = 23.25$, $p < .01$) as showed in Figure 2.
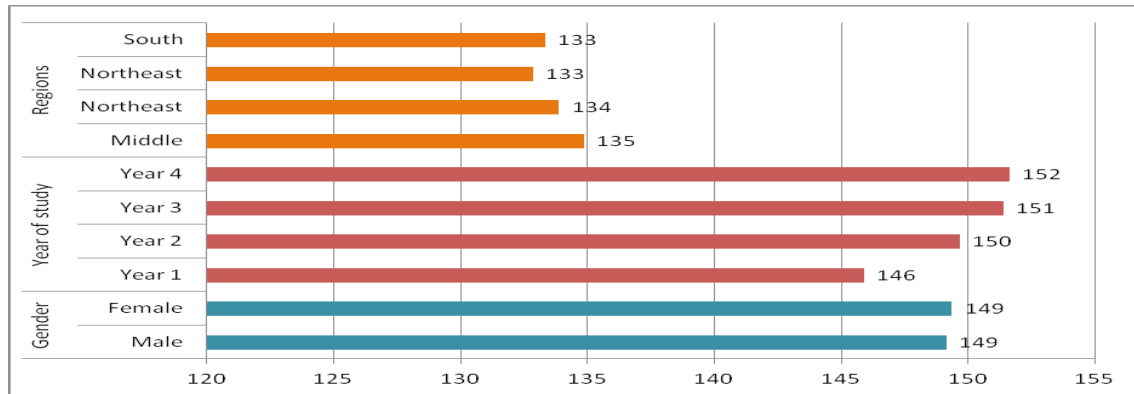
Figure 2
Mean score of attitude towards elderly according
to gender and years in nursing program

Attitudes towards elderly according to nursing practice experiences

There were significant different of attitude towards elderly among students with or without clinical practice experience ($t = 5.88$, $p < .01$), community practice experience ($t = 4.53$, $p < .01$), and elderly training ($t = 3.82$, $p < .01$). In contrast, attitude towards elderly of nursing students who have elderly living at home was not different from students who don't have elderly living at home ($t = 1.61$, $p < .11$) as showed in Table 2.

Table 2

Attitudes towards elderly according to experiences

Characteristics	n	%	mean	SD	Level	t-test
Clinical practice						
Yes	2889	2454	149.3	15.4	moderate	5.88**
No	1105	912	146.2	14.3	moderate	
Community practicum						
Yes	3136	78.7	149.0	15.4	moderate	4.53**
No	855	21.3	146.5	13.9	moderate	
Elderly training						
Yes	2414	61.9	149.21	15.39	moderate	3.82**
No	1577	38.1	147.33	14.69	moderate	
Living with elderly at home						
Yes	2162	55.4	148.8	14.9	moderate	1.61
No	1826	44.6	148.0	15.4	moderate	

**$p < .01$

Criteria: poor = 34-102; moderate 103-170; high = 171-238

Discussion

This study assessed attitude towards elderly among nursing students representative of 29 colleges under Praboromarachanok institute. Finding indicated moderate level of attitudes towards elderly. All mean scores categorized according to participant characteristics were at moderate level. However, there were different of mean score of attitude towards elderly among students with experiences in elderly training, clinical nursing practicum, and community practicum..

Finding of attitude toward elderly at moderate level in this study was similar to previous study in Israel (Topaz & Doron, 2010). Attitudes toward elderly are significant different among students in different year of nursing program, the low attitude among 1st year students was due to lack of knowledge about the elderly (Hweidi & Al-Obeisat, 2006). It also found that interaction with elderly clients improved attitudes toward elderly (Hweidi & Al-Obeisat, 2006; Ekaterini, Panayota, Athena, & Chrysoula, 2009). The increase positive attitudes toward elderly was found after hospital training (Buttner, 2008), rehabilitation care for elderly (Rogan & Wyllie, 2002). There were similar finding that nursing students were more likely to work with adult population (Shen & Xiao, 2011), only 10% of students in current study preferred to work with the elderly.

Conclusion

The overall attitude towards elderly at moderate level found among nursing students in this study indicated the need in course design and plan for teaching and learning of nursing students under Praboromarachanok institute across Thailand. Attitudes and nursing care quality for aging population is a concerning issue that required improvement.

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Relationship Between Eating Behaviors, Body Mass Index, and Blood Pressure: Study Among Hypertensive Older Adults in Saraburi Province, Thailand. [1,2]

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Abstract

Improper eating behaviors increase risk of overweight and uncontrolled blood pressure leading to cardiovascular and kidney disease. This descriptive study investigated prevalence of overweight and uncontrolled blood pressure among hypertensive older adults, and examined relationship between eating behaviors, body mass index (BMI) and blood pressure by analyzing secondary data from the research program on factors affecting blood pressure control among elderly with hypertension conducted in 2011. The samples consisted of 237 hypertensive patients aged sixty years old or more were selected by systematic random sampling from outpatient clinic of Saraburi hospital and the community health center located in Amphor Meoung, Saraburi province, Thailand.

Majority samples were females (79.7%), aged 60-69 years old (54.9%) and elementary education (71.7%). Findings indicated that 38.4 % of the older adults were overweight and obesity. The percentage of the samples who had uncontrolled systolic and diastolic blood pressure were 36.7.0% and 21.9% respectively. Overall mean of eating behavior was at medium proper level (mean =3.72, S.D = 0.48). The improper behavior was eating food that is cooked with sodium additives (the proper mean at lowest level =2.69, S.D.=1.37). Correlational analysis found that BMI and eating behavior were not correlated with blood pressure.

The resulted suggested that 3 factors at risk were at the problematic levels: 1) overweight and obesity, 2) uncontrolled systolic blood pressure, and 3) often eat salty dietary. Nurse and health care provider should encourage their team to strongly campaign to support projects or activities to make the 3 risk factors solvable.

Keywords: eating behaviors, body mass index, hypertension, older adults

Relationship Between Eating Behaviors, Body Mass Index, and Blood Pressure: Study Among Hypertensive Older Adults in Saraburi Province, Thailand.

I. Introduction

Hypertension is a significant risk factor leading to disability and death. It became an increasing common health problem worldwide because of increasing longevity and prevalence of contributing factors such as obesity, physical inactivity and unhealthy diet. [1] High blood pressure is a major health concern in the general population, especially in elderly. According to the 2009 multistage cross-sectional, Fourth National Health Examination Survey (NHES, among 18,629 Thai adults over the age of 20 years, the hypertensive prevalence was 21% and increased with age. [2] The hypertensive prevalence ranged between 16.7 - 47.2% in Thai elderly in the last decade. [3] Survey from 12 health service regions across Thai country in 2013 suggested that the hypertension prevalence is still high, 41% of 14,000 the elderly. [4] In Saraburi province where this study was conducted, hypertension is also one of the most common chronic diseases among older people in Saraburi. It was found that 25 percent of the elderly living in Moueng Saraburi Municipal area faced with hypertension. [5]

The person with higher the blood pressure has greater chance to inflict with myocardial infraction, heart failure, stroke, and kidney disease. Threating systolic blood pressure (SBP) and diastolic blood pressure (DBP) to targets that are less than 140/90 mmHg is associated with a decrease in CVD. Although medical care and improvement in control of hypertension in Thai population is advance, but only 36.6% of people with hypertension had blood pressure less than 140/90 mmHg. [6] In addition, it is observed that the elderly population had lowest rate of blood pressure control.[7] A study of hypertension control among older adults, aged 50 years and over, in low and middle-income countries found only a very small proportion (4.1% to 14.1%) achieved blood pressure control.[8] Therefore, it is needed to explore what are the factors affecting hypertensive controls among the aged population.

Lifestyle modification is recommended as first line treatment for all patients with hypertension, especially in the elderly population. [9] Proper eating is always an important component of blood pressure treatment.[10] A number of studies showed that low salt diet, weight reduction through low calorie consumption and high calorie expenditure are associated with lowering the blood pressure. [11] The elderly persons are more sensitive to salt intake compared with a younger population, leading to higher systolic BP and higher pulse pressure (ie, the difference between systolic BP and diastolic BP) when more salt is consumed by elderly individuals.[12] It was founded that increasing fruit and vegetable consumption alone also caused SBP/DBP to fall by 3/1 mmHg while the added measure of reducing fat intake led to a fall of 6/3 mmHg. In the patients with higher initial blood pressures, there was a fall 11/6 mmHg with the combined diet regime. [13] Therefore, appropriate eating, including, quality and quantities of good nutrients are essential to control blood pressure.

A number of studies have shown that obesity/overweight were associated with hypertension in the elderly. [8],[14],[15] According to cross-sectional study among 257 Tangkhul Naga males of Northeast India[16] indicated that there were significant positive correlations of BMI with both systolic and diastolic BP and BP increased with increase in BMI. Correlation coefficient showed that relationship of BMI with diastolic BP (0.378) was stronger than systolic BP (0.274). However, few data are available on the association between eating behavior, BMI and blood pressure in elderly, particularly in Thailand.

II. Objective

This study aimed to investigate prevalence of overweight and uncontrolled blood pressure among hypertensive older adults, and examined relationship between eating behaviors, body mass index (BMI) and blood pressure.

III. Method

A. Population and design

This descriptive study analyzed secondary data from the cross-sectional research exploring the factors affecting hypertensive control among elderly with hypertension conducted by Krirkgulthorn in 2011. Hypertensive older adults, age 60 year and over, were recruited by using systematic random sampling from name list of outpatient clinic of the tertiary hospital and of primary care center in Mueang Saraburi district. The representative samples were 237 elderly who were willing to cooperate in an interview and physical exam. Inclusion criteria including the ability to communicate with Thai language and no cognitive impairment that diagnosed by score of Thai Mental State Examination (TMSE), more than 23 score from 30 score that come from 6 dimension including orientation, registration, attention, calculation, language and recall.

B. Variables

Dependent variable

Blood pressure was measured in sitting position using sphygmomanometer that was calibrated for accurate measurement. The elderly samples were asked to remain seated and relaxed. BP was measured two times, with 1 minute between each measurement. Mean of two BP were divided in two categories, uncontrolled BP (BP≥140 or ≥90 mmHg) and controlled BP (BP <140 or < 90 mmHg).

Independent variables

BMI was defined as the weight in kilograms divided by the square of the height in meters (kg/m^2). It is commonly used to classify underweight, normal weight, overweight and obesity in adults. In this study, it was classified into 7 categories according to the recommendation by who expert consultation (2004): <18.5 kg/m^2, 18.5-22.9 kg/m^2,23.0-24.9 kg/m^2, 25.0-27.4 kg/m^2, 27.5-29.9 kg/m^2, 30.0-34.9 kg/m^2, and ≥ 35 kg/m^2.

Eating behaviors was another dependent variable that was defined as consuming foods wholly proper or improper for complementing therapeutic regimens for managing

hypertension. It can be measured by scaling on 10 items listed in the eating behaviors questionnaire that was a part of the Self-care Scale for Hypertensive Elderly with Cronbach's alpha 0.81. It asked about how often they eat food that affect with blood pressure control such as salty, high fat and carbohydrate food as well as fruit and vegetable etc. The response to the items is coded on a five-point continuum ranging from not at all (1) to always (5).

C. Data collection

In the field survey of the primary research that we have been permitted for secondary data analysis to answer this research question, data gathering from hypertensive elderly patients was conducted at the outpatient unit of the tertiary hospital and at home in Mueang Saraburi district area by undergraduate nursing students trained specially for the survey during August 2010 to May 2011. Information of demographic, medical history and eating behaviors was obtained from the personal and self-care practices questionnaire interviews. Blood pressure was measure using sphygmomanometer with appropriate arm cuffs after the participants rested 5 minute before measurement in a sitting position according to the standard procedure. Weight and height was measured for BMI calculation. The study protocol was approved by Ethics Committee of Boromarajonani College of Nursing Saraburi, participation was voluntary and all subjects signed an informed consent. The following information was used in this study: (1) demographic characteristics (sex, age, income, education and occupation); (2) eating behaviors (3) blood pressure; and (4) BMI.

D. The statistical analysis

Demographic data, blood pressure and BMI were analyzed using descriptive statistic of mean, standard deviation, and percentage. Pearson's correlation coefficient was used to analyze association between eating behaviors, BMI and blood pressure with the level of significant of 5 %.

IV. Results

A. Characteristics of samples

Majority of the samples in this study were females (79.7%), aged 60-90 years old (mean 69.61 (±7.09), had elementary education (71.7%); married coupled (48.1%) and unemployed (73.4%). Most of them (43.9%) came from low income family with mean of family income was 14,865.2 baht (±17,181.8), of which less than average monthly income per household in Thailand. They have been diagnosed of high blood pressure for 1-45 years with mean 7.9±7.0, ninety seven percent received treatments continuously and nearly half of them had comorbidity. Distribution of demographic characteristic and health by gender are shown in Table 1.

Table 1

Descriptive characteristics of the samples (N = 237)

Characteristics	Male		Female		Total	
	%	(n)	%	(n)	%	(n)
Age (year)						
60-69 Years old	10.3	(24)	44.0	(103)	54.3	(127)
70-79 Years old	9.8	(23)	26.5	(62)	36.3	(85)
80 and over years old	.0	(0)	9.4	(22)	9.4	(22)
min-max,	60-79		60-90		60-90	
mean ±S.D.	69.0±5.4		69.8±7.5		69.6±7.1	
Education						
No school	1.3	(3)	9.7	(23)	11.0	(26)
Elementary school	13.1	(31)	58.6	(139)	71.7	(170)
Secondary school	5.1	(12)	8.0	(19)	13.1	(31)
Vocational school	.0	(0)	.8	(2)	.8	(2)
Higher education	.8	(2)	2.5	(6)	3.4	(8)
Occupation						
Unemployed	13.5	(32)	59.9	(142)	73.4	(174)
Employed	6.8	(16)	19.8	(47)	26.6	(63)
Marital status						
Single	.8	(2)	8.4	(20)	9.3	(22)
Coupled	13.9	(33)	34.2	(81)	48.1	(114)
Widow	1.3	(3)	3.8	(9)	5.1	(12)
Divorce	.4	(1)	1.3	(3)	1.7	(4)
Separate	3.8	(9)	32.1	(76)	35.9	(85)
Family income (THB)						
<10,000	9.8	(13)	34.1	(45)	43.9	(58)
10,000 – 20,000	9.1	(12)	28.8	(38)	37.9	(50)
Over 20,000	5.3	(7)	12.9	(17)	18.2	(24)
min-max	500-100,000		500-100,000		500-100,000	
mean ±S.D.	17,468.8±24224.7		14,032.0±14282.4		14,865.2±17181.8	
Duration of having hypertension (years)						
≥ 5	10.4	(24)	41.6	(96)	51.9	(120)
6-10	5.2	(12)	23.8	(55)	29.0	(67)
11-15	2.6	(6)	6.9	(16)	9.5	(22)
16-20	1.3	(3)	3.9	(9)	5.2	(12)
> 20	0.4	(1)	3.9	(9)	4.3	(10)
min-max,.	1-30		1-45		1-45	
mean ±S.D	7.5±6.2		8.0±7.2		7.9±7.0	
Comorbidity						
Yes	11.0	(26)	37.6	(89)	48.5	(115)
No	9.3	(22)	42.2	(100)	51.5	(122)
Continuity of treatment						
yes	18.6	(44)	78.5	(186)	97.0	(230)
No	1.7	(4)	1.3	(3)	3.0	(7)

B. Prevalence of overweight and uncontrolled blood pressure

The results showed that BMI of the older adults with hypertension ranged from 14.1-39.2 with mean 24.1(S.D.±4.2) that categorized in normal level. Only half (52.7%) of them had normal weight whereas the proportion of overweight and obesity of the samples were 30.4% and 10.1%, respectively. The percentage of the samples who had uncontrolled systolic or diastolic blood pressure were 36.7% and 29.1% respectively. The overall mean of BMI (24.1±4.2), SBP (136.1±14.6) and DBP (78.4±11.0) were at normal level as shown in Table 2.

Table 2

Descriptive blood pressure and BMI of the samples (N = 237)

Blood pressure and BMI	Male %	Male (n)	Female %	Female (n)	Total %	Total (n)
BMI (kg/m^2)						
Underweight (<18.5)	2.1	(5)	4.6	(11)	6.8	(16)
Normal (18.5-24.9)	11.0	(26)	41.8	(99)	52.7	(125)
18.5-22.9	*8.0*	*(19)*	*26.6*	*(63)*	*34.6*	*(82)*
23.0-24.9	*3.0*	*(7)*	*15.2*	*(36)*	*18.1*	*(43)*
Overweight(25.0-29.9)	6.3	(15)	24.1	(57)	30.4	(72)
25.0-27.4	*5.1*	*(12)*	*16.5*	*(39)*	*21.5*	*(51)*
27.5-29.9	*1.3*	*(3)*	*7.6*	*(18)*	*8.9*	*(21)*
Obese (30 and over)	0.8	(2)	9.3	(22)	10.1	(24)
30.0-34.9	*0.8*	*(2)*	*8.0*	*(19)*	*8.9*	*(21)*
≥ 35	*0.0*	*(0)*	*1.3*	*(3)*	*1.3*	*(3)*
min-max	*16.4-33.7*		*14.1-39.2*		*14.1-39.2*	
mean ±S.D.	*23.0±4.1*		*24.4±4.2*		*24.1±4.2*	
Systolic BP (mmHg)						
Controlled BP (<140)	12.2	(29)	51.1	(121)	63.3	(150)
<120	*1.7*	*(4)*	*8.9*	*(21)*	*10.5*	*(25)*
120 -139	*10.5*	*(25)*	*42.2*	*(100)*	*52.7*	*(125)*
Uncontrolled BP (140 and over)	8.0	(19)	28.7	(68)	36.7	(87)
140 -159	*5.9*	*(14)*	*25.7*	*(61)*	*31.6*	*(75)*
160 and over	*2.1*	*(5)*	*3.0*	*(7)*	*5.1*	*(12)*
min-max	*110.0-175.0*		*98.0-199.0*		*98.0-199.0*	
mean ±S.D.	*138.2±14.4*		*135.6±14.7*		*136.1±14.6*	
Diastolic BP						
Controlled BP (<90)	17.7	(42)	60.3	(143)	78.1	(185)
<80	*10.5*	*(25)*	*41.8*	*(99)*	*52.3*	*(124)*
80 -89	*7.2*	*(17)*	*18.6*	*(44)*	*25.7*	*(61)*
Uncontrolled BP (90and over)	2.5	(6)	19.4	(46)	21.9	(52)
90 -99	*2.5*	*(6)*	*18.1*	*(43)*	*20.7*	*(49)*
100 and over	*0.0*	*(0)*	*1.3*	*(3)*	*1.3*	*(3)*
min-max	*66.00-97.00*		*53.0-105.0*		*53.0-105.0*	
mean ±S.D.	*79.2±7.6*		*78.2±11.7*		*78.4±11.0*	

Table 2 (Contd.)

Blood pressure and BMI	Male		Female		Total	
	%	(n)	%	(n)	%	(n)
Both DBP and SBP Control						
Controlled DBP and SBP	11.8	(28)	44.3	(105)	56.1	(133)
SBP ≥ 140,DBP<90	5.9	(14)	16.0	(38)	21.9	(52)
SBP<140, DBP≥ 90	.4	(1)	7.2	(17)	7.6	(18)
SBP/DBP ≥140/90	2.1	(5)	12.2	(29)	14.3	(34)

C. Eating behaviors

Findings of this study indicated that the older adults had proper eating behaviors at moderate level (mean = 3.72, S.D. = 0.48) for controlling blood pressure, the mean ranged from 2.69 to 4.22 for each items. There were three improper eating behaviors that were categorized at poor level. It included eating food that is cooked with sodium additives (the proper mean at lowest level =2.69, S.D.=1.37), eating salty food and adding fish sauce or bean sauce or salt in the food while eating. The eating habit with highest mean score was eating vegetables followed by eating three meals per day (4.11) and eating fruits (4.07). Details are in Table 3.

Table 3

Mean and Standard deviation of eating behaviors of the hypertensive elderly patients

Eating behaviors	mean	SD	Level*
1. Eat three meals per day.	4.11	1.15	moderate
2. Drink at least 8 glasses of water.	4.06	1.12	moderate
3. Eat salty food such as salted fish, salted egg etc.	*3.30*	*1.16*	*poor*
4. Eat fermented food.	3.97	0.95	moderate
5. Eat food that is cooked with sodium additives such as monosodium glutamate, baking soda, and desiccated soup.	2.69	1.37	*poor*
6. *Add fish sauce or bean sauce or salt in the food while eating.*	3.34	1.30	*poor*
7.Use vegetable oil for cooking	3.91	1.16	moderate
8. Eat meat with fat such as pork's leg, chicken fat with rice, pork's fat.	3.54	1.13	moderate
9. Eat vegetables.	4.22	1.03	moderate
10.Eat fruits such as bananas, oranges papayas, etc.	4.07	1.01	moderate
Overall eating behaviors	3.72	0.48	Moderate

*proper eating behavior level; poor ≤3.50, moderate =3.51-4.50 and good ≥4.51,

D. Association between BMI, eating behaviors and blood pressure

Correlational analysis found that BMI and overall eating behavior were not correlated with SBP and DB (Table 4). The Chi-square test also confirmed that DBP and SBP were not related to BMI and eating behavior.(Table5). However, findings from the correlational analysis by eating behavior items indicated that SBP was significant positively associated with drinking at least 8 glasses of water (r=.13 p<.05) .The more drinking of water, the more raising SBP. In addition, DBP was significant positively related to eating three meals per day (r=.16 p<.05), drinking at least 8 glasses of water (r=.19 p<.01), eating fermented food, (r=.23 p<.01), and eating meat with fat (r=.22 p<.05) as shown in Table 4.

Table 4 Correlation between eating behaviors, BMI and Blood pressure

Variables	Correlation coefficient (r)	
	SBP	DBP
BMI	.07	.03
Overall eating behaviors	.04	-.03
1. Eat three meals per day.	.09	.16[*]
2. Drink at least 8 glasses of water.	.13[*]	.19[**]
3. Eat salty food such as salted fish, salted egg etc.	-.04	.05
4. Eat fermented food.	.03	.23[**]
5. Eat food that is cooked with sodium additives such as monosodium glutamate, baking soda, and desiccated soup.	-.01	-.03
6. Add fish sauce or bean sauce or salt in the food while eating.	-.05	.07
7. Use vegetable oil for cooking	-.01	.04
8. Eat meat with fat such as pork's leg, chicken fat with rice, pork's fat.	.07	.22[**]
9. Eat vegetables.	-.02	-.01
10.Eat fruits such as bananas, oranges papayas, etc.	-.02	.01

*. Correlation is significant at the 0.05 level. **. Correlation is significant at the 0.01 level

Table 5

Crosstab of blood pressure and BMI of the samples (N = 237)

BMI (kg/m²)	SBP				DBP			
	Controlled		Uncontrolled		Controlled		Uncontrolled	
	%	(n)	%	(n)	%	(n)	%	(n)
Underweight (<18.5)	6.0	(9)	8.0	(7)	8.1	(15)	1.9	(1)
Normal (18.5-24.9)	56.0	(84)	47.1	(41)	51.4	(95)	57.7	(30)
Overweight (25.0-29.9)	28.0	(42)	34.5	(30)	30.8	(57)	28.8	(15)
Obese (30 and over)	10.0	(15)	10.3	(9)	9.7	(18)	11.5	(6)
Total	100.0	(150)	100.0	(87)	100.0	(237)	100.0	(185)
Chi-square	1.93				2.79			
p-value	0.59				0.43			

V. Discussion

The finding study demonstrated that Thai older adult, who lived in urban, Saraburi province, had uncontrolled systolic (36.7%) and diastolic blood pressure (21.9%) but more than half of them (56.1%) were able to control their blood pressure both SBP and DBP at 140/90 mmHg whereas considerable proportion (43.9%) could not control the blood pressure level. Distribution of the sample revealed that approximately 1/4 of the samples (21.9%) had only high SBP called Isolated systolic hypertension (ISH) followed by 14.3% having high level of both SBP and 7.6% had high level of DBP (Isolated Diastolic hypertension) only.

This finding is normal as at this age they have aging vascular, increasing stiffness and elasticity loss of artery walls, thus resulting in prevalence of ISH. Huang, et al [17] found that Isolated systolic hypertension (ISH) increased with age and may have higher chances to increasing risk for stroke and coronary heart disease; and was more common in older women than in older men. Therefore, it is necessary for elderly to practice proper high blood pressure control by themselves. Health care personnel need to have proactive measures and plan to support high blood pressure control to the elderly group despite the available health care policy in Thailand which emphasize chronic diseases prevention especially hypertension. Although findings revealed that majority of the samples in this study (97.0%) received continuous treatment and care in clinic but the small proportion of those who were able to control their blood pressure level indicated the unsuccessful nursing care. To achieve blood pressure safety, blood pressure level at > 140/90 mmHg must be maintained among hypertension patients; which is lower than control rate used in many countries. Findings from study of Maholtral [18] indicated that nearly two-thirds (64.5%) of treated hypertensive in Singapore had sub optimal control. Moreover, Lloyd-Sherlock [8] in low-and middle-income countries rates of hypertension are strikingly high

and levels of treatment and control are inadequate despite half of those sampled being aware of their condition. Success of blood pressure control in elderly with hypertension depends on both non pharmacologic and pharmacologic treatments. Appropriate dietary and weighing control are also important factors that promote lower blood pressure among the elderly. [8],[9],[10] Although, it was found in this that the older adults had the BMI mean of 24.1 at normal level, however, there was a high proportion of overweight (30.1%) and obesity (10.4%. ; and most of them (34.6%) had BMI category between 18.5 -22 kg/m2, followed by 30.4 % of overweight (25.0-29.9 kg/m2). This rate was similar to the previous health survey among Thai elderly conducted in 2013 [4] where most of the hypertensive elderly (33% were men and 31% were women) were found having BMI in normal level (18.5 -22 kg/m2) and one-third of them had over weight (25.0-29.9 kg/m2).

Comparison of relationship between BMI and blood pressure level data revealed that there are 45.5% of the sample who were over-weighing and almost 40% of them had uncontrolled high blood pressure level. Empirical data suggested that BMI is likely to have significant relationship with blood pressure level, however correlational analysis in this study yield that BMI and overall eating behavior were not correlated with SBP and DB. This incident may result from high percentages of the sample (97%) receiving continuous clinical treatment and 70% of them had routine medication. It was agreed that medication treatment is also an important factor to control blood pressure level although life style modification is also effective in older population, but this was difficult to maintain. It could be possible to say that BMI and dietary may have no effect to blood pressure control as this study was a cross-sectional study and eating behavior was collected using self-report, thus the blood pressure level measured in this study may not directly result from dietary habit or BMI of the samples. On the contrary, Neto who measured level of nutrients of the samples directly after food intake and found relationship between dietary and overweigh BMI. [14]

Gezmen- Karadag [19] indicated that eating high sodium food has relationship with hypertension. However, it was found that BMI had no statistical significance relationship with blood pressure level was inconsistent with the findings of Lloyd-Sherlock [8] which found that being overweight or obese had no consistent effect on blood pressure control among older adults in low and middle-income countries. High BMI was a key determinant of national variations although, as with hypertension, BMI did not correlate with general development indicators at the national level. The reasons for these discrepancies have not been systematically researched and require further analysis.

Although the results of this study showed that the elderly have appropriate eating habits that promote control of blood pressure at moderate level however it was found that overall eating habits had no statistically significant relationship with DBP and SBP blood pressure. It should be noted that eating habit of the samples in this study need appropriate intervention as many had high chance of high sodium intake due to eating salty foods, cooking with MSG, having a habit of adding condiment such as fish sauce or ketchup. Aged taste buds usually occur when people getting older and resulting to decrease ability

to taste salty food and lower appetite. This increases risk to uncontrolled blood pressure.

Moreover, the analysis of the relationship between eating habits, including the amount of daily diet, the volume of water intake, eating fermented foods, and eating lean meats are positively correlated with blood pressure levels. These findings were inconsistent with the study of Weinberger et al [12] which found that the elderly persons are more sensitive to salt intake than a younger population. When more salt is consumed by individuals elderly, higher systolic BP and higher pulse pressure (i.e., the difference between systolic BP and diastolic BP) is likely. Likewise, Masaki [20] found that eating high-fat diet makes overweight which is associated with blood pressure levels.

VI. Conclusion and implication

This study has found that although the elderly with hypertension received ongoing treatment however they remain overweight, obese and could not control their blood pressure in a very high rate. Therefore, it is important that the healthcare providers and other concerned parties should find appropriate/innovative intervention to help curb blood pressure of the elderly at a safe level (Target blood pressure). The elderly with high blood pressure are more likely to get sodium overdose which cause blood pressure to rise, therefore, to care for the elderly with hypertension health care providers should recognize the importance of providing knowledge and strategy to reduce blood pressure to the elderly such as proper diet and eating behavior modification to suit a particular disease, reducing sodium intake, and weight control, etc.

In addition, as it was found that BMI and eating habits had no significant relationship with blood pressure levels which may derive from a limitation of the research design and sample size, therefore further longitudinal study in a bigger sample size is needed to validate the factors effecting hypertension and tracking of dietary habit and monitoring BMI and blood pressure.

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Survey of Cigarette Use and Media Exposure among Thai Adolescent[1,2]

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Abstract

In Thailand, incidents of cigarette use are increased especially among new face. There is an approximate of 200,000 – 300,000 new smokers in each year. This study explored cigarette use behaviors and media exposure of adolescents in Saraburi province, Thailand. Data was collected using self-reported questionnaires in June-July, 2014.

Participants comprised of 362 students, age 11-19 (mean = 15.03, SD = 1.76). They were asked to response to questions related to lifetime smoking, age at first smoked, reason of smoking, current smoking, and intention to smoke in the next year. Frequency and source of media exposure to cigarette advertise were assessed. Finding revealed proportion of students with lifetime smokers for 28.7% (male = 88.5%, female = 11.5%). Average age at first smoking was 12.55 (SD = 3.73) years. The top three reasons of smoking were experiment (19.1%), peer pressure (12.7%), and stress (7.2%). Proportion of current cigarette use among the lifetime smokers was 29.8%. For smoking intention in the next year, 76.2% indicated of will not smoking cigarette in the next year. For media exposure during the past month, 27.3% and 10.5% of students reported of often and very often seeing cigarette advertisement. The frequent media channels used were TV (70.2%), point of purchase (48.9%), billboards (13.3%), bars (12.7%), and radio (8.8%). This study provides basis information and can be useful in evaluation of the current policy on banding underage smoking in Thailand.

Keywords: *Adolescent, smoking, cigarette, media exposure*

Survey of Cigarette Use and Media Exposure among Thai Adolescent

Introduction

In Thailand, an approximate of 200,000 – 300,000 new smokers occurs each year. The National Statistic Office of Thailand reported the 21.4% or 13 million of smokers among total population (National Statistic Office, 2014). Percentage of regular smokers was 18.4 % or 9.9 million whereas 2.9% or 1.6 million were infrequent smokers. Male smoker was 41.7% or 20 times higher compare to 2.1% of female. Trend of smoking among regular smokers was decreased from 2001 - 2009 but increased from 18.1% in 2009 to 18.4% in 2000. The increased was found among male smokers from 35.5% to 36.1%.

Smoking causes diseases and harms body organs. Immediate and long term consequences found among youths is nicotine addiction. Youth are more sensitive to nicotine than adults, the younger age at first smoking cigarettes the more likely they'll be addicted (HHH, 2012). There are reduces lung function, retards lung growth, short of breath, and at risk of chronic obstructive pulmonary disease among young smokers. Tobacco causes cardiovascular damage, and premature deaths among continuous smoking youths (Centers for Disease Control and Prevention, 2014). The mortality rate due to tobacco used was 52,000 cases per year. In addition, second-hand smokers can be found for 68.8% in public, 36% at home, and 30.5% in office.

Smoking among adolescent is a problem of growing concern in Saraburi, a province in central part near Bangkok. Tobacco uses of teens lead to an establishment of the sub-committee to address this issue. The group was in collaboration with parents and families for prevention and finding solution (Public Relation Division Saraburi, 2011). Adolescent is the challenging periods by nature that susceptible to unhealthy behaviors from experiment. Previous studies indicated factors influencing adolescents' decision of start smoking and continue to smoke which comprised of individual characteristics, social characteristics, and exposure to tobacco advertisement (O'Loughlin, Karp, Koulis, Paradis, & DiFranza, 2009; Hanewinkel, Isensee, Sargent, & Morgenstern, 2011). These risk factors common found were stress, smoking by parents, and siblings, peer pressure, and tobacco advertising affect smoking initiation and continue of use among adolescents.

Objective

This study explored cigarette use and media exposure of cigarette advertisement among adolescents in Saraburi province, Thailand.

Method

This descriptive study was conducted using self-reported questionnaires in June-July, 2014. The institution review board was approved from Boromarajonani College of Nursing Saraburi, Thailand. Students were informed of their rights, consent from school principal and parents, and accent from students were obtained prior data collection. Researchers distributed self-reported questionnaire to students in class room during school day.

Participant

Participants comprised of 362 students grade 7-12 randomly selected from 3 public schools in Saraburi province.

Instrument

1. ***Personal Data*** Students were asked to provide information related to age, gender, socio-economic status include family income, daily allowance, daily expense, and family relationship include people lived with, frequency of communication with parents.

2. ***Tobacco Used***. Students were asked to response to questions related to family use of tobacco, lifetime smoking, age at first smoked, reason of smoking, current smoking, and intention to smoke in the next year.

3. ***Media exposure to cigarette advertising***. Students were asked about frequency and source of exposure to tobacco advertisement in daily life during the past 30 days.

Data analysis

Descriptive statistic include mean, standard deviation, and percentage was used to analyze personal data, tobacco use, and exposure to tobacco media.

Results

Participants Characteristics

Students in this study were 74.4% of female, 11-19 years old with mean = 15.03 (SD = 1.76), age 11-15 (58.6%) vs. 16-18 (41.4%). For socio-economic status, 47.0% from low income family, 25.1% from moderate income family, and 17.1% from high income family. Majority of students received daily allowance in the amount of 20-100 baht (73.6%) and spent 10-100 baht per day (86.7%). For family relationship, 73.6% of students were living with parents and 71.7% and 87.5% reported of talking with father and mother every day, respectively.

Table 1

Socio-economic and family relationships (N = 362)

Characteristics	n	%
Income		
Low	168	47.0
Moderate	91	25.1
High	101	17.1
Daily allowance (Baht)*		
20-100	265	73.6
101-200	75	20.5
200-650	20	5.9
Daily expense (Baht)		
10-100	312	86.7
101-200	41	11.4
200-500	7	1.9

Characteristics	n	%
People live with		
Parents	265	73.6
Siblings	15	4.2
Relative	29	8.1
Friend	6	1.7
Alone	45	12.5
Talk with mother		
Every day	315	87.5
Every week	13	3.6
Every month	11	3.1
< once a month	13	3.6
Not at all	8	2.2
Talk with father		
Every day	258	71.7
Every week	40	11.1
Every month	18	5.0
< once a month	26	7.2
Not at all	18	5.0

Tobacco Use

Finding revealed lifetime smokers was 28.7% which comprised of male = 88.5% and female = 11.5%. Average age at first smoking was 12.55 (SD = 3.73) years. The top three reasons of smoking were experiment (19.2%), peer pressure (15.9%), and stress (7.2%). Percentage of current cigarette use was 8.7%. For intention to smoke in the next year, 23.8% of students indicated that they may smoke cigarette as showed in Table 2.

Table 2

Tobacco use and intention to use in next year (N = 362)

Tobacco use	n	%
Family teaching		
No	142	39.4
Yes	218	60.6
Family smoking		
Father	139	38.6
Mother	12	3.3
Siblings	44	12.2
Age at first smoking		
Never	258	72.1
8 to 12	23	6.4
13 to 15	74	20.4
> 16	3	.8

Tobacco use	n	%
Reason of smoking		
Friend acceptance	57	15.9
Experiment	69	19.2
Reduce stress	26	7.2
Good image	7	1.9
Current smoking		
No	327	91.3
Yes	31	8.7
Intention to smoke next year		
Definitely not	276	76.7
May be not	45	12.5
May be smoked	28	7.8
Will definitely smoke	11	3.1

Tobacco M*edia Exposure*

For media exposure during the past month, students report their frequency of seeing tobacco advertisement as showed in Figure 1 were 27.3% of often and 10.5% of very often. Percentage of media channels exposure to cigarette ads from high to low were through TV (70.6%), convenient store (49.2%), poster (16.9%), billboards (13.4%), pub/bars (12.8%), and radio (8.8%).
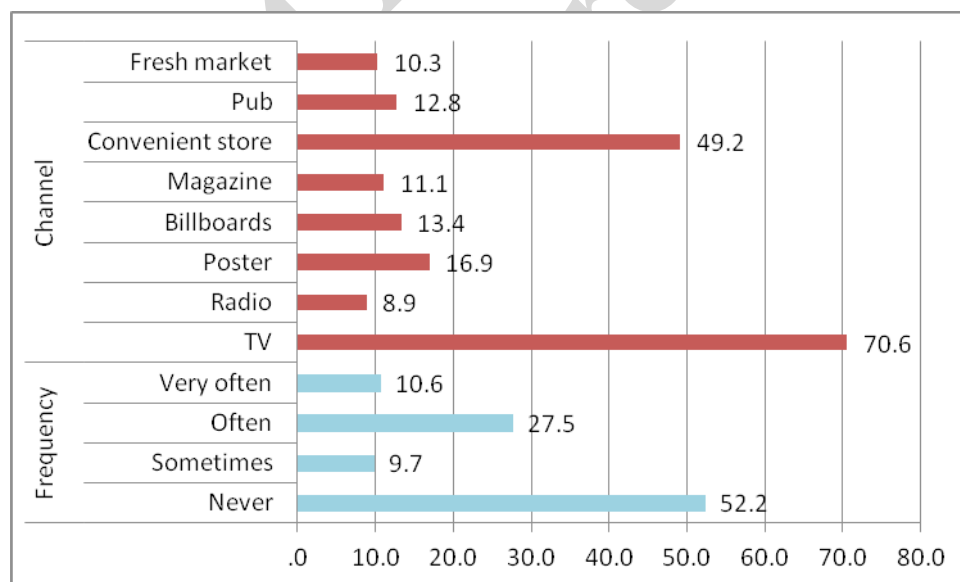
Figure 1 Frequency and channels of exposure to
tobbaco advertise during the past 30 days

Discussion

This study explored cigarette use and media exposure of adolescents in Saraburi province, Thailand. Finding revealed lifetime smokers of 28.7% (male = 88.5%, female = 11.5%). Average age at first smoking was 12.55 (SD = 3.73) years which lower than the 2011 survey in Thailand that found report of 16.2 years (NSO, 2011). The 2o12 national survey in the USA reported of lifetime smoking were 5% by the end of fifth grade (ages 10 to 11), 15.5 % by the end of eighth grade, and 30.1% by the end of tenth grade (US HHH, 2012). Proportion of current cigarette use among lifetime smokers in this study was 29.8%. The top three reasons of smoking were because of want to experiment (19.1%), peer pressure (12.7%), and stress (7.2%). 362 students, age 11-19 (mean = 15.03, SD = 1.76), and 76.2% indicated that will not smoke cigarette in the next year.

For exposure to tobacco advertisements during the past month, 27.3% and 10.5% of students reported that the often and very often seeing cigarette advertisement. The media exposure channels from high to low were TV (70.2%), point of purchase (48.9%), billboards (13.3%), bars (12.7%), and radio (8.8%). This findings was similar to study

Conclusion

This study provides useful information for current problem on cigarette uses among adolescents in Saraburi province. Results reflect the current policy on banding tobacco advertising and prohibit underage smoking in Thailand. The frequent reason of first smoke because of the experimentation with tobacco should be the focus of preventive matures in reducing experimentation and regular tobacco use among teenagers in Thailand.

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Fruit and Vegetable Consumption, Eating Habits, and Intention to Increase Fruit and Vegetable Consumption of Thai Students[1,2]

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Abstract

Significant: Non-communicable diseases is on the rise in Thailand, current surveillance indicate that 75% of Thais consumed fruit and vegetable less than the WHO recommend of 400 gram per day. This daily recommendation is equal to the consumption 3 portions of vegetable and 2 portions of fruit.

Purpose: This study examined fruit and vegetable consumption, eating habits, and attitude towards fruit and vegetable of Thai students.

Sample: Participants in this study are representative of 276 students, grade 7-12 enrolled in the 2014 academic year. These students were randomly selected from each school district in Saraburi province.

Methods: The fruit and vegetable consumption self-reported questionnaires were distributed to students during school day. They were asked to provide answer on consumption behaviors including fast food, soft drink, fruit, and vegetable and attitude towards fruit and vegetable.

Results: Findings indicated that 51.1% and 17.2% of students consumed vegetable and fruit less than the WHO recommendation. In addition, 86.5% reported of drinking soft drink more than once a day during the past month. Only 48.4% did not eat fast food during the past week whereas the rest had fast food 1-6 meals per week. The overall intention to increase fruit and vegetable consumption were at good level.

Suggestion: Health care personnel and educators should integrate teaching and learning activities promote healthy eating of students in school setting.

Keywords: Consumption, students, intention, eating, vegetable

Fruit and Vegetable Consumption, Eating Habits, and Intention to Increase Fruit and Vegetable Consumption of Thai Students

In Thailand, metabolic syndrome and non-communicable diseases are on the rise. Incidents of chronic disease were 6.9% of diabetes, 21.4% of hypertension, 19.1% of high cholesterol, and 21.7% of metabolic syndrome. Obesity can be found among 3 out of 10 males and 4 out of 10 females. Waist circumference is increased with age. Poor nutrition in Thai children has been decreased to fewer than 10% during the past two decades. The 4th National survey conducted in 2009-2010 found the highest prevalence of overweight and obesity among children in the south. At the same time, the underweight and short stature was found the highest in the three southern provinces (Health System Research institute, 2010).

The National Survey indicated increasing trend of 3-meal daily eating of population. Fry food with oil was found more frequent in Bangkok compare to other regions. Snack food was found eating in three quarters of children age older than 6 years and the highest was among age 6-14 (National Statistic Office, 2009). National surveillance on fruit and vegetable consumption among Thai people revealed that 75% of Thai people consumed fruit and vegetable less than 400 gram per day. According to World Health Organization (WHO, 2014), daily recommendation of 5 servings a day of fruit and vegetable consumption include 3 portions of vegetable and 2 portions of fruit. Thai Nutrition Department, Ministry of Public Health recommends 3-5 portions of fruit and 2-3 portions of vegetable for health benefit (Bureau of Nutrition, 2014). Strategic committee to mobilize food network and nutrition towards good quality of life focus on increasing fruit and vegetable consumption provided recommendation on preparation of fruit and vegetable to maintain nutrient and enhance absorption (Mahidol Nutrition Institute, 2012).

Studies supported that daily consumption of fruit and vegetable for 5 servings have benefits on health. Nutrient, vitamin, mineral, chemical, and fiber in fruit and low caloric vegetable can reduce risk of cancer for 50%, heart disease for 30%, and body weight (Bub *et al*, 2003). The modern lifestyle and fast pace living change eating habit of people to less consume nutritious fresh fruit and vegetable but increase in consumption of fruit and vegetable juice. Multi sectors have collaborated in promoting fruit and vegetable consumption including growing own fruit and vegetable for household and adjust the environment such as increase of selling fruit at school cafeteria, and building fruit and vegetable consumption networks.

Purpose

1. To examine fruit, vegetable, soft drink, and fast food consumption among school age adolescent.

2. To examine attitude towards fruit and vegetable consumption of school age adolescents.

Methods

This cross-sectional survey was conducted in the 2014 academic year. The approval for this study was granted by the Research Ethics Committee at Boromrajonni College of Nursing Saraburi, Thailand in 2014.

Sample

Participants are representative of 276 students, grade 7-12. These students were randomly selected from each school district in Saraburi province. Researcher explained study details and obtained permission from school directors, parents, and participants.

Instrument

Two questionnaires were used to collect personal data, assess students' consumption, and opinion/attitude toward fruit and vegetable consumption as below.

1. The self-reported questionnaires of food, fruit, and vegetable consumption were distributed to students. They were asked to provide answer on consumption behaviors including fast food, soft drink, fruit, and vegetable.

2. The attention to increase fruit and vegetable consumption.

Data analysis

Data was analyzed using descriptive statistic and t-test independent.

Results

1. Participant characteristics

Out of 276 participants are 42% males and 58% females, age ranges from 12 -18 years, secondary school and high school for 50% each, low family income 45%, moderate income 22.5%, and high income 33% as showed in Figure 1.
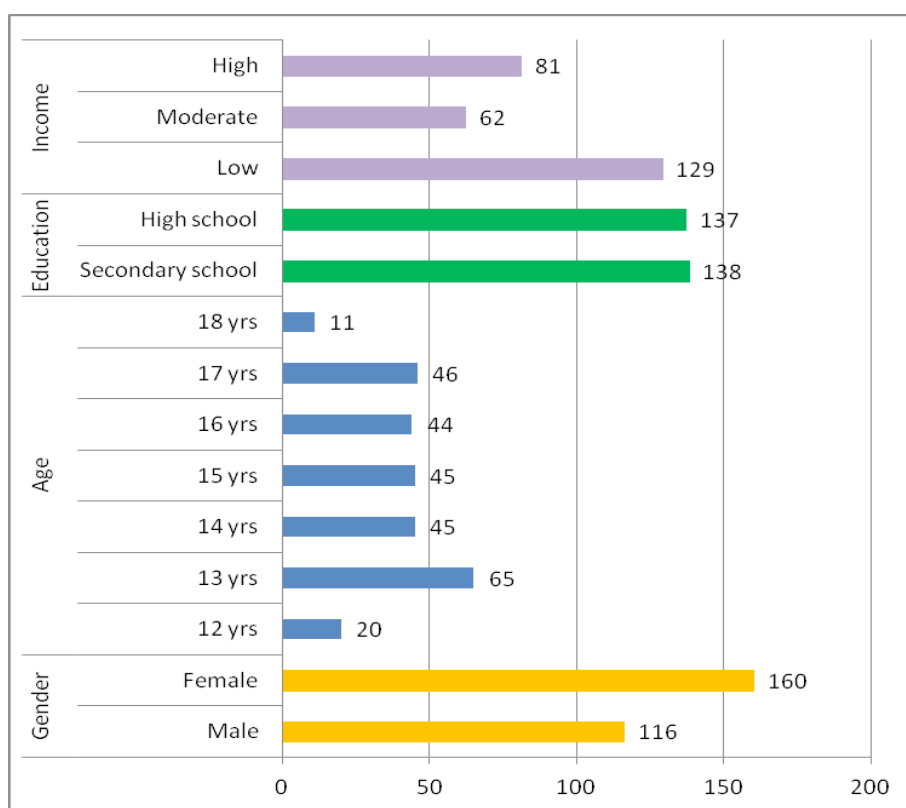
Figure 1

Characteristics of students according to age, gender, education, and family income

2. Consumption Behaviors

For fruit and vegetable consumption, 72.2 % of students reported of eating fruit more than 2 portions/day and 75% of students reported eating vegetable more than 3 portions per day. For drinking soft drink, only 13.5% reported not consume whereas 44.7% stated they had soft drink once a day, 26.2% were drank twice a day. For fast food consumption in past week, 48.4% were not eating at all whereas 32% ate fast food for 1 time in the past week, 5.1% were eating 3 times, and 6.9% ate fast food more than 4 time during last week (Figure 2).
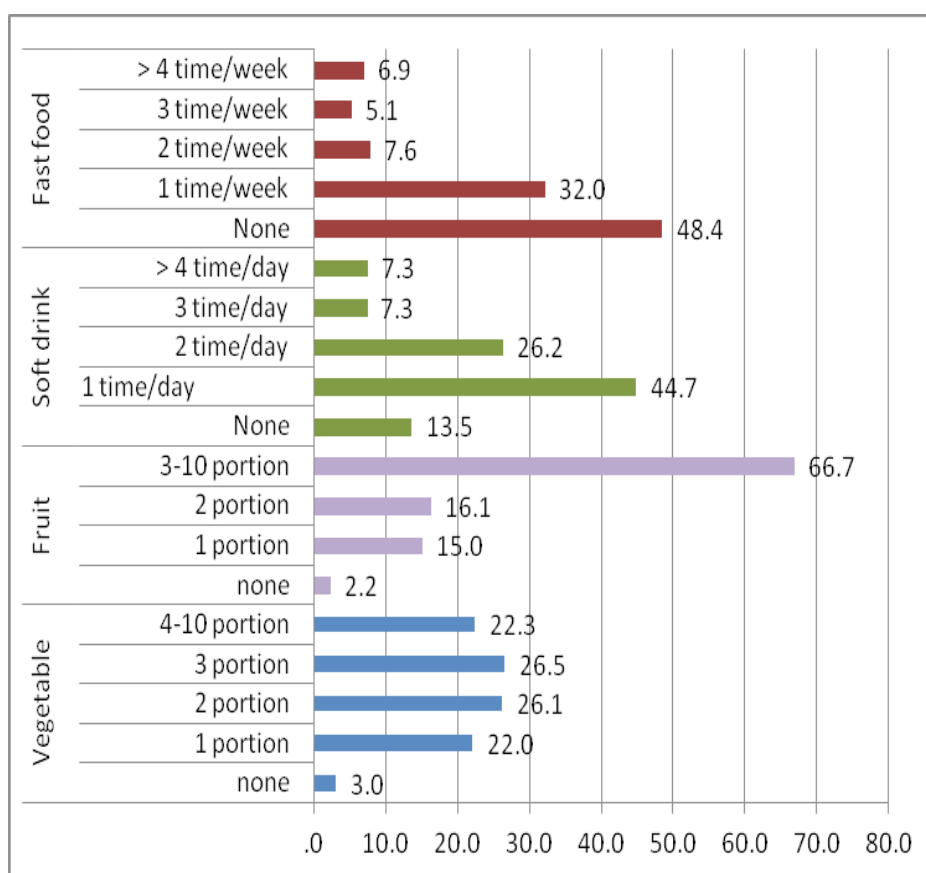
Figure 2
Consumption behaviors among students grade 7-12 (N = 276)

3. Intention to increase fruit and vegetable consumption

Findings in Table 1 revealed similar intention to increase fruit and vegetable consumption. Proportion of 15% and 64.6% of adolescent students reported moderate and strongly agree on intention to increase vegetable consumption. For fruit consumption, 16.4% and 70.1% of students had moderate and strongly agree on intention to increase their vegetable consumption.

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Table 1

Intention to increase fruit and vegetable consumption (N = 276)

Intention	Frequency	Percent
Vegetable consumption		
Strongly disagree	20	20.4
Moderate	41	15.0
Strongly agree	107	64.6
Intention to increase fruit consumption		
Strongly disagree	8	13.1
Moderate	45	16.4
Strongly agree	136	70.1

Discussion

Findings indicated that majority of students had good intention to increase fruit and vegetable consumption. The eating habits of Thai students in this study meet the 5 servings a day recommendation of WHO. In contrast with the 4th National Health Survey of Thai Health Population conducted in 20 provinces found an average of fruit and vegetable consumption of 3 portions which divided to 1.7 portion (Median = 1.4 portion) of vegetable and 1.5 portions (Median = 1 portion) of fruit (Health System Research institute, 2010). Only 23.8% and 28.2% of participants met the recommendation of daily consumption of vegetable and fruit (). The mean consumption of fruit and vegetable that met the requirement of overall population was 17.7%. A study conducted in school found 35.52% of students eating vegetable every meal and 39.44 % of students with daily fruit consumption (Department of Nutrition, 2002).

For soft drink, proportion of students in this current study who consumed soft drink more than once a day was 86.5% which higher than the finding in previous study conducted on students, age 12-18. The daily soft drink consumption was 23.29% and the quantity of drinking was 1 can or 1 cup at a time (Department of Nutrition, 2002). This study found only 48.4% of students did not eat fast food during the past week. A study conducted on 900 students reported that 40.11% of students consumed food 3 meals in each day. Majority eat boiled rice and rice porridge as breakfast. For lunch, students usually eat one dish meal such as noodle soup, fry rice, and rice with curry. Fast food is reserved for special occasion (Department of Nutrition, 2002).

Conclusion

This study can benefit health care personnel and educators, there should be improvement in eating habit through integrate teaching and learning. Students spend most of their time at school, therefore school is an important setting to promote healthy eating, intervention, and nutritional related activities that network with family, community, and healthcare personnel.

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Depression, relationships with parents, and expose to domestic violence of Thai youths[1,2]

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Abstract

Significant: Depression is commonly found among school age children and adolescents. This condition affects psychosocial abilities if left untreated.

Purpose: This study explores levels of depression, relationships with parents, and exposure to domestic violence among Thai students.

Sample: Participants were 362 students across school district in Saraburi province. Data collection was conducted in June 2014 using self-reported questionnaires.

Results: Proportion of male students are 74.4%, age 11-19, mean GPA of 2.85 (SD = .61), lived in two-parent household (63.3%), low income (47%) vs middle income (25.1%). Majority of students had daily communication with mother (87.5%) and father (71.7%).. For exposure to domestic violence among students living in two-parent household was 20.3%. Overall students had low level of depression (mean = 16.75, SD = 9.44) less than the 22 cut point. Proportion of students with depression was 23.1% which 63.4% was older than 15 years. Mean score of adolescent age younger than 14 (mean =15.68, SD =9.94) was non-significant lower than adolescents age 15-19r (mean = 17.50, SD = 9.08), t = 1.79, p = .07).

Suggestion: This study provides information for improvement and further mental health services for teens.

Keywords: Depression, teens, students, domestic violence

Depression, relationships with parents, and expose to domestic violence of Thai youths

Depression is a condition found among 7.1% of Thai school age. The untreated condition will affect growth, development, family and social relations, learning abilities, self-harm, and suicide. The prevalence of depression was children whereas the suicidal rate among adolescents was 13.3% in Thailand. The symptom conditions, signs, and severity of depression depend on developmental stage of each affect child. There is challenge in diagnosis of depressive disorder in children due to limit language in expression of feeling and emotion. Therefore, children and adolescents focus their interests on enjoyable activities to substitute the emotional problem such as smoking, drinking, driving under influence that affects long term health.

Previous study conducted among high school students found relationship between authoritative parenting styles, family income, relationships with parents and friends on depression (Kittitassseranee, Sontirat, & Surinya, 2009). The positive factors of depression were low self-esteem, poor academic performance, poor relationship with parents, low family income (Kaewpornsawan & Tuntasood, 2012). Adolescent is a period of developmental and hormonal change the adjustment to these changes significant impacts gender maturity, thinking process, and self identity. Any problems occur can put teens at risk of depression and long term consequences to adulthood.

Objective

This study aims to explore levels of depression, relationships with parents, and exposure to domestic violence among Thai students.

Sample

Participants were a representative of 362 adolescent students across school districts in Saraburi province. Data collection was conducted in June 2014 using self-reported questionnaires. The Institution Review Board is obtained from Boromarajonani College of Nursing, Saraburi.

Instrument

The questionnaires for data collection are:

1. *The Personal Information* comprised of questions related to age, gender, GPA, family structure, and family income.

2. *The Center for Epidemiologic Studies-Depression Scale (CES-D) Thai version* (Trangkasombat, 2002) was used to evaluate depression in Thai adolescent students. The original questionnaire was developed by the Center for Epidemiologic Studies, United State National Institute of Mental Health. The self-reported questionnaires comprised of 20 items that assess frequency of depression occur in the past week. Response options were "Not at all = 0", "Some time = 1", "Often = 2", and "All the time = 3". Total score above 22 indicate need to referral for further diagnosis and treatment of depression. Psychometric property of the CES-D Thai version reports the reliability of .86, significant

discriminated youths diagnosed with depressive symptom (p < .10), the ROC curve of depression was at 22 with sensitivity 72% and specificity 85% (Trangkasombat, 2002).

3. *Relationships with Parents* was assessed using two questions related to frequency of communication with parents separately between father and mother. Response options were never, less than once a month, monthly, weekly, and daily.

4. *Exposure to domestic violent* was assessed using a question that ask "if you ever see parents hit each other". Response option was "yes" and "no".

Data analysis

Descriptive statistic was used to analyze demographic data, and Analysis of variance (ANOVA) was used to compare mean different of depression among adolescents age 11-14 vs 15-19, male vs female, GPA, Family structure, relationship with parents, and income.

Results

1. Participants characteristics

Proportion of male participants were male 74.4% students, age 11-19 (mean = 15.23, SD = 1.76) with 42.7% of age 11-14 and of 57.3% of age 15-19. Students who lived in two-parent household was 63.3%. For economic status of family were from low income (47%) and middle income (25.1%). Mean GPA was 2.85 (SD = .61) as showed in Figure 1.
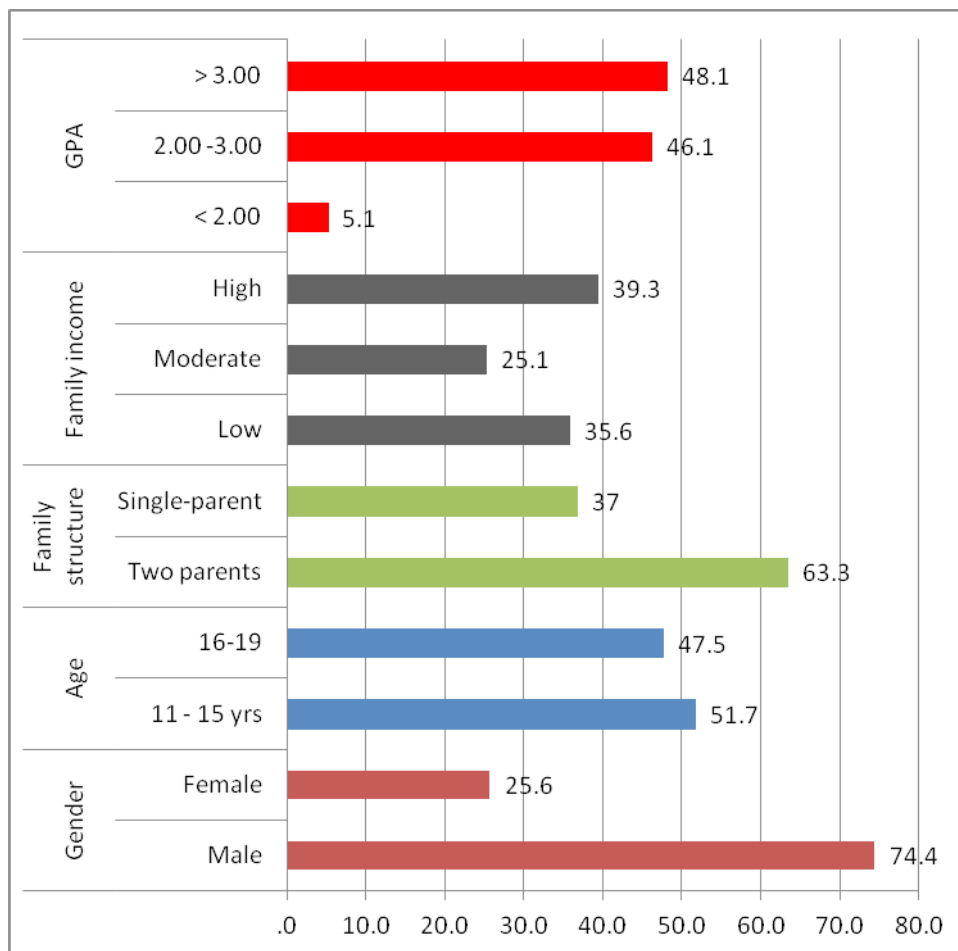
Figure 1

Characteristics of participants

2. Relationship with parents

Majority (79.6%) of students had daily communication with parents. The comparison of communication frequency between mother and father were similar although more daily communication with mother (87.5%) than father (71.7%) as show in Figure 2.
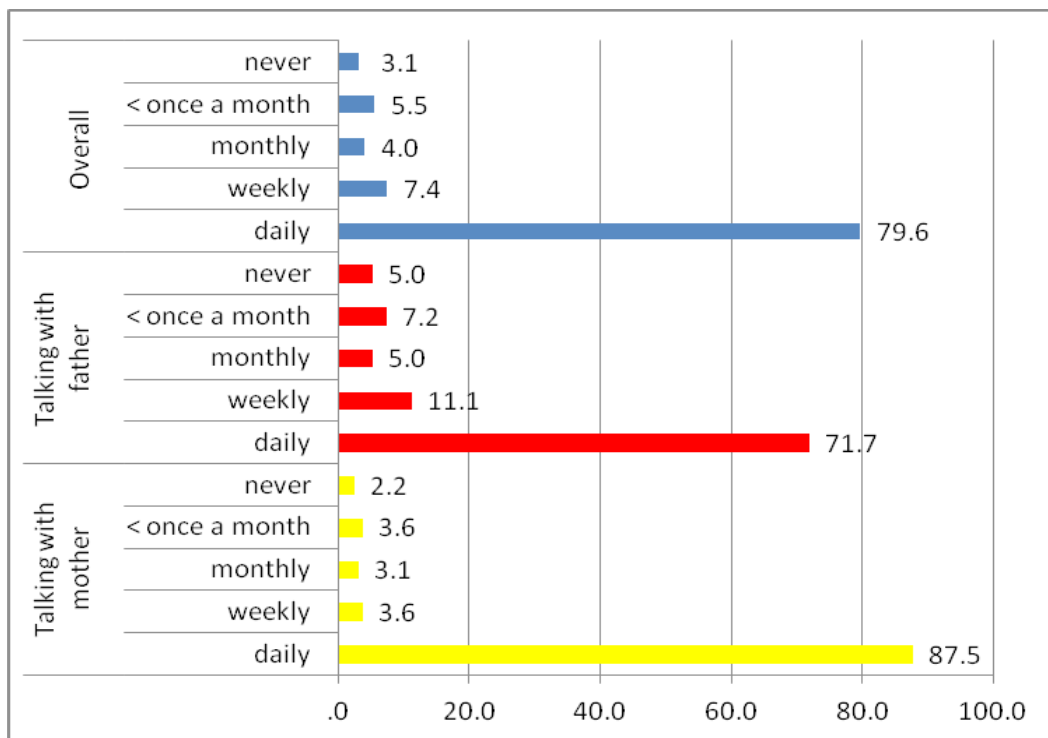
Figure 2

Frequency of teen's communication with mother and father

3. **Exposure to domestic violent**

The self-reported of exposure to domestic violent of students living in two-parent household was 24.8%. Female students (30.4%) were found to report exposure to domestic violent twice than male students (16.8%) as showed in figure 3.

Figure 3 Self-reported of Exposure to Domestic Violent of Adolescents
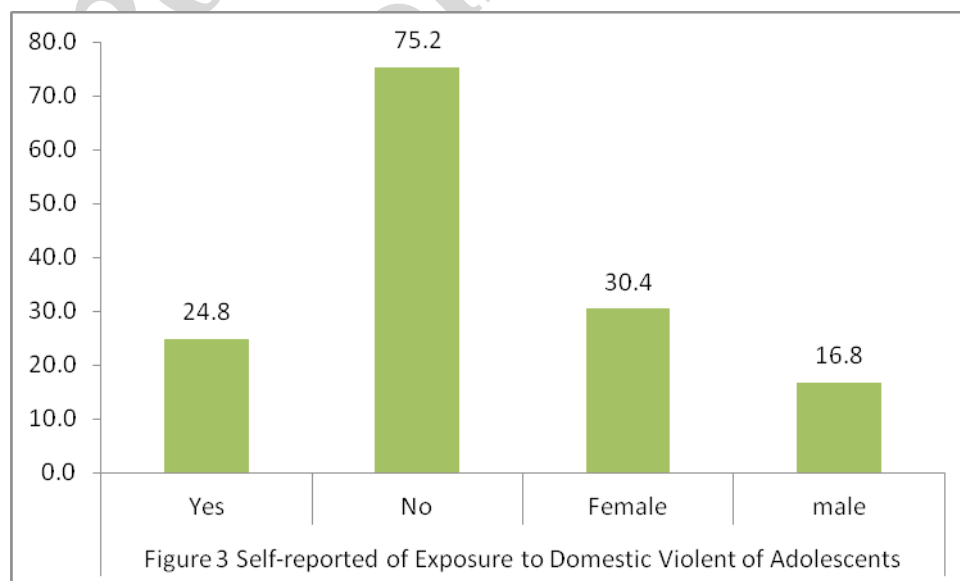
4. Prevalence of Depression among adolescents

Depression mean score of overall students was at low level (mean = 16.75, SD = 9.44) which is less than the 22 cut point. There were 23.1% of students with mean score above 22 which indicate depression. Among this 14.6% was older than 15 years. However, mean score comparisons indicated non-significant different of depression score among adolescent age 11- 15 years (mean =15.68, SD =9.94) and adolescents age 16-19 (mean = 17.50, SD = 9.08), t = 1.79, p = .07.

Discussion

This study explored levels of depression, relationships with parents, and exposure to domestic violence among Thai students. The prevalence of depression found among overall adolescents age 11-19 years in this study was 23.1%.

Prevalence of depression among adolescents age 11-15 years in this study was 8.4% which lower than 11.3% of depression found in 7th grade students at Ubonratchathani province (Leelatrakarnkun, Trangkasombat, 2012). For adolescents age 16-19, the prevalence of depression was 14.3% which is higher than the 3.8% of depression found in previous studies conducted in 1,267 students, grade 10 in Bangkok (Kaewpornsawan & Tuntasood, 2012) and the 17% of depression found among grade 11 students in Nondhaburi province (Kittitassseranee, Sontirat, & Surinya, 2009).

Conclusion

This study suggests that age, relationship with family, academic achievement impacts on mental health. Empowering teens and helping them to function better play major roles in the treatment and prevention of depression in adolescents.

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Opinion Towards Abortion Of Thai Youths[1,2]

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Abstract

Pregnancy in adolescent's year is stigmatized to self and family as failure according to social norms. This study explore teens' attitude towards unwanted pregnancy and abortion in Thailand. Participants are representative of 206 high school students in Saraburi province. Data collection was conducted in June 2014. Students were asked to provide personal information of age, gender, GPA, family structure, income and, experience in sexual relations. They were asked to rate their opinions towards abortion. Response options were 5-point rating scale range ranged from 7-35. Descriptive statistic and analysis of variance were used for data analysis. Majority of respondents were female (68%), age 15-19, GPA = 2.78 (SD = .71), ever have sexual activities for 7.3% with 3 times higher among males than females. Mean score of attitude toward abortion of high school students was at good level indicted antiabortion (mean = 24.17, SD = 3.05). Female students had attitude toward abortion significant better than male students ($t = 11.20$, $p < .001$). Students with GPA < 2.00 were found to have fair attitude toward abortion significant lower than students with GPA 2.00-3.00 and GPA > 3.00 ($F = 7.42$, $p < .001$). There were non-significant different of attitude toward abortion among students with different family structure, income, and sexual experiences. This study benefits to healthcare personnel and educators in planning of education for adolescents at school and healthcare setting.

Keywords: Pregnancy, abortion, prevention, adolescence

Opinion Towards Abortion Of Thai Youths

Pregnancy among teens is a significant problem in Thailand. In 2009, teenage pregnancy rate in Saraburi province was 16.67 % higher than 10% target of World Health Organization (SDHC: Social Development and Human Security, 2009). The surveillance on Thai students found the average age at first intercourse of 12 among males and females. There were 4.2% male and 3% female students engaged in sexual activity. Decreasing age at first intercourse put school age adolescents at risk of unintentional engage in sexual relations. There was a report that early involvement with sexual activity leaded to unplanned pregnancy and abortion in youths age 15-19 (SDHC, 2009).

Adolescent is one of challenging period due to rapid development, and hormonal changes result in sensation seeking, increasing curiosity thus make teenage group vulnerable and risk of unintended pregnancy. Easy access to social media due to high technological advancement opens door for adolescents to communicate and get acquainting and lead to sexuality (Freeman, Rickels, Sondheimer, 1988). Moreover, almost 50% of teens were found report lack of knowledge on pregnancy prevention (Chailangka, 2010).

Pregnancy during teenage years puts adolescents in difficult situation and emotional crisis (Freeman, Rickels, & Sondheimer, 1988). Strong supports and good relationships with friend, school, and family have significant impact on a decision to continue or abort the pregnancy of adolescents (Paranjothy, Broughton, Adappa, Fone, 2009). Moreover, social norm, reproductive health knowledge, life circumstances of teens during pregnancy are factors influence health and well being during pregnancy (Krinara, Yingrengreung, Sudsanguan, 2012).

Teenage pregnancy and related problems affect not only teenage health but also families, society, and country. There is a need to understand attitude, opinion on abortion among adolescents. Finding will benefit the intervention specific to early teens.

Objectives

1. To explore attitudes towards abortion of Thai high school students.

2. To compare attitude towards abortion of students according to gender, family structure, income, GPA, and experiences in sexual relations.

Method

This cross-sectional survey was conducted on representative of high school students in Saraburi province. Data was collected during school day in June 2014. Researcher obtained permission from school directors, parents, and students. The approval for this study was granted in 2014 by the Research Ethics Committee at Boromrajonni College of Nursing Saraburi, Thailand.

Sample

Participants comprised of 206 high school students randomly selected public schools in Saraburi province. The population of high school students enrolled in the 2011 academic year was 8,791 students.

Instrument

Two self-reported questionnaires were used for data collection: the personal data form and the opinions toward abortion.

1. **The Personal Data Form** including questions about age, gender, family income, family structure, grade point average (GPA), and having experience with sexual activity.

2. **The Opinions toward Abortion** comprised of six question items of four negative attitude and two positive attitudes. The negative attitude questions against abortion includes: "Abortion is sinful, immoral, and illegal", "Abortion is selfish and poor responsibility", "Abortion is legal if infected with HIV/ raped", "Should consult parents for pregnancy solutions, whereas the two positive statements signify teens' pro abortion are "Abortion is OK if teen is not ready" and "Abortion if the partner refuse the responsibility". Response options were 5-point rating scale from strongly agree to strongly disagree, score range ranged from 1 to 5. The total score were 6-30. Scoring criteria are categorized to three levels: poor attitude towards abortion or pro abortion (6-13), fair attitude (14-22), and negative attitude towards abortion or against abortion (23-30).

Data analysis

Descriptive statistic including mean, standard deviation, and percentage was used to analyze age, gender. T-test and ANOVA were used to compare attitude toward abortion according to gender, family structure, income, and experience in sexual activity.

Results

1. Participants characteristics

Participants in this study comprised of 68% female vs. 32% of male students, age 15 to 19 (mean = 16.31, SD = 1.02), 68% were from high income family, 70.4% lived in two-parent household, 46.6% had GPA 2.00-3.00, and 36.8% had GPA > 3.00 (Table 1).

Table 1
Students characteristics (N = 206)

Characteristic	n	%
Gender		
Male	66	68.0
Female	140	32.0
Income		
Low	-	-
Moderate	66	32.0
High	140	68.0

Characteristic	n	%
GPA		
< 2.00	27	16.6
2.00 – 3.00	76	46.6
> 3.00	60	36.8
Family structure		
Two-parent household	145	70.4
Single-parent household	61	29.6

2. Sexual relationships experience

Proportion of high school students reported of having sexual activity was 7.3%. When examined according to gender, 9 out of 56 male students (13.6%) were found to engage in sexual relations more than female students (4.3% or 6 out of 134) as showed in Table 2.

Table 2

Self-reported of experiencing sexual relationship among students (N = 206)

Sexual relations	Male		Female		Total	
	n	%	n	%	n	%
Abstinent	56	84.8	134	95.7	190	92.2
Active	9	4.4	6	2.9	15	7.3
Total	65	32.0	140	68.0	205	100.0

3. Attitude toward abortion

Majority of students has negative attitude towards abortion. They expressed their attitude against abortion, 81.1% and 13% of students were strongly agreed and highly agreed that "abortion is sinful, immoral, and illegal." They also slightly disagreed (15.0%) and disagreed (70.4%) with the pro abortion statement that "abortion if the partner refuses to take responsibility with solutions". However, 7.3% and 12.1% of high school teens were highly agreed and strongly agreed in contrast with the 16.5% of moderate, 13.6% slightly, and 50.5% of disagreed that "Abortion is OK if teen is not ready" (Table 3).

Table 3

Attitude toward abortion according to gender, income, GPA, family structure, and experience in sexual activity (N = 206)

Items	n (%)				
	strongly agree	highly agree	moderate agree	slightly disagree	disagree
Abortion is sinful, immoral, and illegal	*167* *(81.1)*	27 (13.1)	9 (4.4)	-	3 (1.5)
Abortion is selfish and show poor responsibility	75 (35.9)	43 (20.9)	54 (26.2)	13 (6.3)	22 (10.7)
Abortion is OK if teen is not ready	25 (12.1)	15 (7.3)	34 (16.5)	28 (13.6)	104 (50.5)
Abortion if the partner refuse the responsibility	9 (4.4)	5 (2.4)	16 (7.8)	31 (15.0)	*145* *(70.4)*
Abortion is legal if infected with HIV/ raped	61 (31.1)	29 (14.1)	40 (19.4)	24 (11.7)	49 (23.8)
Should consult parents for pregnancy solutions	116 (56.3)	60 (29.1)	22 (10.7)	3 (1.5)	5 (2.4)

Comparison of attitude toward abortion

The overall mean score of attitude towards abortion of high school students in this study was at good level (mean = 24.17, SD = 3.05). Score ranged from 14 to 30. Mean score comparisons of attitude toward abortion in Table 4 showed that high school students with GPA < 2.00 had fair attitude toward abortion (mean = 22.41, SD = 3.00) whereas students with GPA 2.00 - 3.00 (mean = 24.39, SD = 2.75) and GPA > 3.00 (mean = 24.87, SD = 2.76) had higher mean score against abortion. Post hoc comparisons revealed significant poorer attitude towards abortion among students with GPA < 2.00 compared to students with GPA = 2.00-3.00 and GPA > 3.00 ($F = 7.42$, $p < .001$).

Attitude toward abortion of female students (mean = 24.65, SD = 2.98) was at good level significant better than fair level of male students (mean = 23.17, SD = 2.99), $t = 11.20$, $p < .001$. However, there were non-significant different of attitude toward abortion among students across family structure, income, and previous experiences with sexual relations.

Table 4

Mean score comparisons of attitude toward abortion (N=206)

Characteristics						95% CI					
	n	Mean	S.D.	S.E.	Level	Lower	Upper	Min	Max	F	Sig.
Sexual relations											
Yes	15	23.73	3.43	.89	Good	21.83	25.63	17.00	29.00	.340	.712
No	190	24.20	3.03	.22	Good	23.77	24.63	14.00	30.00		
Gender											
Male	66	23.17	2.99	.37	Fair	22.43	23.90	17.00	30.00	11.12	.001
Female	140	24.65	2.98	.25	Good	24.15	25.15	14.00	30.00		
GPA[b]											
< 2.00	27	22.41	3.00	.58	Fair	21.22	23.60	17.00	29.00	7.42	.001
2.00-3.00	76	24.39	2.75	.32	Good	23.77	25.02	18.00	30.00		
> 3.00	60	24.87	2.76	.36	Good	24.15	25.58	18.00	30.00		
Income											
Middle	66	24.30	2.97	.37	Good	23.57	25.03	17.00	30.00	.17	.680
High	140	24.11	3.10	.26	Good	23.60	24.63	14.00	30.00		
Family structure											
Two-parent	145	24.03	3.11	.26	Good	23.52	24.54	14.00	30.00	1.03	.310
Single parent	61	24.51	2.91	.37	Good	23.76	25.25	18.00	30.00		
Total	206	24.17	3.05	.21	Good	23.76	24.59	14.00	30.00		

[a] Level of attitude: Poor/pro abortion (mean = 6-13), fair (mean = 14-22), and good/against abortion (mean = 23-30)

[b] Mean attitude score of students with GPA < 2.00 was significant lower than students with GPA 2.00-3.00 and GPA > 3.00

Discussion

Proportion of 4.4% male and 2.9% female high school students engaged with sexual activity in Saraburi was similar to the 4.2% male and 3% female found in Thai students surveillance (SDHS, 2009). The overall mean score attitude towards abortion of high school students was at good level in this study. Students with lower academic achievement had fair attitude toward abortion contrast with the antiabortion among high achievers students.

Attitude toward abortion of female students was against abortion and significant better than the fair level of male students. This study found non-significant different attitude toward abortion among students live with single parent or two-parent family, middle or high income, and with/without sexual relation experiences.

Conclusion

This study benefits to healthcare personnel and educators in planning of education for adolescents at school and healthcare setting. Finding suggests that students with poor academic achievement should be paid attention on anti abortion campaign.

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Using Electronic Document System in Nursing College:
Perceived Benefits and Barriers[1,2]

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Abstract

  Using electronic document system (e-document) to facilitate office documentation system is an important policy to increase organization's performance in Boromarajonani College of Nursing Nakhon Ratchasima. Providing necessary resources to run electronic office and raising awareness of its usefulness would be critical success factors for document management. The purposes of this study were to explore the perception of back office personnel of Boromarajonani College of Nursing, Nakhonrachasima on benefits and barriers to use e-document as a way to support efficiency and effectiveness of working.

  This qualitative case study collected from 12 back office staffs of the college using focus group discussion to determine their perception on benefits and barriers of using e-office management. Data were content analyzed using thematic analysis. Research findings indicated that the office personnel perceived outcomes of using e-document system in both positive and negative issues and identified difficulty of the system utilization that would be suggested for quality improvement.

Keyword: *Electronic document system, Nursing College, Perceived benefits;*
   Perceive barriers

I. Introduction

In response to an e-Government policy, Praboromarajchanok Institute for Health Workforce Development (PIHWD) has developed e-Document System to facilitate electronic inter-office correspondence among organizations under supervision. Launched in 2005, the system aims to facilitate interoperability of correspondence with compliance to the Regulation of the Prime Minister Office on Records Management B.E. 2526 (1983) and the second amendment and additional version B.E.2548 (2005). In 2009, 56% of constituents under jurisdiction of the PIHWD used the system the rest is on adopting process (Pakpien and Denwattana 2009).

Literally, e-Office describes software which is used to capture, manage, store, and control enterprise-wide contents. An e-Office is used to assist in content control associated with business process, and can be used to assure compliance. Similar to other public sectors, the Boromarajonani College of Nursing Nakhon Ratchasima (BCNNM) continues to experience escalating workload, declining staff counts and is forced to do more with less. In response to workload pressures, and on-going expectations of mandate compliance the BCNNM adopted E-document System of Praboromarajchanok Institute for Health Workforce Development (PIHWD) to redesign record management systems and processes of the BCNNM in January 2014, starting with the support staffs group. This prolonged adoption commenced almost a decade after the PIHWD's e-Document system has been launched.

Implementing electronic document used in the BCNNM's effectiveness and continuity, is a new thing for users. Although, some personnel in the back office reportedly used the system in organizing their paper works but just kept to them. An adoption is probably the reason for this case, as always to other case. In particular, support staff, which are key players in the administration documentation must accept and recognize the benefits of adopting a technology. Davis (1989) indicated in that perceived benefit and perceived ease-of-use affect user acceptance of technology. Therefore, acceptance or resistance of e-Document system among the user could either increase or decrease efficiency and effectiveness of administrative works. Thus, empirical data of perceived benefits and barriers of e-Document utilization among the support staffs could be used to formulate best practices and full scale e-Document implementation at college-wide level.

2. Objectives of the Study

1. To study the benefits of E-document in enhancing effectiveness and efficiency of work as perceived by the back-office personnel in Boromarajonani College of Nursing Nakhon Ratchasima.

2. To determine barriers of using e-Document to enhance effectiveness and efficiency of work as perceived by the back-office personnel in Boromarajonani College of Nursing Nakhon Ratchasima.

3. To find recommendations to improve and expand an e-Document utilization at organization-wide level in Boromarajonani College of Nursing Nakhon Ratchasima.

3. Literature Reviews

In recognition that an information and communication and communication technology (ICT) is a potential enabler for national economic and social development and for strengthening competitiveness for Thailand, a high-level policy body chaired by the Prime Minister, National IT Committee, or NITC has been established by the Government of Thailand in 1992. Over the past two decade the NITC has developed policies and plans to promote ICT development and utilization in the country. The first National IT Policy (IT2000) which was announced in February 1996 has provided the framework and guideline for subsequent IT policies and initiatives in the IT2010 (Thuvasethakul and Koanantakool, 2002). On March 19, 2002, the ten-year plan, IT2010, was endorsed by the Cabinet as a policy framework for Thailand ICT development towards the "Knowledge-Based Society and Economy (KBS/KBE)". To achieve the goals, IT 2010 identified five main flagships that have to be developed as follow:

1. e-Society, covering issues such as digital divide, quality-of-life, culture, health, public participation;

2. e-Education, includes issues of life-long learning, computer literacy, human resource development, virtual education, etc.;

3. e-Government, including public service via electronic service delivery, employment, legal infrastructure;

4. e-Commerce, with special focus on 'eservices' including not only finance, tourism and IT services, but also other industries; and

5. e-Industry, focusing on e-manufacturing and IT-related industries, plus issue such as standardization.

In implementing e-Government flagship, the first Thailand e-Government Interoperability Framework – the TH e-GIF - came into being in November 2006 to facilitate government in adapting to the digital era with the introduction of technical policies and specifications for achieving Information and Communication Technology (ICT) systems coherence across the public sector (G2G – Government-to-Government) and between the State and citizens (G2C – Government-to-Citizens) or businesses (G2B – Government-to-Business). It aimed to develop an interoperable system to send/receive official correspondence letters electronically across ministerial departments following the framework. In Thailand, the Government officers use an Electronic Correspondence Letter Management System (e-CMS) to send/receive the letters in their departments (Saekow and Boonmee, 2011). The Thailand's GIF framework was adopted in all governmental sectors under responsibility of the Electronic Government Agency (EGA). In May 2013, an electronic correspondence management system (e-CMS) on the government cloud was launched, in a bid to improve the system's interoperability standard among the government agencies (Kunakornpaiboonsiri, 2013).

The PIHWD's e-Document System, Open Source Documentation Filing Management Software, is developed using work system application open source software License GPL 2.0 for multi group user under coordination with the Information System Engineering Research Laboratory (ISERL), Faculty of Information Science, Burapa University. The current system serves the interoperability of the internal correspondence of the constituents and external correspondence between constituents under jurisdiction of the PIHDW. Advance utilizations and mobile mode are being developed. Distribution of the software and system to organization could not be a one-time total change as the system is not at its full functionality and technological innovation adoption usually not always on a smooth transition. Resistant, reluctant or laggard are common.

The Technology Acceptance Model (TAM) is an information systems theory that models how users come to accept and use a technology. The model suggests that when users are presented with a new technology, a number of factors influence their decision about how and when they will use it with comprise of perceived usefulness (PU) and perceived ease-of-use (PEOU). Fred Davis (1989) defined the PU as "the degree to which a person believes that using a particular system would enhance his or her job performance" and the PEOU as "the degree to which a person believes that using a particular system would be free from effort". The TAM has been continuously studied and expanded by several academes and researchers. The contexts of e-commerce with an inclusion of the effects of trust and perceived risk on system use were later proposed (Venkatesh & Bala 2008). Success and failure of the system rely on the acceptance and usage of the stakeholders.

An electronic document is any electronic media content (other than computer programs or system files) that is intended to be used in either an electronic form or as printed output. As forms and documents are the core of government operations, transformational redesign of government can be accomplished by eliminating paper, and the tasks and costs paper creates, while streamlining and automating traditional processes and workflows to serve constituents faster and better. Document management systems (DMS) are designed from the ground up to assist entire organizations seeking to manage the creation, storage, retrieval and expiry of information stored as documents.

Steve Williams of the ContentManager.eu.com (2014) indicates that benefits of e-Document could be tangible and intangible (or less tangible). Tangible benefits are those things that can be measured in the sense that the benefit can be quantified. These would include the following; reduced storage; flexible retrieval; flexible indexing; improved, faster and more flexible search; controlled and improved document distribution; improved security; disaster recovery; no lost files; digital archiving; improved regulatory compliance; and improved cash flow. Intangible or less tangible benefits are things that it's going to be hard to measure and attribute to the use of a DMS, but are nevertheless known benefits that occur indirectly through the implementation of a DMS. Less 'tangible' benefits include improved internal operations, competitive edge, improved customer service and satisfaction and preserve intellectual capital - organizational knowledge.

Generally, innovation implementation involves problems and barriers from various factors. Mongkolkerd and Chumputirat (2003) found that most users at Faculty of Associated Medical Science, Chiangmai University were satisfied at moderate level using the new information technology in the administrative work and secretary office. The barriers indicated by the users were availability of the hardware, the program software, communication network and personnel. Na Lamphun and Wuwongse (2012) indicated that e-document collaboration increase the effectiveness and efficiency of government operations, however, several difficulties arise when dealing with online document exchange or submission. A significant concern is the differences in technologies, systems, or applications that are used and different versions of the software employed can also cause backward/forward compatibility problems.

Mutchima and others (2012) study behaviors and efficiency of using electronic office system (e-Office) of Suan Dusit Rajabhat University from 332 personnel using open ended questionnaires. The results revealed that most respondents used e-Office every day at 8.01-12.00 o'clock to follow documents. Satisfaction of using e-Office, ability of this system and problems of using it were at moderate. The difference of sex, ages, education, work status and department of personal were not affecting the efficiency of using e-Office.

Teo, Srivastava and Jiang (2009) indicated trust as well as various Web site quality attributes in understanding e-government success. Based on DeLone & McLean Model of IS Trust (D&M Model), survey of 214 Singapore e-government Web site users revealed that trust in e-government Web sites is positively related to information quality, system quality, and service quality. The quality constructs have different effects on "intention to continue" using the Web site and "satisfaction" with the Web site.

4. Methods

This qualitative case study used focus group interview to collect data from 12 key informants who are the support staffs in Boromarajonani College of Nursing. Two focus group interviews were conducted in August 2014. Research variables in this study are perceived benefits and perceived barriers in using the PIHWD's e-Document system.

Perceived benefits are the usefulness of an e-document system currently in use which could be either tangible or intangible as perceived by the key informants which include tangible and intangible benefits. Tangible benefits are those things that can be measured in the sense that the benefit can be quantified. Intangible or less-tangible benefits are things that it's going to be hard to measure and attribute to the use of an e-document system, but are nevertheless known benefits that occur indirectly through the implementation of an e-document system.

Perceived barriers are the problems that the users encounter during deployment of the system which include information infrastructure, correspondence administration and administrative policy.

Seven hours interviews were transcribed verbatim. Thematic analysis was used in data analysis. Data from on-duty observations were also used to enrich discussion and suggestions.

5. Results

1. Key Informants Profile

Key informants comprised of 12 support staffs at Boromarajonani College of Nursing Nakhon Ratchasima. There are 10 females and 2 males, aged between 25-52 years old, only one key informant has master degree the rest are bachelor degree holders, work in the administrative back-office between 2 months to 31 years and have experience in using e-document system between 2 months to 4 four years, respectively.

2. Perceived Benefits of e-Document System

Data analyses reveal that the key informants perceived both tangible and intangible benefits in using e-Document system. As expected, tangible benefits are more clearly perceived. It was found that using e-Document can help control and improve documents distribution, flexible document retrieval, reduce storage, fixing lost files problem and increase document security. In term of intangible benefits, it was found that using e-Document help improve internal operation, preserved intellectual capital or organizational knowledge, improve government correspondence service and increase competitive edge.

2.1 Perceived tangible benefits

2.1.1 Controlled and Improved Document Distribution

Most key informants agreed that using e-document help improve document distribution although it seem to be complicate in the beginning. Imaging makes it easy to share documents electronically with personnel, administrator and lecturers over a network, by email or via the Web in a controlled manner. Paper documents usually require photocopying to be shared. This e-Document provides a cost saving by reducing the overheads associated with paper based document distribution, such as printing and postage and removes the typical delay associated with providing hard copy information. Members of the College can access to details news or important message in details faster than before.

2.1.2 Flexible Retrieval

Retrieving documents stored as hard copies absorbs time. An e-Document System helps create electronic images of documents and stores them centrally. Less time is spent locating the documents as they can be retrieved without leaving a desk and facilitate multi-tasking work to other systems available from the desktop at the same time as retrieving documents. With paper-based workflow, documents are often removed from storage and taken back to the desk and at the same time access other systems (which can lead to loss, prevents others finding the same file, can be viewed by others). Likewise, e-Document system allows simultaneous use of other to access and use the same documents.

2.1.3 Reduced Storage

The cost of commercial property and the need to store documentation for e.g. retrieval, regulatory compliance means that paper based document storage competes with people for space within an organization. Scanning documents and integrating them into a document management system can greatly reduce the amount of prime storage space required by paper. It also allows any documents that still have to be stored as paper to be stored in less expensive locations. Piling of paper documents required by law that all government offices must keep the original for a long period of time before destroying them create storage and space shortage in all office. Imaging or digitizing these document s and store in a DMS server help solve the storage stack and space allocation in an already limit budget and space.

2.1.4 Improved Security

Paper documents stored in a traditional filing cabinet or filing room have security measure; using e-Document System gave the concerned personnel a better, more flexible control over sensitive document through a combination of security control and audit trails equipped in the System. An access to documents is controlled at the folder and/or document level for different groups and individuals is equipped in the e-Document. The possibility of having confidential or secrets material lying around unattended in an office is minimizing as those documents will be safeguarded and only available to the officer who is authorized to use the file in the system. An audit trail of who viewed an item, when or who modified an item and when, which is difficult to maintain with paper based systems is possible using an e-Document system.

2.1.5 No Lost Files

Lost documents can be expensive and time-consuming to replace. Within an e-Document system, imaged documents remain centrally stored when being viewed, so none are lost or misplaced. Although no hundred percent guarantee of human error free in any automation system but the intelligent of the system will provide mean to recover them faster than using manual system.

2. Perceived Intangible or less 'tangible' benefits

2.1 Improved Internal Operations

Although the system is not fully developed and not fully in operation in all department the reduced time to complete processes provided by the tangible benefits, improves the day to day operations of the back office staffs, leading to an improved flow of information, an increased perception of staff in their ability to solve questions and tasks and a general 'feel good' factor.

2.2 Preserve Intellectual Capital - Organizational Knowledge

New or changed documentation are pushed to all personnel and no longer relies on certain personnel. The locality of information is not locked away in the 'heads' of specific individuals and can be easily shared across departments and physical locations increasing the value of that information to the organization. The document system in the BCNNM is available to several authorized officers simultaneously and not monopolized by only certain officer which is a better kick off of an organizational knowledge management.

2.3 Improved document delivery service and satisfaction

Reduced response times, a more professional response, a more accurate response with more controlled processes reduces the time spent on 'manually' ensuring receivers satisfaction and allows staff to allocate resource to other core business activities. The staffs' satisfaction through timelier processing of issues and requests was also improved.

2.4 Competitive Edge

The same information that was previously stored as paper or microfilm, can now be distributed to target recipients electronically. Understanding of the process enable the users to dramatically reduce the time needed to complete these processes and allows overwhelmed staff to focus more energy on the highest valued tasks. The 'reduced time-to-market' effect can be for products, services, support - all of which improves the impression the external recipient has of the organization and provides a competitive edge over competitors. In this case the image of having efficient correspondence can be perceived and will be a competitive benefit of the BCNNM

3. Perceived Barriers of thee-Document System

Although the system has several benefits but it nevertheless encounters several barriers or problems which impair the system operation, physically or technically. Findings revealed the following barriers were perceived in using the e-Document System.

3.1 Information Infrastructure. The first barrier concerns the information networking, hardware deficiency, auxiliary equipment inadequacy, and network maintenance and admins staffs' competency. The number of scanner in use for imaging the document was a serious problem that causes the inefficiency use of the system as there are a lot of document to scan. The network in some spot or building was not properly function which cause the system disruption very often. Although the system can be accessed from anywhere and anytime, most back office staff complained they did not have convenient remote access for some time.

3.2 Correspondence Administration.

This barriers include problems arise from officer-in-charge's competency in using the system. It eithers comes from lacking or inadequate knowledge on rules and regulations of government correspondent protocol and record keeping or lacking comprehension of e-Document system. Personnel are also important problem in implementing the system. It could be from inter-cooperation of officers in different departments, work rotation of personal-in-charge, and turnover of the back office staff. The turnover of the back office staffs came from the low salary, limited fringe benefits and insecurity of this position.

Most staffs in this position are not a permanent officer so they do not received the full benefits similar to what the permanent staffs have received.

3.3 Administrative Policy.

Problems in this area are from the top management officer in an organization. An understanding of the system's benefits and lack of attention to use the system resulted in no-policy to utilize the system. No definite policy to use the system officially in the beginning delays an adoption of the system to the College's correspondence works. A good sense of supporting and encouraging the staffs in order to reach excellent performance and fruitful outcomes could ease and solve the entire problem. Lacks of computer literacy of the administrators also delay the implementation of the system. In some cases, there is policy to use e-Document but no administrator-in-charge was assigned to supervise the implementation which causes the system handicap or inefficiency.

Discussion and Suggestions

As using an e-Document in the BCNNM is at the beginning stage, official policy was effective at the beginning of this year and in particular back office staffs. The system was well adopted despite the misunderstanding, confusion, or deficiency of equipment and network. Although inconvenient or use difficulties were perceived but asking to give weight of satisfaction all key informants gave 7 to 8 scores out of 10 to describe their satisfaction in using the system. The perceived benefits and barriers can be summarized in Diagram below.

Perceived Benefits and Barriers of e-Document System Use in Boromrajonani College of Nursing Nakhon Ratchasima
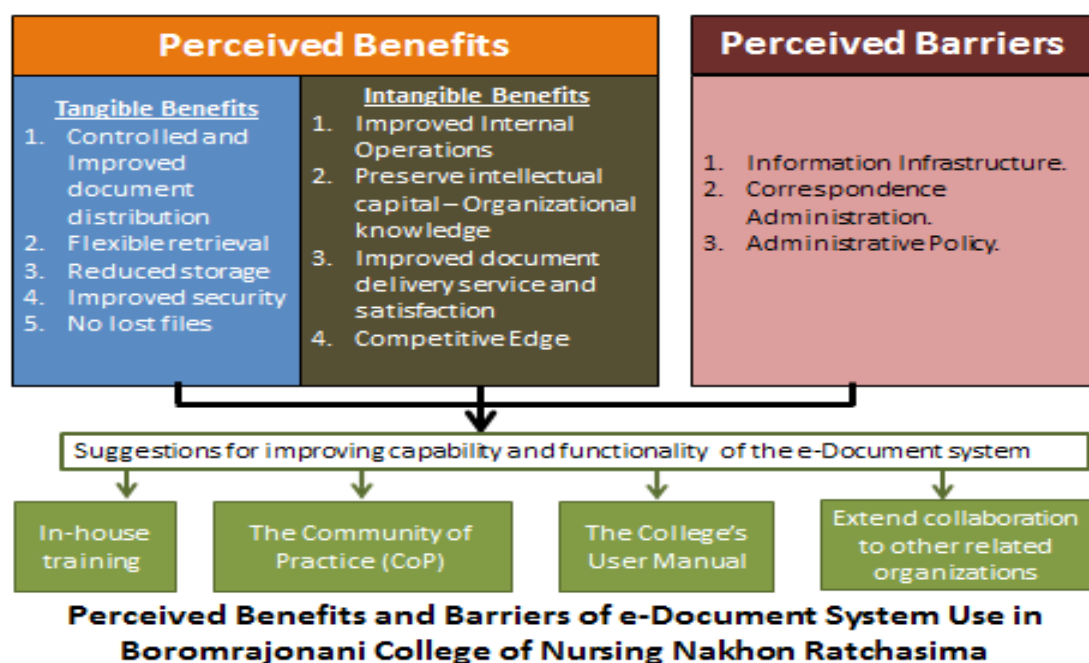
To be able to expand the e-Document System at organization-wide level, suggestions to improve system utilization are as follow.

1. In house-training.

If an organization want to ensure a 'best practices' implementation, the first course of action is to thoroughly understand the College's vision and how technology is intended to help all member achieve it. The full scale e-Document system deployment should address areas where deficiencies or opportunities are the greatest, yet even departmental e-Document deployment demands a holistic, enterprise approach from the start. If the staffs don't consider how documents, information, and automation will (or ultimately could) affect other business units, the College will waste time and resources and miss opportunities for efficiency gains as the System expand across the enterprise. Through in-house training, the staffs will have enough knowledge of the system's technicality to facilitate their innovation adoption.

2. The Community of Practice (CoP)

The Community of Practice (CoP) should be used actively to support the other personnel during the transition after their training. Sharing experiences of difficultly and solutions with other members in the community could increase others' competency in using the system. Knowledge on rules and regulations of government correspondent protocol and record keeping could be the subject of discussion among the members from time to time. The CoP could facilitate relationship and inter-cooperation of officers in different departments.

3. The College's User Manual

The College Manual with specific detail of the correspondence procedure with the BCNNM should be prepared to supplement the manual provided from the PIHWD's system developer. This manual should include workflow automation that route critical work, notify staff of important tasks and digitize paper moving through organization's work processes. The special task force should be formed to analyze the document cycle and classification of documents. This group should have capability in analyzing work assigned, having good knowledge and capable of using information technology and office automation. Workable user manual will enable the users to dramatically reduce the time needed to complete these processes and allows overwhelmed staff to focus more energy on the highest valued tasks. This managerial tool allows administrators to quickly and easily monitor workflows, generate performance reports and respond to constituent needs. This manual serves as an administrator expression of commitment, support and encouragement to the constituents in reaching excellent jobs and fruitful outcomes.

4. Extend collaboration to other related organizations

This e-Document system improves the correspondence between the BCNNM and other organizations under jurisdiction of the Praboromarajchanok Institute for Health Workforce Development (PIHWD). Nevertheless, communicating with other organizations is also important, especially organization in the same province and region.

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Attitudes toward Older People of Nursing, and Public Health Undergraduate Students in Thailand, Indonesia and Myanmar[1,2]

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Abstract

Background: Ageing society is become significant issues worldwide, in particular Southeast Asia. Nursing students, who will be the future health care professionals, requires the competency to care for older people. Providing a good care for older people requires a positive attitude toward elderly. Therefore, attitudes toward older people of undergraduate nursing students in Southeast Asia region should be examined.

Purpose: This study aimed to examine scores of attitudes toward older people among undergraduate students in Thailand, Indonesia and Myanmar.

Methods: Descriptive research: cross-sectional surveying was used in this study. The Cluster sampling were used, therefore, undergraduate nursing students from three countries in southeast asia including Thailand (3,588 students), Indonesia (429 students) and Myanmar (527 students) were recruited to the study. All participants, who agreed freely to take part in this study, answered the questionnaires including personal characteristics and attitudes toward older people. Data were analyzed using frequency, percentages; means, standard deviations.

Results: The result reveals that the attitudes toward older people scores of the undergraduate nursing students from all three countries were at moderate level. Considering the overall scores from each countries, the average score of Thai undergraduate nursing students was the highest (M=4.42, SD=1.42), those from Indonesia was the second rank (M= 4.25, SD=1.49) and those from Myanmar was the lowest (M= 4.17, SD=1.51).

Conclusion and recommendations: Results of this study shows that the nursing students in three countries had a moderate level of attitudes toward elderly. Therefore, this situation may link to a low quality of care for older people in the future. Recommendations for the educational sector are that institutions should provide knowledge, direct and positive experiences about older people both from curricular and extracurricular activities to enhance positive attitudes toward older people.

Keywords: attitudes toward older people, nursing students, elderly, Southeast Asia

Background:

Ageing society is become significant issues worldwide, in particular Southeast Asia. Nursing students, who will be the future health care professionals, requires the competency to care for older people. Providing a good care for older people requires a positive attitude toward elderly. Therefore, attitudes toward older people of undergraduate nursing students in Southeast Asia region should be examined.

Purpose:

There are two main purpose of this study:
1. To examine scores of attitudes toward older people among nursing and public health undergraduate students in Thailand, Indonesia and Myanmar.
2. To compare the difference of attitudes toward older people scores among three countries

Methods:

Design:
Descriptive research: cross-sectional surveying was used in this study.
Sampling:
The Cluster sampling were used, therefore, undergraduate nursing and public health students from three countries in Southeast asia including Thailand (3,588 students), Indonesia (429 students) and Myanmar (527 students) were recruited to the study as detailed below.

In Thailand, all nursing and public health undergraduate students were recruited online from nursing colleges and public health colleges under the Praboromarajchanok Institute of Health Workforce Development Ministry of Public Health.

In Indonesia, all participants were recruited from three institutions across Indonesia in various islands and zones: STIKES Hang Tuah Tanjung Pinang, STIKES Mataram Lombok,All institutions have the memorandum of mutual agreement on research collaboration were obtained.

In Myanmar, all participants were recruited from the University of Nursing Mandalay where memorandum of mutual agreement were signed with Boromarajonani College of Nursing, Nakhonratchasima .

Measurement tools: There were two main questionnaires for this study: personal characteristics and attitudes toward elderly.

First, personal characteristics questionnaires were about age, gender, subject and educational level.

Second, attitudes toward elderly was measured using the the Kogan's Attitude toward Old People (Kogan's OP) which was translated by Rungkawatt (2007). This questionnaires was a self rating questionnaires about 7 levels from 1 equates to strongly disagree to 7 equates to strongly agreed. This questionnaire included 34 items. Scores

ranged from 34-238 scores. Higher score showed the positive attitudes toward elderly. Furthermore, the researcher sat up the criteria to categorize scores in terms of poor level of attitudes (average scores ranged from 34-102, moderate level of attitudes ranged from 103-170 scores and at good level ranged from 171-238 scores.

The reliability of these questionnaires of the first study in Thailand was 0.70 and the second study (Runkawatt, Gustafsson, & Engstrom, 2011) was 0.73.

Data collection:

Three main steps were undertaken:

After the approval on Ethical consideration of this study was obtained from Boromarajonani College of Nursing, Saraburi which is one significant center of this study, the link of online invitation letter which explained about the project in terms of activities, harm and benefit and right of the participants were posted in the nursing or public health colleges' website.

When the proposed participants agreed, they answered the online questionnaires from the link assigned.

However, in some institutions in Indonesia, the internet connection is not available properly. Therefore, the hard copied questionnaires/ paper based questionnaires was used instead. The researchers from each institution organized this data collection.

All participants were able to withdraw from the study when they are uncomfortable or any reasons without any negative impact.

Data Analysis:

Data of this study were analyzed using SPSS in terms of frequency, percentages; means, standard deviations.

Results:

There were two parts of the results:

Personal characteristics:

Most participants were female (75.74%). Considering the detail of genders of nursing students in each country, differences were found that most Thai nursing students which are the biggest group were female (90.51%). However, in Myanmar and Indonesia were found that most of them were male (95.64 % and 59.67%) respectively.
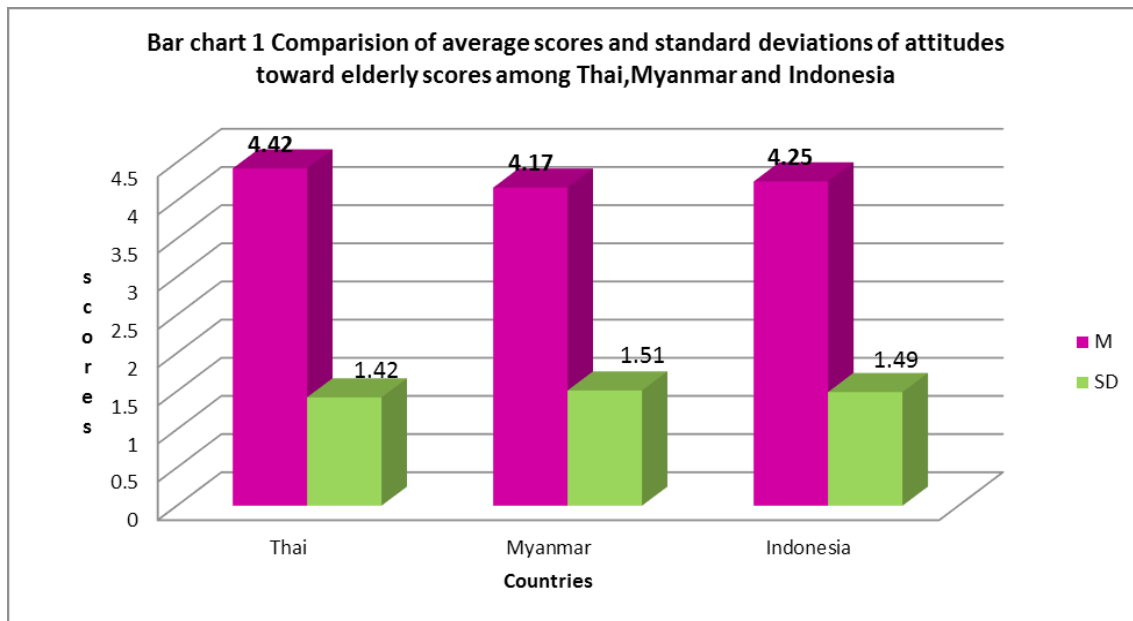
Age of participants were varied and ranged from 18-24 years old. Most participants were 20 years old (30.21%, Mean = 20).

Most participants were the second year students (30.98%). Considering the detail of educational levels, the results showed that most students in Myanmar was the first year students (27.13%) and Indonesia was at the fourth year students (30.61%)

Attitudes toward elderly:

The result reveals that the attitudes toward older people scores of the undergraduate nursing students from all three countries were at moderate level.

Considering the overall scores from each countries, the average score of Thai undergraduate nursing students was the highest (M=4.42, SD=1.42), those from Indonesia was the second rank (M= 4.25, SD=1.49) and those from Myanmar was the lowest (M= 4.17, SD=1.51) as shown in bar Figure1.

Bar chart 1 Comparision of average scores and standard deviations of attitudes toward elderly scores among Thai,Myanmar and Indonesia

Discussion:

Attitudes toward elderly of the nursing students from three countries were at the moderate level. the results also showed the congruent trend to the previous study (Sujinda Muangmee, 2002) which found that university students had the moderate attitudes toward elderly. Even though the result of previous study showed that most students had the higher scores on positive items and only a few aspects such as having conservative ideas and being fussy or grumbling. Contrarary, the results from previous study (Tangchonlatip et. al, 2010) about attitudes toward elderly was at the low level or negative attitudes toward elderly.

Furthermore, some studies also showed the controversial issues, in particular, the study of attitudes of staff in Thanyarak hospital (Kanungrat Leewittaya, 2011) toward elderly. It found that the attitudes of staff and health care providers working at this hospital have a positive attitude toward elderly. It may due to these health care providers are in the center and they can have chance to care for elderly from their experience and these groups may have a chance to be encouraged from the campaigns over there.

Comparing to the studies at the international of attitudes toward elderly levels (Bell et al., 2009) among many subjects of health care providers (Zambrini, Moraru, Hanna, Kalache, & Nuñez, 2008), the results showed that most students can have positive attitudes

toward elderly, except nursing students had a lower score than other subjects which may congruent to this study

Interestingly, the average scores on attitudes toward elderly of Thai students is the highest rank and follow by Indonesia and Myanmar at the lowest rank. Even though staying in the extended families was common among all these three countries, the nursing students should be assumed that they had an opportunity to stay with an older people in family and should have a better score such as the average score. This may due to most Myanmar students were at the first year students, so they may have a limited experiences in caring for older people. The further studies about factors related to attitudes towards elderly which is needed urgently.

Conclusion and recommendations:

Results of this study show that the nursing students in three countries had a moderate level of attitudes toward elderly. Therefore, this situation may link to a low quality of care for older people in the future. Recommendations for the educational sector are that institutions should provide knowledge, direct and positive experiences about older people both from curricular and extracurricular activities to enhance positive attitudes toward older people.

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Perceived Health Status and Health Promoting Behaviors of Local Handloom Fabric Weavers in central Thailand Villages[1,2]

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Abstract

This descriptive research investigated the health status and health promoting behaviors of local hand-woven fabric makers in urban community in Saraburi province in central Thailand. Participants were 52 handloom weavers who were convenience sampled into the study. Data collection was conducted in 2011. Based on the health promotion model of Pender, health promoting behaviors including health promoting lifestyle responsibility, exercise, nutrition, interpersonal relations, spiritual growth, and stress management were measured. Descriptive statistics was used for data analysis of the frequency, mean, and percentage. Findings revealed the weavers had 8 – 15 years of weaving experience. The most common health problems were joint and muscle pain. The average scores of overall health status with a mean of 3.25 (SD = 0.32) and each dimension of the health promoting behaviors : health promoting lifestyle responsibility (mean = 3.00, S.D. = 0.45), interpersonal relations (mean = 3.57 , S.D. = 0.41), exercise (mean = 3.05 , S.D. = 0.64), nutrition (mean = 3.29 , S.D. = 0.33) spiritual growth (mean = 3.50 , S.D. = 0.42) and, stress management (mean = 3.09 , S.D. = 0.45) showed a good level of health. Findings indicated the need for health promotion programs aimed at preventing further health problems related weavers spending long periods in sitting positions.

Keywords: Health status, fabric-woven, villagers, health behavior, health promotion

Introduction

   Thai traditional fabric weaving is an inherited cultural art where weavers learn local fabric-making techniques from their ancestors. In the past the fabric was made for family use, and hand-loom weaving was a family activity in almost every household throughout Thailand. Hand-woven fabric is noted for its distinct patterns and textures which vary depending on who made it. Its uniqueness represents the fabric weaver's cultures and customs.   Nowadays, hand-weaving is increasingly done to provide a living, or as a supplemental source of household income, instead of for family use or for displaying cultural art.(Aujana Somthong, 2001)

   "Pah Pheun Meang Sao Hai", local fabric weaving from *Sao Hai* city in the central region of Thailand, is a hand craft among the Thai Yaun people that has been inherited from generation to generation. To help generate household income, some female villagers created a weaving group in their village so they could make more local fabric for sale as their "tambon", or "sub-district" in English, product under the "One Tambon One Product" (OTOP) project. The OTOP project is supported by the government as a way to help the villagers by marketing the locally produced OTOP products across the country. (Pinet Noyputhra, 2011; Saraburi Provincial Culture Office ,2003 & Vichai Sumneakpun, 2008)   When the local fabric market is expanding and the amount of product needed is increasing the weavers have to work harder and for longer periods of time. Doing so may have an effect on their life style and may cause some health problems for them, like any other occupation. Handloom-weaving related health problems have been reported. They included peptic ulcers as a result of missing meal times, physical fatigue due to a lack of exercise and insufficient sleeping time due to long periods of continuous work leading to adverse effects on their physical and psychological health, as well as their family relationships and family warmth. Moreover, weavers weave in a seated or standing position for long periods causing muscular-skeletal injuries including joint pain and muscular strains and fatigue. Shoulders are involved in repetitive movements without any breaks when throwing the shuttle and moving the reed frames in the weaving process. This repetitive movement increases the risk of neck, upper arm, and shoulder musculoskeletal problems from operating the heavy reed frames continuously without taking adequate breaks for rest. The body part strains that most frequently reported were lower back, knee, shoulder, thigh, and upper back strains. On top of that, some weavers drink insufficient water and frequently delay voiding because weaving requires them to work continuously in seated positions for long periods, and that caused the weavers to experience urinary tract problems. The most common urinary tract problem found was cystitis. In addition to these health problems and injuries, some local fabric weavers experienced headaches, dizziness, and eye pain or eye strain.(Decha Tamdee and Darunee Thayati,2007)

   These health problems or injuries can be considered the result of unhealthy behavior. Based on the World Health Organization's (WHO) definition, health is a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity. To pursue and maintain health, people must adopt appropriate health promoting behaviors. Pender (1996) described health promoting behaviors as personal actions that each person does on a daily basis. Health promoting behaviors are comprised of six dimensions including: 1) health promoting lifestyle responsibility, 2) interpersonal relations, 3) exercise, 4) nutrition, 5) spiritual growth, and 6) stress management. The model believes that when a person adopts health promoting behaviors and engages in them regularly until they

become their routine, it should result in improved health, enhanced functional ability, and better quality of life at all stages of development. On the other hand, if a person has unhealthy behaviors, they would possibly be at risk for developing disease or health problems.

The researchers, as health care professionals, were interested in better understanding the life style, health status, perceived health status, and health promoting behaviors among local Sao Hai handloom fabric weavers living in Thai Yuan villages in the Ta Chang and Ton-Tan sub-districts of Sao Hai district, Saraburi province, in central Thailand. It was expected that the findings of this study would provide basic knowledge to facilitate further study and the development of health promoting interventions based on the circumstances of the weavers' life styles, health statuses, and the weaving process to help preserve this valuable occupation for the community.

Methods

This descriptive research study was undertaken to study the health status, perceived health status, and health promoting behaviors among local fabric weavers living in Saraburi province, Thailand, to examine the factors affecting their health status and health promoting behaviors and to discover their health care needs in relation to hand-weaving.

Population and samples

The study populations were: 1) handloom weavers and who were members of the Ta Chang or Ton Tan sub-district weaving groups in Sao Hai district, Saraburi province and 2) health care professionals, village health volunteers, and key village health care persons residing in the Ta Chang or Ton Tan sub-districts of Sao Hai district, Saraburi province.

Samples: The sample was a convenience sample. Inclusion criteria were individuals who were 1) fully conscious and cooperative, 2) fluent in spoken Thai and able to understand written materials, 3) weaving either for a living or for a second source of income at the community weaving center or their home, and 4) voluntarily participating in the study.

The sample in this study included 52 handloom weavers and 20 health care professionals, village health volunteers, and key village healthcare persons who met the inclusion criteria.

Instruments

Four instruments were used to obtain the data. They included

1. Personal characteristics questionnaire developed by the researchers.

2. Health promoting behavior questionnaire developed by the researchers based on Pender's health promotion model (Pender, 1996 ; Wipaporn Sitthisat & Suchada Saunnum , 2007). The instrument was a 65-item rating scale measuring the frequency of self-reported health behaviors on six subscales, 1) health promoting lifestyle responsibility,

2) interpersonal relations, 3) exercise, 4) nutrition, 5) spiritual growth, and 6) stress management. The responses were recorded as never, sometimes, often or routinely. The health promoting behavior questionnaire has undergone testing for content and construct validity by three experts. Acceptable evidence of validity was indicated by a Cronbach's Alpha coefficient of .85 for the whole scale and that of .61, .81, .84, .50, .82 and .70 for the subscales: health promoting lifestyle responsibility, interpersonal relations, exercise, nutrition, spiritual growth, and stress management, respectively.

    3. Semi-structured interview guides for individual interviews and focus groups among the handloom weavers exploring their perceived health status and self-health care, and among the healthcare providers, village health volunteer and key healthcare persons in the community regarding the handloom weavers' health problems.

    4. A handloom weavers' healthcare need survey.

Data collection procedure

The steps for data collection included the preparation for data collection, the actual data collection process, and the evaluation process.

1. Preparation for data collection

    1.1 Contacted and informed community leaders, the leaders of the hand-weaving groups, the local government, and Ta Chang and Ton Tan sub-district healthcare providers about the research study and its objectives and data collection procedures to ask for their cooperation in the study.

    1.2 Prepared researchers and research assistants (12 first year nursing students) to perform the interviews and focus groups by hosting an educational workshop on the knowledge and skill aspects of doing interviews and focus group as methods of collecting data.

2. Data collection process

    1.1 Reviewed the target participants' basic personal information and health status recorded when they received health care services at either the Ta Chang or Ton-Tan sub-district health promotion hospital based on their home address.

    1.2 Collected information on the perceived health status and health promoting behaviors among the handloom weavers using the questionnaires developed by the researchers.

    1.3 Interviewed the participants who met the inclusion criteria.

    1.4 Carried out the focus groups with groups of 10-12 handloom weavers both sub-districts regarding their health status and how they do self-health care.

    1.5 Interviewed and carried out focus groups with groups of 10-12 health care providers, village health volunteers and key persons in the community both sub-districts to collect data about life style, culture, health problems, and factors affecting health problems or discomfort in relation to weaving by the handloom weavers living in the two sub-districts.

    1.6 Examined the handloom weavers' physical health status

    1.7 Surveyed the participants' health care needs using the survey developed

by the researchers.

3. Evaluation process

3.1 Cleaned-up the quantitative data and categorized the qualitative data from the interviews and focus groups to get the data ready for further analysis.

3.2 Hosted a meeting with the community leaders and the health care providers of the two sub-districts in order to report the information or data gathered from the participants to them. They may use the information regarding the hand-weaving related health problems and healthcare the participants needed for providing further support as needed.

Data analysis and statistics

For the quantitative data, descriptive statistics including frequency, percentage, mean and standard deviation, were used to analyze the demographic characteristics, health promoting behaviors, and physical health examination data.

For the qualitative data, content analysis was employed to categorize the data gathered from the interviews and focus groups.

Expected benefits of the study

The study provided a better understanding about the life style, health status, perceived health status, hand–weaving related health problems, and health promotion needs among the weavers residing in Ta Chang and Ton-Tan sub-districts, Sao Hai district, Saraburi province. This information can be used to guide an intervention program targeting promoting healthy behaviors based on the life styles and cultures of the community.

Results

1. Demographic data

A sample of 52 handloom weavers was included in the study. Most of them were female, married, and identified themselves as the bread-winner for their household. The top three age ranges were 61-70, 51-60 and greater than 70 years of age. The top three education levels were primary school, high school, and diploma. The top two occupations that they did for a living were small businessperson and agriculture. Their average household income was less than 10,000 Baht per month ($300 U.S.) and was considered as low income. Their self-reported chronic health problems were hypertension and diabetes.

2. Health status

2.1 Health status

Health status was obtained from interviews and focus groups, not only among the participants, but also the health care providers and village health volunteers from the sub-district health promotion hospitals (See Table 2). Other than health status, information about life style, culture, health problems, and factors affecting weaving occupation-related health problems or discomfort among the weavers in the two sub-districts was also gathered. Of the participants (n=52), 92% had health problems (n=48). Among those

who had health problems, top two health problems in relation to long periods of weaving were fatigue (body, arm, or shoulders) and back pain.

Table 2

The number and percentage of hand-weaving related health problems (N= 52)

No.	Health problems	N	%
1.	Had no health problems	4	7.69
2.	Had health problems	48	92.31
	2.1 Strain (all body parts, arm or shoulder)	26	54.17
	2.2 Back pain	10	20.83
	2.3 Leg pain	4	8.33
	2.4 locked Middle and ring fingers	4	8.33
	2.5 Strain in eyes	2	4.17
	2.6 Foot deformity	2	4.17
	Total	52	100.00

2.2 Factors affecting handloom weavers' health status related to handloom weaving

Based on the interviews, their health problems experienced due to the nature of weaving were related to continuously working for long periods of time and repetitive movement. Handloom weavers need to weave continuously. They have to stay in the same position for long periods of time, from 3-4 hours at a time, from dust until dawn. Some of them may continuously weave during the night to meet large fabrics orders from their customers or when orders made with a short period of production time. Poor light and continuous working causes strain to their entire body, especially their arms and shoulders. Furthermore, weaving involves continuous, repetitive movement of their hands, shoulders, and legs. During the entire handloom weaving process, the weaver has to move their hands, arms, and shoulders to throw the shuttle and move the reed frames and move their feet up and down on the loom frame.

3. Health promoting behaviors

The average scores of the overall health promoting behavior scale and its six subscales for handloom weavers living in the two sub-districts were high. The average scores of the subscales ranged from 3.57 (interpersonal relations) to 3.00 (health promoting lifestyle responsibility) (See Table 3.)

Table 3

Means and standard deviations of health promoting behaviors among handloom weavers (N=52)

No.	Health promoting behaviors	Means	SD
1.	health promoting lifestyle responsibility	3.00	0.45
2.	interpersonal relations	3.57	0.41
3.	exercise	3.05	0.64
4.	nutrition	3.29	0.33
5.	spiritual growth	3.50	0.42

No.	Health promoting behaviors	Means	SD
6.	stress management	3.09	0.45
	Total	3.25	0.32

3. Healthcare needs among handloom local fabric weavers in Saraburi province

Based on the data obtained by the healthcare needs survey developed by the researchers, there are three aspects of healthcare that the participants needed. They needed 1) the health care services and support to relieve body part strains, back pain, and joint pain, 2) healthcare recommendations regarding physical activity, stretching exercises, and good sitting posture, and 3) on-site physical check-ups provided by nurses or public healthcare providers that can be done at their homes or the community weaving center.

Discussion

The study found that the handloom weavers who made local fabrics in the communities in Saraburi province had 8 -15 years of handloom weaving experience. With the nature of handloom weaving operations, sitting in the same position for long periods of time causes many health problems. These occupational health problems can further bother the weavers' daily life and life happiness and well-being, which supported by the previous study of Nattapong Ritnamkam and Ganchana Nattapinthu (2007). They studied work related health problems and health care of silk weaving groups in Amphoe Ban Kaow in Chaiyaphum province. From interviewing 231 silk weavers, they found that muscular fatigue of the waist, knee, thigh, shoulder, and the upper back were most commonly reported. Furthermore, the silk weavers also experienced a lack of exercise and held their bladder while weaving. Moreover, the findings of this study were supported by the work of Decha Thamdee and Darunee Thatiya (2007). They assessed the occupational health impacts and needs for physical activity or other activities to promote healthy habits among 27 female "*Pah Teen Jok*" (a specific type of traditional fabric) industry workers in Songtarn village, Ban-tab subdistric, Maejam district, Chiang Mai province. The study found that the participants voiced that fabric weaving had an effect on their health status, physically, psychologically, socially, and spiritually. They physically experienced headaches, dizziness, eye pain, eye strain, muscular strain, joint pain, cystitis, and hemorrhoids. The psychological effects were related to promoting family relationships and feeling happy, however, sometimes it caused them stress due to time limits for weaving to fill an order and late paychecks. Social effects due to silk weaving were related to silk weaving being a source of income in the community, reducing the unemployment rate, community network building, giving the community a good reputation, and reducing illegal activities, such as gambling or illicit drug use. On the top of that, they can share their silk weaving experiences. Spiritual effects in relation to silk weaving were being proud of their work, feeling grateful about their handcrafts being used by others, and helping to build their community's reputation.

Findings of the study provided us with useful information regarding the health problems and health care needs among local handloom fabric weavers in Saraburi province. Handloom weaving related health problems and health impacts are important occupational

hazards. Public health care providers should pay more attention to this information in order to use it as input for designing health promoting programs for the silk weaving groups in Saraburi province. The programs should be focused on knowledge providing increased awareness and attitudes of being engaged in self-health care to reduce the risk factors for cardiovascular diseases, and work-related health problems or injuries.

Conclusion and suggestions

The findings of the study suggested that public healthcare providers and community leaders should develop a health promoting behavior program targeting the local fabric weavers. Doing so would allow them to promote better social activity or elderly club engagement. The programs should focus on exercise promotion, physical stretching, good sitting posture, appropriate body movement, stress management, and strategies to promote self-health care.

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Demand Forecasting for Pharmacy Technicians of the General Hospitals and Private Hospitals in Northern Thailand in the Year 2013 – 2022 by System Dynamics Modeling[1]

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Abstract

Prediction of pharmacy technician demands has been estimated with limited actual input data from health care settings. The objective of this study was to forecast the demand for pharmacy technician of the general hospitals (that are not under the auspices of the Ministry of Public Health, MOPH) and private hospitals from 2013-2022 using a system dynamics modeling (SDM) and compare supply and demand for pharmacy technicians in each subsector of the general hospitals and private hospitals. Demand data were collected from the above public health care settings in northern Thailand. The demand of pharmacy technician data was the sum up of the demand in each subsector. The amount of the existing pharmacy technician would be affected by the number of the new pharmacy technician, lost from death, retirement and quit. Then, simulation model using the "Stella Software for Windows" was formulated.

The results from the simulation model showed that 628 pharmacy technicians would be required to fill the jobs at public health care settings in studied region by the year 2013-2022. The required numbers of pharmacy technician ranked from private hospitals (329 persons) and general hospitals (299 persons). Comparisons of demand and supply of pharmacy technician in 10 years showed that, overall, there was no supply to the system both general hospitals and private hospital while the demand was increasing in every year during 2013-2022. The overall demand of pharmacy technician increases 3.4 times of the number of existing pharmacy technician. Subsector demand analysis showed that there were shortages of supply for pharmacy technician in both general hospitals and private hospital.

Keywords: *forecasting, pharmacy technician, system dynamics, stella*

Introduction

Human resources for health, including personnel from varied professions and supporting staffs, play a key role on promoting good health, medical care, disease control and prevention, and rehabilitation (Ministry of Public Health, 2007). Pharmacy technician is regarded as the supporting staff produced by the Ministry of Public Health (MOPH) through Sirindhorn College of Public Health (SCPH) under the supervision of Praboromarajchanok Institute for Health Workforce Development with seven colleges across the country. The role purpose is to provide provincial public health care settings (Ministry of Public Health, 2000). At the present time a shortage of the supporting staff is also occurred at the general hospitals (that are not under the auspices of the Ministry of Public Health, MOPH) and the private hospitals. Human resource management for healthcare system is a major problem in Thailand (Thamarangsri, 2005), in particular, an inadequate number of personnel due to numerous factors – more access to the national health security scheme, higher average of life expectancy, a greater number of the elders with chronic conditions, and an increasing of foreign workers (Chunhara, 1998). Such a situation, a shortage of pharmacy technician would be occurred at the general hospitals and the private hospitals because of there is no supply of pharmacy technicians while there is a high demand for the pharmacy technicians (Mirintangkurn, Tuntanatanith and Ueimsir, 1999). The researcher prioritizes importance of the study on the number of pharmacy technicians in 17 provinces in Northern Thailand to forecast the demand for pharmacy technicians in public health care settings in order to enhance the education of pharmacy technicians to be qualified pharmacy technicians.

Methods

The research divided this study into two phases as followed.

Phase I: A survey study was conducted using a set of questionnaires, numbers of pharmacy technician required in 2013. The researcher sent questionnaires to 58 public health care settings, including general hospitals and private hospitals in 17 provinces in the northern part of Thailand. Heads of pharmacy department at each health care setting were asked to provide the data. Demand data of pharmacy technician would be used as input data in the simulation modeling to forecast future demand.

Phase II: A simulation modeling was developed to forecast demand of pharmacy technicians in 10-year period (2013-2022) by developing the causal-loop diagram based on the data from the Phase I referred to as Fig.1. Then, the researcher computed the probability (P) of the variables affecting the demand of pharmacy technicians. The recruitment of new pharmacy technicians had an effect on increasing demand of pharmacy technician whereas death, retirement, and job change had an effect on decreasing demand of pharmacy technician. Then the causal-loop diagram (Nataniel JM, 1986) was translated into computer model using the "Stella Software for Windows" (Fig. 2).
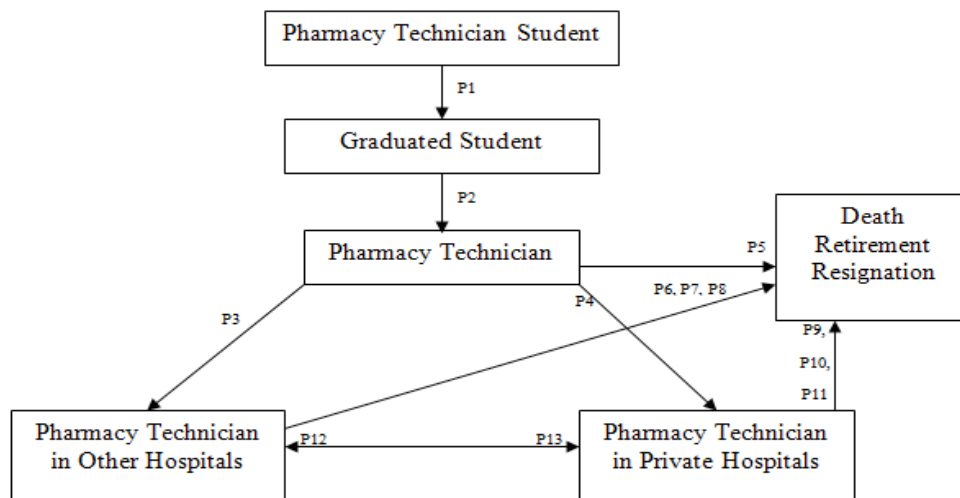
Fig.1 Causal-loop diagram of pharmacy technicians.

Fig 1
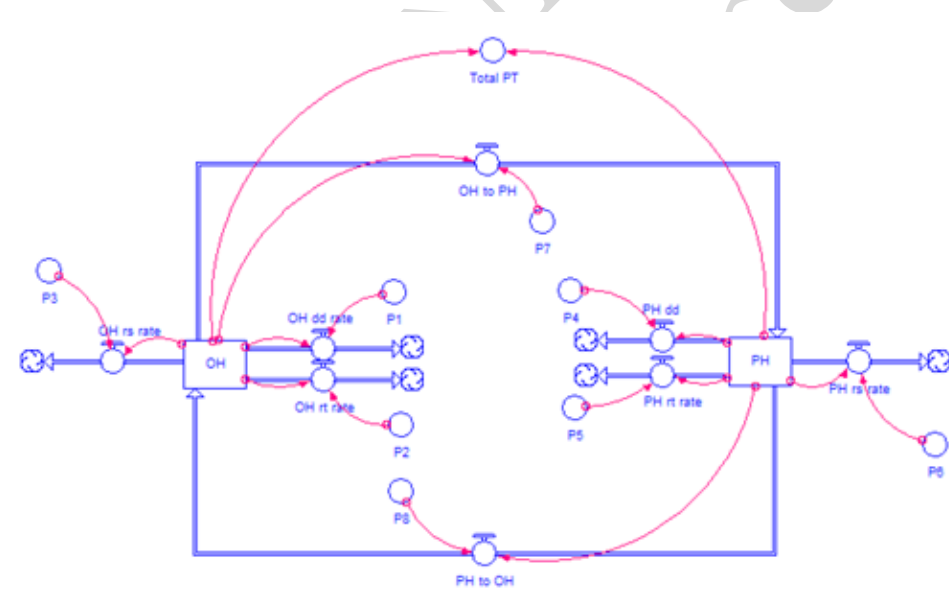Causal-loop diagram of pharmacy technicians.

Fig 2
System dynamics modeling of the demand for pharmacy technicians
in other hospitals and private hospitals in 17 Northern Provinces.

Results and Discussion

   The demand survey was distributed to 58 health care settings, 19 other hospitals and 39 private hospitals. The response rate was 78.95% from the other hospitals and 74.36% from the private hospitals.

   The results of the simulation model showed that 628 pharmacy technicians would be required by public health care settings in the studied regions in the year 2013-2022. Sub-analyses based on types of health care setting showed that 299 persons required in other hospital and 329 in private hospital. (Fig.3)

Fig 3
Estimated demand for pharmacy technicians in each subsector
(OH: Other hospitals, PH: Private hospitals, Total: overall).

   Comparison between the demand and supply for pharmacy technicians in the other hospital in the year 2013-2022 showed that there would be a shortage of pharmacy technician in other hospitals. The estimate shortage of supply was approximately 2-3 persons per year. Within 10 years (2022), the demand for pharmacy technicians would approximately increase 3.4 times compared with 2013. (Fig.4)
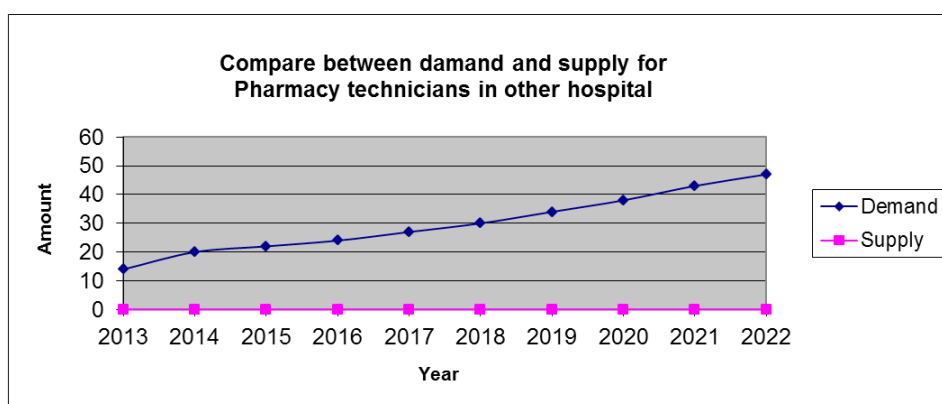

Fig 4
Comparison between demand and supply for pharmacy technicians
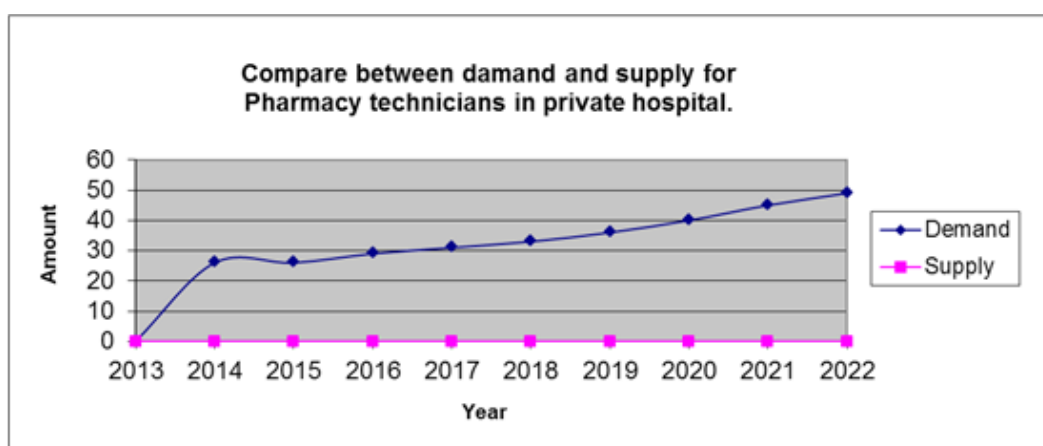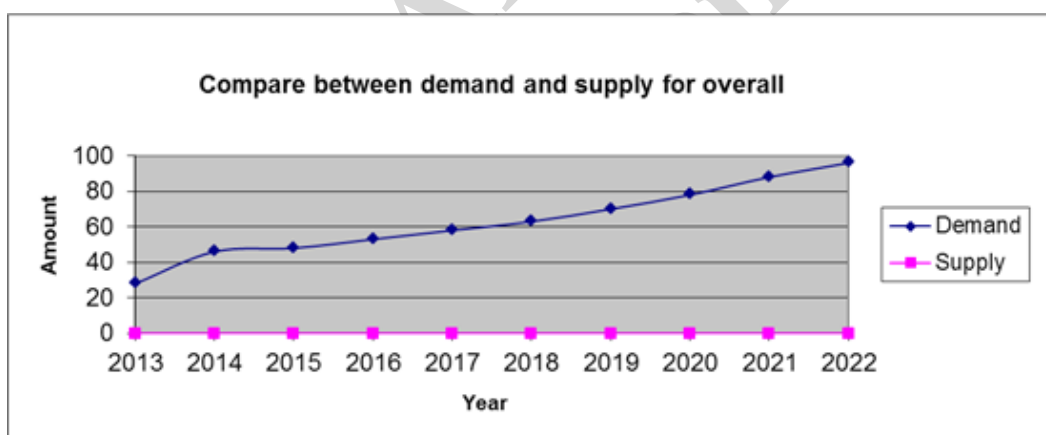in other hospitals in 2013-2022.

Fig 5
Comparison between demand and supply for pharmacy technicians
in private hospitals in 2013-2022.

There was no supply of pharmacy technicians to the private hospitals in the same situation with the other hospitals. The estimate shortage of supply was approximately 3-4 persons per year. Within 10 years (2022), the demand for pharmacy technicians would approximately increase 1.9 times compared with 2013. (Fig.5)

Fig 6
Comparison between overall demand and supply
for pharmacy technician in 2013-2022.

Compare between demand and supply for overall (Fig.6) showed that there was no supply of pharmacy technicians to both the other hospitals and the private hospitals, a shortage of pharmacy technicians would be occurred while the demand of pharmacy technicians is increasing in average 6-7 persons in every year. The demand of pharmacy technician in next 10 years will be 628 persons.

Conclusion

This study was aimed to identify the number of pharmacy technicians required in public health care settings in 17 Northern Thailand during 2013-2022 in each subsector, other hospitals and private hospitals. The study also compared the demand and the supply of pharmacy technicians over 10-year period using the simulation modeling.

The study found that within 10 years (2013-2022) an increasing demand of pharmacy technicians would occur in every sub-sector, the demand of pharmacy technicians in the private hospitals is a bit higher than the other hospitals.

Comparisons of the demand and the supply of pharmacy technician in 10- year period showed that, there was no supply of pharmacy technicians to both the other hospitals and the private hospitals while the demand of pharmacy technicians is increasing in every year.

The results of this study could be used as a decision making tool for Ministry of Public Health and the designated pharmacy technician education institutions to consider demand data to plan for educating adequate number of pharmacy technicians to meet the demand in 17 provinces in Northern Thailand, which could reduce chance of shortage in the future.

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Examining A Social-Cognitive Model Predicting Chinese People's Information Seeking Behavior Regarding Environmental Risks: Toward A Public-Oriented Way of Risk Communication[1]

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Abstract

The fundamental goal of risk communication is to improve the public's preparedness and self-protection. Given this, our study attempted to develop a model based on social cognitive theory for predicting people's behavioral reaction to environmental risks. We proposed that individual's self-efficacy to seek risk information was the most powerful predictor of their actual seeking behavior. At the same time, we assumed that information features, the quality and affective contents, had strong impact on self-efficacy. They also significantly influenced individual's environmental risk perception-another source of perceived self-efficacy. We collected data from a national online survey among Mainland Chinese (*N*=1032). Results of structural equation modeling indicated good model fit. It provided practical implications that increasing people's perceived self-efficacy could enhance their precautionary behaviors, and improving information quality and altering affective contents of risk information are two possible strategies.

Keywords: *environmental risk communication, social-cognitive approach, self-efficacy, information seeking*

**Examining A Social-Cognitive Model Predicting Chinese People's Information Seeking Behavior Regarding Environmental Risks:
Toward A Public-Oriented Way of Risk Communication**

Introduction

Bolstered by a plenitude of natural resources, humans have achieved a rapid development in industrialization. However, as the utilizing of environmental treasures accelerates, the side effects of human development, especially the environmental issues, become serious and cause global concerns. When facing environmental threats, experts use scientific approach to estimate the probability of risk and calculate the magnitude of potential loss (Stern, 2007). Unlikely, the general public, as laypeople without perfect knowledge for accurate assessment, are inclined to be emotional and make intuitive judgment about the risk (Slovic, Finucane, Peters, & MacGregor, 2004). Making up laypeople's knowledge deficit becomes the primary driver of risk communication in order to guide rational reactions (Frewer, 2004; Leiss, 1996; Plough & Krimsky, 1987).

Evolved from the intention to educate the public, risk communication has been shifting its pedagogical mission to taking the public as active participants (Covello & Sandman, 2001). It changes from merely conveying scientific knowledge about risk to concerning the public's information need and respecting their feedback (Frewer, 2004; Reynolds & Seeger, 2005; Skarlatidou, Cheng, & Haklay, 2012). It is gradually acknowledged that risk communication should endeavor to improve the public's preparedness and resilience instead of forcing their attitudinal and behavioral change (Kellens, Zaalberg, & Maeyer, 2012). The largest population exposed to environmental risk is the general public. Hence, strengthening their precautionary behaviors is of paramount significance because it will contribute to efficient response and management of environmental risks.

Given the above, for a further development of environmental risk communication, this study attempts to examine a public-oriented model that predicts individuals' information seeking behavior from their interpretation of risk information. We take individual's information seeking as a precautionary behavior for preventing him or herself from the impact of environmental risks. Certain features of information are assumed to have power in directing the actual seeking behavior. Thus, results of the current study are also expected to provide practical implications related to information design.

Theoretical Perspectives

As stated before, without perfect knowledge to estimate the real risk, lay people subjectively define the risk by their feelings that being seen as the mental shortcut to judgment (Slovic et al., 2004). The information environment is one of the social factors that greatly constructs lay people's perception of risk (Taylor-Gooby & Zinn, 2006; Wahlberg

& Sjöberg, 2000). Accurate, sufficient, and clear information is necessary for disseminating scientific knowledge. At the same time, the multifarious signals of affect carrying by risk information directly stimulates feelings of risks (Slovic, 2010).

According to the social amplification of risk framework (SARF), the actual risk is likely to be amplified or attenuated in the process of information transmission due to the interpretations of individuals and groups who are part of the communication network to intensify or weaken the signals (Kasperson et al., 1988; Masuda & Garvin, 2006). It is claimed that the social amplification of risk has strong impact on people's feelings and judgment of risk, and changes in cognition are able to vary behavioral reactions (Kasperson et al., 1988). However, according to early empirical findings, the predictive power of SARF is limited. It seldom explains the variance in behavioral variables significantly neither at the individual nor the collective level (Breakwell & Barnett, 2003). Although SARF integrates psychological perspective into the socially oriented approach, it concentrates more on establishing an all-encompassing framework, which makes it rather descriptive than predictive.

Instead of rushing into a cross-disciplinary direction, the cognitive perspectives show their focus on humans and provide theoretical support for the lay people-oriented communication. For instance, the social learning theory (SLT) underlines that humans are active learners who gather information and acquire knowledge from observations (Bandura, 1971). Such capability endowed through evolution facilitates humans' adaptation to the environment and largely forms their behavioral patterns for handling different situations. People interpret risks within their exposure to the information environment. Although risk perception is described as the capability constraint for rational reasoning, such intuitive judgment once being regulated through the observational learning could help to trigger people's preparedness for impending hazards (Taylor-Gooby & Zinn, 2006).

Expanded upon the social learning theory, the social cognitive theory (SCT) manifests a more structured paradigm for understanding human functioning. It suggests a "triadic reciprocal determinism" among environmental, personal, and behavioral factors that influencing human development (Bandura, 1986). The three sets of determinants are bidirectionally acting upon each other to change people's behavior patterns (Bandura, 1989). Personal factors in the form of cognition, affect as well as biological characteristics are put in the central position in SCT. People's capabilities of observational learning and self-regulation are highlighted: they are able to interpret and utilize signals from the environment to get motivated and guide future decision and action (Bandura, 2001).

Among the personal determinants influencing behavior, the most powerful one is self-efficacy, which refers to people's belief in their abilities to execute actions required to manage certain situations (Bandura, 1986). Self-efficacy, as the key to self-regulation, helps to activate goal setting, anticipate outcomes of future actions, and exercise control over stress (Bandura, 1995). In the filed of risk analysis, studies on lay people's risk related behavior show that perceived self-efficacy has the closest association with behavioral variables and serves as the most powerful predictor of behavior change (Schwarzer &

Fuchs, 1995). Steps have been continuously made for improving risk communication by introducing self-efficacy in the prediction of lay people's preparedness and self-protection behaviors (Bubeck, Botzen, & Aerts, 2012; Kellens, Zaalberg, Neutens, Vanneuville, & De Maeyer, 2011; Kievik & Gutteling, 2011; Prati, Pietrantoni, & Zani, 2011; Verroen, Gutteling, & Vries, 2013).

The Present Study

Aimed at contributing to the improvement of public-oriented environmental risk communication, this study attempts to develop a model for predicting the public's information seeking behavior. To provide insights for planning environmental risk communication that strengthen people's precautionary behavior, results of model testing are expected to suggest ways of regulating people's certain behaviors in the communication process.

By consulting the social cognitive theory, self-efficacy is introduced as a key variable in the hypothesized model, which is supported by previous findings as the strongest influence of behavioral variables. Regarding the communication context, Bandura (2001) had a profound explanation of the source of self-efficacy: humans possess the ability of "plasticity", which is generated from the advanced neutral system; such plasticity enables people's confidence in processing coded information and utilizing the information to foresee and plan for future situations. Sufficient, accessible, and credible information may compensate for lay people's shortage of knowledge about environmental risks. Hence, high quality information is assumed to increase people's beliefs in gaining useful information for coping with environmental risks. Information with affective signals such as frightening and alerting contents may rapidly attract people's attention to environmental risk, intensify their feelings, and exacerbate their concerns about the situation. Therefore, such affective information may act to motivate laypeople to instill more efficacy beliefs that boost coping behaviors. Perception of environmental risk, which directly comes from lay people's subjective feelings shaped by the information environment, is assumed to have a similar function as affective information in changing self-efficacy.

Given the above, we proposed the model in Figure 1 and the following hypotheses:

H1: People's perceived information seeking self-efficacy will increase the frequency of information seeking behavior.

H2: Information quality will increase the level of people's perceived information seeking self-efficacy.

H3: Affective information will increase the level of people's perceived information seeking self-efficacy.

H4: People's perception of environmental risk will increase the level of their perceived information seeking self-efficacy.

Regarding the impact of information features on environmental risk perception, high quality information may trigger more imagination about the consequences of risks, which probably makes people judge the event to be more risky. Information with affective

elements, for instance the frightening contents, may arouse negative feelings of the risk, which leads to a high level of risk perception. Therefore, we proposed:

H5-1: Information quality will increase people's perception of environmental risk.

H5-2: Affective information will increase people's perception of environmental risk.
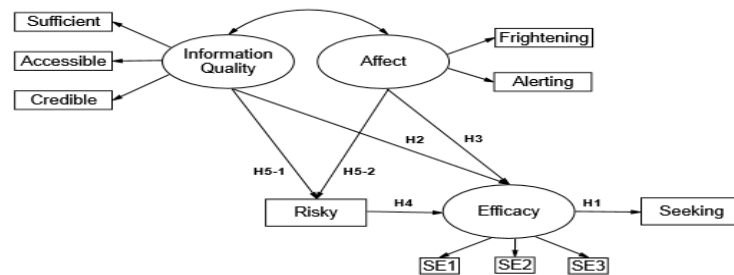

Figure 1
The hypothesized model predicting information seeking behavior.

Method

Online national survey was implemented during the first week of September 2013. Invitation email with an URL link of the web-based questionnaire was sent to Chinese members of the panel of a Japan based research institute. Participants were recruited from six areas of Mainland China[2], including 22 provinces, 4 province-level municipalities and 5 autonomous regions. A total of 1032 valid responses (511 males, 49.5%) were collected with an 8.58% response rate. Questionnaire items measuring variables in the hypothesized model are listed in Table 1. All the items were rated on a 7-point scale (1=*not at all* and 7=*extremely*).

Table 1
Questionnaire items

Variable	Item	*M*	*SD*
Information Quality	Information about environmental hazards is sufficient	4.87	1.31
	Information about environmental hazards is easily accessible	5.00	1.29
	Information about environmental hazards is credible	4.91	1.24

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[2] East China, including Anhui, Fujian, Jiangsu, Jiangxi, Shandong, Zhejiang, and Shanghai; Northeast China, including Heilongjiang, Jilin, and Liaoning; North China, including Hebei, Shanxi, Inner Mongolia, Beijing, and Tianjin; South Central China, including Henan, Hubei, Hunan, Guangdong, Hainan, and Guangxi; Northwest China, including Gansu, Qinghai, Shaanxi, Ningxia, and Xinjiang; Southwest China, including Chongqing, Guizhou, Sichuan, Yunnan, and Tibet.

Variable	Item	*M*	*SD*
Affective Information	Content of information about environmental hazards is frightening	4.71	1.24
	Content of information about environmental hazards is alerting	5.01	1.14
Environmental Risk Perception	How risky do you consider each of the following hazards to be to Chinese people and the China society? (Results of the thirteen questions were aggregated.) *Earthquake, flood, landslide, drought, climate change, air pollution, freshwater shortage, species extinction, chemical waste, unsafe food, genetically modified food, nuclear radiation, urbanization*	5.24	0.91
Information Seeking Self-efficacy	I have confidence in my ability to understand information regarding environmental hazards and the coping strategies	4.98	1.20
	I have confidence in my ability to search for information regarding environmental hazards and the coping strategies	5.03	1.14
	I have confidence in my ability to evaluate the credibility of information regarding environmental hazards and the coping strategies	4.93	1.17
Information Seeking	I often search for information about environmental hazards and the coping strategies	4.96	1.21

The model presented in Figure 1 was analyzed using structural equation modeling (SEM). SEM is a statistical analysis procedure that tests the fit between a hypothesized model and a data set. It can examine causality by multiple regressions and explore latent structural relations among variables. We use AMOS 21.0 to perform SEM and estimate the parameters of model fitting. The X^2 goodness-of-fit statistic will be reported as an index of model adequacy, where a nonsignificant value suggests good model fit. However, X^2 is sensitive to sample size (Bollen, 1989), thus we will also report the X^2/df ratio, where a value less than 5 suggests good model fit (Kline, 2011). In addition, we will report the comparative fit index (CFI) and the root mean square error of approximation (RMSEA), which demonstrate how well the specified model explains the data. Value of CFI is ranging from 0.00 to 1.00, where 0.90 and above is considered to represent good fit. RMSEA value less than 0.08 suggests reasonable error of approximation.

Results

The resulting model (see Figure 2, nonsignificant pathways are removed) indicates satisfactory fit: X^2 (23)=51.562, p-value=.001, X^2/df=2.242<5, CFI=.996, RMSEA=.035 (90% Confidence Interval=.022-.047).

In line with H1, the estimates showed that perceived information seeking self-efficacy significantly caused information seeking behavior (β=.67, p<.001). H2, H3, and H4 were also supported by the results showing that the level of perceived information seeking self-efficacy was significantly increased by information quality (β=.39, p<.001), affective information (β=.28, p<.001), and environmental risk perception (β=.11, p<.001). Moreover, significant direct causation between affective information and information seeking behavior was also demonstrated by the resulting model (β=.18, p<.001).

Furthermore, the final model indicated a significant correlation between the two aspects of information features (r=.75, p<.001). Regarding the predicted effect of information features on environmental risk perception, H5-2 was supported by results showing that affective information significantly increased people's environmental risk perception (β=.34, p<.001). However, results failed to support H5-1 showing that information quality didn't have significant impact on environmental risk perception (β=-.07, ns).
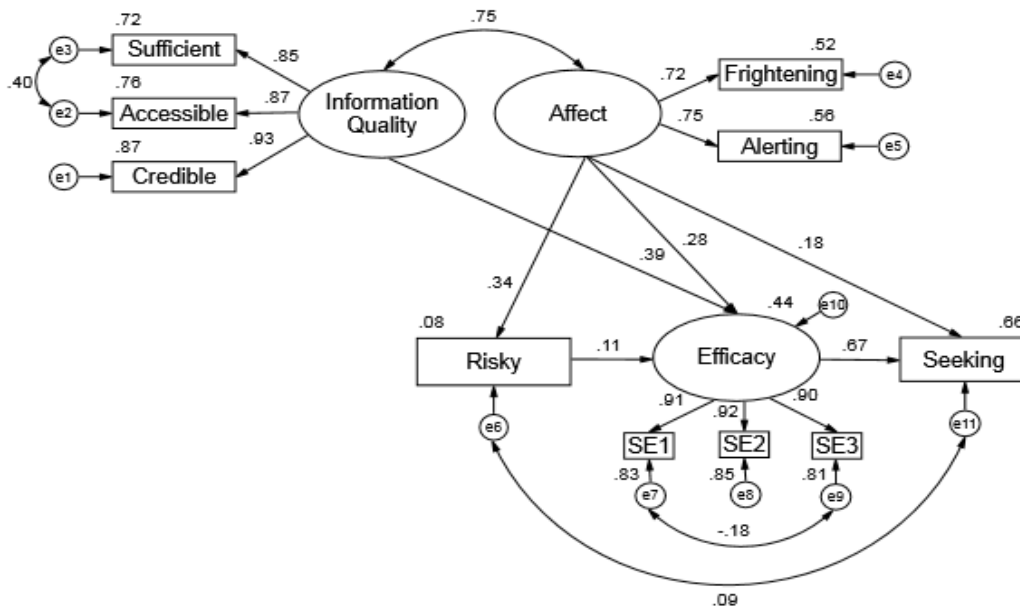

Figure 2
Resulting model of the relationships between information features, environmental risk perception, information seeking self-efficacy, and information seeking behavior.

Discussion

The current study is an attempt to develop a model of environmental risk communication by taking the general public as proactive participants in the communication process. From the social-cognitive perspective, the public is not passive recipients of risk information. Instead, they are self-directed learners who interpret signals from the information environment to get motivated to prevent themselves from the impact of environmental risks. Given this, we introduced the key concept in social cognitive theory, self-efficacy, to construct a model for predicting the public's information seeking behavior.

Using the data from a national online survey among Mainland Chinese people, this study has achieved several meaningful findings that provide practical implications for the public-oriented environmental risk communication. The most notable one is the strong predictive power of perceived self-efficacy on behavior, which is in line with previous findings (Griffin et al., 2008; Huurnea & Guttelinga, 2008; Kievik & Gutteling, 2011). It implies that the most rewarding way for improving public's precautionary behavior under the context of risks could be to raise their perceived self-efficacy.

According to Bandura (1995), self-efficacy, which decides how and to what extent people endeavor in adapting and managing their environment, comes from four major sources: experience of mastery, observational learning, social persuasion, and psychological state. Our model invited information quality, affective information, and environmental risk perception as predictors of information seeking self-efficacy, and we got satisfactory results showing that they all have power of generating self-efficacy. High quality information people received may enhance their sense of mastery, which provides the most authentic evidence to make them believe that they can succeed in future information seeking. Information with intense affect in the content and high level of risk perception are likely to play the role of emotional arousal that persuade people to instill more efficacy beliefs to boost coping behaviors. A strong sense of self-efficacy to gain, understand, and evaluate information about environmental risks will activate more efforts in seeking behavior. As a result, such behavior may help to enrich people's knowledge about environmental risks and strengthen their precautionary behaviors.

Limitations and Future Direction

As important as the findings are, a few limitations of this study must be acknowledged. The first one is related to risk perception. The concept indicates a subjective and emotional judgment of risk made by the public, which drives concerns of regulators and policy makers. Risk perception is claimed to be multidimensional (Fischhoff, Slovic, Lichtenstein, Read, & Combs, 1978; Slovic, 1987), and it is constructed by various feelings of risk such as feeling of dread, controllability, familiarity, and catastrophe. The current study used the general perceived riskiness, which may lack power to represent and explain lay people's environmental risk perception. In future research, the multi-factor-structure measuring risk perception should be considered in model testing.

Second, future framework of public-oriented environmental risk communication should be improved on the basis of the present modeling trial. For instance, lay people's knowledge about risk could be invited in model testing because it is an important factor influencing risk perception (Malka, Krosnick, & Langer, 2009; Siegrist & Cvetkovich, 2000). Knowledge may also have potential relationships with lay people's interpretation of risk related information. In addition, we expect the following research could further develop the measurements of information features since the characteristics of information have strong power in causing self-efficacy.

Moreover, future studies could also consider testing the model in specific information environment, for instance, under the context of the Internet and social network services. Due to the easy access and low cost, the Internet provides a platform for many-to-many communication, which reshapes the traditional one-to-many communication and accelerates the speed and intensity of the public's attention to risks (Chung, 2011; Skarlatidou et al., 2012). The social networking services enable interactions between social network members, and the peer feedback in SNSs environment can significantly influence people's risk perception and self-efficacy to execute coping behaviors (Binder, Scheufele, Brossard, & Gunther, 2011; Verroen et al., 2013).

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Military Service as a Process of Political Socialization: The Case of Universal Conscription in Israel[1]

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Abstract

Despite Israel's adoption of universal conscription, one third of Israeli citizens avoid military service. We utilize the deviance from conscription to investigate the function of military service as a process of political socialization. This article provides an empirical examination of the effect of service in the Israeli Defense Forces on political attitudes. We test a hypothesis derived from the theory of national integration of the armed forces. That is, military experience raises consciousness of national security and produces an uncompromising defensive attitude toward the occupied territories. Data are from the 2007 Democracy Survey conducted in February among a representative sample of the Jewish population. The research design of our study applies propensity score analysis to produce as-if randomized treatment and a control group, almost the same as groups without military experience, and to control confounding variables. We demonstrate that conscripted Jewish citizens hold a similar distribution to non-drafted Jewish citizens in the categories of satisfaction with democracy, Zionist identity, opinions about leadership, and national pride. However, our analysis shows a counterintuitive result, that the experience of military service prompts opposition to Arab emigration and support for territorial concessions in the West Bank. The result is implicated in a reexamination of the national integration function of the military service.

Keywords: *Military service, socialization, Israel-Palestinian conflict, propensity score*

I. Introduction

It is common knowledge that the armed forces were a crucial institution in the creation and internalization of social values. From ancient Greece to recently independent nations, state leaders have employed universal conscription to integrate a diverse populace into a strong and coherent nation, especially in wartime. The governments in the Middle East, a region characterized by war-proneness, used the military to involve the people in nation building, the process of constructing a national identity. Zartman (1993: 253) depicts national service as bringing a large segment of the population together and taking a key role in the modernization of traditional society. Therefore, the military acts as an institution to socialize lower ranking soldiers and officers to national norms. While a nation usually contains cultural, ethnic, and linguistic diversity, this often produces severe conflicts of political opinions and interests, even affecting national security. Multi-ethnicity and immigrants can create a vigorous and dynamic society but may cause interethnic and political tension. Universal conscription is not a solution to this type of social conflict.

It is unclear whether military service can achieve national consensus on important issues with respect to national interest. Nation-states can utilize the armed forces to indoctrinate citizens as uncritical soldiers of orders from their superiors. Because state leaders need majority support from the populace to wage war on adversaries, it is expedient for politicians that public opinion be unified behind national defense. However, military education programs, combat training, and experience in actual warfare are not always enough to make compliant patriots of citizens. A number of socioeconomic characteristics, such as political ideology, religiosity, ethnicity, class, and gender, are evoked to explain the differences of attitudes toward national politics. Therefore, this study investigates the effect of military service on a multiplicity of opinions about political issues by removing the influence of other factors.

To test the appropriateness of my argument, I address a country that faces constant external threat, applies universal conscription, and begins wars frequently. Accordingly, this study considers the state of Israel from the above perspective. Israeli governments have faced constant national security concerns, conscripted citizens into the army, and gone to war repeatedly. In the following section, we provide a brief overview of military service in Israel and propose a hypothesis for the link between public opinion on political issues and military experience. The second section presents an outline of survey research in Israel, measuring attitudes toward security policies, both for those drafted and those not drafted. The third section explains the research strategy for empirical analysis and presents the results in consideration of the hypothesis. Although our empirical approach is rarely applied in social science literature, we show that our method is superior to the traditional approaches to control confounding factors. The final section discusses the results and indicates some theoretical implications.

II. Military Service and Political Attitudes: A Brief Literature Review

The citizens go into the Israel Defense Force (IDF) through the universal draft system, which applies to most Jewish citizens. It is well known that the state of Israel employs a universal conscription system that includes compulsory service for women. According to Mahler (2011: 227), draft-age females spend two years in active duty without participating in combat, but only about 60 percent of all women join the reserves, and they are only required to until the age of twenty-five. In contrast, about 90 percent of men are drafted and serve three years in barracks on active duty. Israeli men do about one month

of annual reserve duty until the age of fifty-one. A major study of the Israeli civil-military relationship describes the IDF as a primary agent of socialization and assimilation for generations of immigrants. "Military service has become one of hallmarks of citizenship in most modern states and a symbol of the individual's identification with the center of political authority. In Israel it has assumed an added importance, expressing not only political affiliation, but also membership of the collective, whose basis is more exclusive because it reflects the social basis itself" (Peri 1983: 22).

The IDF fulfills the institutional function of socializing the people, such as in families, schools, and workplaces. The first half of regular service has a profound impact in terms of the political socialization of fresh recruits because the training turns civilian youths into fighters. The military experience is believed to strengthen national identity and enhance patriotism among recruits. The militarized socialization process begins even before children enter an elementary school. Furman (1999) describes the process of the construction of militaristic attitudes and behavior among schoolboys listening to a heroic narrative about masculine soldiers. The IDF recruiters attempt to contact the final-year male students in high school to persuade them to enlist in combat units (Levy and Sasson-Levy 2008: 355). Military service is not only a place for discipline but also a socializing agent for recruits. "Of all the periods of IDF duty, the most critical in terms of socialization is the first half of regular service" (Popper 1998: 170). The young soldiers have an opportunity to consolidate their identity as "a good citizen" with military experience in a people's army. Israel society recognizes military service as a rite of passage to adulthood and as an important requisite for the job search and applications for university admissions. Military service is also the social system that segregates Jews from the Arab population to maintain the Jewishness of the state.

The Israeli draft system is regarded as an institution to integrate people of different and multiethnic backgrounds into one nation. Some sociologists, however, present an alternative view of the function of militarized socialization in the army. Shafir and Peled (2002) reveal that the integration process in the army cannot redress the social divide in the citizenry but rather reproduces social class hierarchies caused by socioeconomic characteristics; Ashkenazim, Mizrahim, and Palestinians. Israeli society upholds the republican ethos of dedication to military service as a supreme social value. The citizen-soldier principle permitted Ashkenazi commanders to seize elite status because of accessibility to valuable social positions; the Ashkenazi hegemony, in other words (Levy 2011: 43). The US state department (2009) criticizes the Israeli military service as a discriminatory system of social stratification:

> Military service is compulsory only for Jews, Druze, and the 5,000 member Circassian community (Muslims from the northwestern Caucasus region who immigrated to various points in the Ottoman-controlled Middle East in the late nineteenth century). Ultra-Orthodox Jews and Israeli Arabs—both Muslim and Christian—are exempt. The majority of Israeli Arabs opt not to serve in the army;

however, some Christian and Muslim Arab citizens, mainly Bedouin, serve as volunteers. As of June 2007, Israeli Arabs and ultra-Orthodox Jews can perform national service for one to two years as volunteers in health, education, or welfare sectors in lieu of military service. This service confers eligibility for similar national benefits accorded military veterans. Israeli-Arab advocacy groups, Knesset members, and local community leaders have charged that housing, educational, and other benefits, as well as employment preferences based on military experience effectively discriminate in favor of the Jewish population, the majority of which serves in the military.

The centrality of the military marginalizes Arab Israelis[2] and ultra-orthodox Jews because of exemption from service and disqualifies lower educated Mizrahim from the draft (Levy and Sasson-Levy 2008: 354). As this alternative view of military socialization indicates, if the IDF reproduces the social divide, it will be observable in the draft. For this reason, I formulate a hypothesis that tests the effects of military service:

Hypothesis 1:   The draft is more sensitive to the social divide than the non-draft.

There is literature that addresses conscription's effect on Israeli feelings about national politics, such as national identity and security policy. Asher Arian, the most comprehensive analyst of survey datasets about Israeli attitudes toward national security, examines conscription's effect on security attitudes. The poll was conducted in January 1986. The survey concludes that the more military experience a citizen has, the more likely he will consider Israel capable of dealing with security threats. The data presents another finding about the political issues of dealing with the occupied territories; there is a tendency toward the most intransigent attitude regarding returning territories in citizens with the least military experience (Arian, Talmud, and Hermann 1988: 61–64). Later, the trend of the time series polls also shows, with great significance, that soldiers who served in the territories felt the measures used during the First Intifada were too soft (Arian 1995: 68). Previous studies provide no consistent findings about the effect of conscription on national security policy. The inconsistency may be attributable to the application of simple or rudimentary statistical methods, which disregard other control variables that might eliminate spurious relationships. That is, a true regressor for political attitudes toward national security might not be army experience but possibly ethnicity or another demographic factor. There is likely to be a possible structural break with past attitudes caused by an external event, such as the First Intifada.

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[2] The Druze is an exception to the exclusion of non-Jews from service. The IDF decided Israel's male Druze citizens could be subjected to mandatory conscription in 1956. The decision produced the policy of integrating minority Druze as ordinary Israeli citizens and discriminating them from Christian and Muslim Arabs as second-class citizens. See Krebs (2006: 44–93).

In Israel, it was recently reported that about 60 percent of the Jewish people still supported for continuing the peace process (Ben Meir and Bagno-Moldavsky 2013: 75-76.). Despite of it, no Israel government since the Second Intifada had made progress toward peace with the Palestinian Authority. In every election, the electorate has supported the right-wing bloc: the Likud party or Kadima, which was composed of politicians who defected from the Likud. The election outcomes show that most citizens believe peace with the Palestinians is impossible because of the wave of terror attacks, kidnappings, and multiple wars in the first decade of this century. The War on Terror, the phrase used by US President George W. Bush, escalated the cycle of violence in the Israel-Palestinian conflict, but it is not clear whether the Israelis expect reliable peace talks because of the series of Palestinian attacks. As such, I consider again the effect of the experience of conscription on opinions about solutions to the Israel-Palestinian conflict, especially for the territorial issue today.

Hypothesis 2: Military experience produces a specific trend in opinion on the territorial issue.

Let us now look at cases in another country. The majority of empirical research on the effect of the draft on human behavior has been conducted in the United States. Recent studies focus on the case of the Vietnam War because of the imposed draft lottery, which functioned as a random selection. Such randomness is convenient for social scientists to find true causation, so it is called a quasi-experiment or a natural experiment. According to Bergan (2009), using the panel survey at the University of Virginia, students with a low number in the draft lottery, therefore more likely to be drafted, were likely to support early withdrawal from the Vietnam War. This finding suggests that self-interest drives people's attitude toward war, in spite of previous results suggesting no effect. Horowitz and Levendusky (2011) demonstrate that conscription decreases mass support for war, especially among young, draft-age men and their parents, in exploiting an original survey experiment. Erikson and Stoker (2011) examine the extent to which the draft lottery influences vote choice, presidential candidate evaluations, policy issue attitudes, ideology, and partisanship. They regard the lottery as a natural experiment with essentially random selection to get rid of the confounding factors in the Jennings-Niemi panel data of 1965 high school teenagers. All the literature supports the self-interest effect on attitudes toward war. These findings could generally be identified as the self-interest effect of military service.

Hypothesis 3: Draftees want to avert a risk on the basis of the self-interest mechanism.

III. Data and Method

Data Set. The data for this study come from the Democracy Index Project of the Israel Democracy Institute. The original survey consisted of interviews with a national sample of 1,203 Israeli adults, Jews and Arabs, 18 years and older, in the state of Israel. The survey was conducted by telephone in Hebrew, Russian, and Arabic in February 2007. The sampling error at a 95 percent level of confidence was +/-2.8 (Arian, Atmor, and Hadar 2007). This study depends on only the Jewish sample of the data because universal conscription does not apply to Arabs holding Israeli citizenship. Therefore, our analysis works with a sample of 969 Jewish Israeli citizens to measure the effect of military service on political attitudes.

Universal Conscription? In spite of the popular belief that most Israeli citizens are conscripted, a substantial percentage of potential conscripts do not serve in the military. Haaretz, a respected news source in Israel, reported that over one quarter of Israeli males are not recruited into the IDF.[3] The data present a question about conscription and tell us that only 71 percent of Jewish citizens served regular or reserve military service. This result supports the article in Haaretz and shows a different image from that of the universal conscription system. This study uses the variable of military service to produce an as-if randomized treatment and control group, almost identical except for experiences in the military, in order to control confounding factors in the sample.

Dependent Variables. The survey includes a series of political attitudes toward three indices, 1) Social Inequalities, 2) Strictly Defense Policy, and 3) Self-Interest, which are used as dependent variables in this study. To measure attitudes toward Social Inequalities, we compose a binary response by using the items of opinion about Social Tension[4] on a scale of 1 to 5 (1-there is much less and 5-there is much more) and Relationship among Groups[5] on a 4-point measure (1-not good at all and 4-very good). The other two indices, Strictly Defense Policy and Self-Interest, are operationalized as follow; we create responses from the items of Arab Emigration and Noncompromise Territories[6] and later responses from the variables about two items of Enlisting[7] and Military Budget.[8] Table 1 shows

[3] Grinberg, Mijal (2007) "IDF: Nearly 28% of Israeli males avoided conscription in 2007," *Haaretz*, November 6, 2007.

[4] The question is the follow wording: In your opinion, is there more or less tensions between groups in society? (Q41_3). I rescaled to range from 0 (=much less, less, and moderately) to 1(=more and much more).

[5] This item asked about the relationship between religious and non-religious (Q38_1), Ashkenazim and Mizrahim (Q38_2), new immigrant and old timers (Q38_4), and rich and poor (Q38_5). Lower choices (=1 and 2) were recoded positive in the binary response.

[6] "Concerning the territories Israel has occupied since the Six-Days War, what in your opinion is the biggest concession that should be made so as to reach peace?" (Q15) The respondents could reply to the question from among five choices: from "Give up all these territories so as to reach a peace agreement" to "Not give up any territories at all."

[7] "If you were about to go to the army now, what would you do?" (Q16) "If you were a parent of a son about to go to the army, what would you advise him to do?" (Q17) The questions have five alternatives (1-to avoid army service, 2-enlist as a non-combatant, 3-let the IDF determine my placement, 4-serve as a combatant, 5-an elite combat unit), in which higher codes converted into positive response.

descriptive statistics about political attitudes toward three indices and we can recognize that only four items indicate over 0.1 absolute values of the simple differences.

Method. My research is an observational study in using the survey data. This type of study is not free from several biases that are avoidable with a randomized controlled trial. We must suggest a research design to address the negative influence of the bias on finding true causal inferences. The estimation of the impact of military service has a constraint because of confounding factors among Jewish citizens. There are many differences between citizens with conscripted experience and without it in education, occupation, size of family, and monthly expenditure. The impact of service on security policies may be affected by the interaction of demographic factors and control variables, so researchers must consider numerous combination patterns of the interactions in the regression models for effective estimates. In other words, attention must be given to addressing the curse of dimensionality.

One solution to control confounders is propensity score matching, proposed by Rosenbaum and Rubin (1983). This method has the advantage of reducing bias in estimations of religious impact as if it were a natural science. Propensity score means a predictive probability to a treatment group estimated from the existence of confounding factors.[9] Using the propensity score, we must data match to get the estimates of conscription as the treatment group on the attitudes to foreign policies described as average treatment effects (ATE). The employed matching algorithm is the Kernel matching method, proposed by Heckman et al. (1998). The analysis was conducted using an add-on program, psmatch2, for STATA, developed by Leuven and Sianesi (2003). Rosenbaum and Rubin also caution researchers to pay attention to a hidden bias: The presence of unobserved heterogeneity might affect the robustness of matching estimators. This problem is associated with observation studies and is difficult to deal with, but there is a method to estimate the size of a hidden bias in a result, called Sensitivity analysis. When the result of ATE estimation is statistically significant, I further conduct sensitivity analysis in using an add-on, rbounds, provided by DiPrete and Gangl (2004).

Table 2 presents statistics of covariates to estimate the propensity score of the conscriptions. The criterion for covariate selection comes from regression models and qualitative studies in the literature. Arian, Talmud, and Hermann (1988), Horowitz and Levendusky (2011), Izraeli (2004), and Levy and Sasson-Levy (2008) controlled partisanship and demographics (Sex, Age, Income, Ethnicity, and Social Class) in the models for their estimations of conscription effect. Table 2 shows that many covariates are significant for the estimated score of the treatment group without considering ideology, social class, and city. The algorithm of psmatch2 follows almost the same procedure of the probit model to estimate propensity scores on the covariates. It is based on the maximum

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[8] In your opinion, is it justified or unjustified to cut down social services to increase the defense budget? (1-definitely justified, and 4-definitely unjustified) The choices of justification were coded positive response.

[9] Hoshino (2009) shows a concise explanation of the propensity score matching method for users without sacrificing the mathematical rigor.

likelihood approach to the probability of who is drafted into the army. According to the results in Table 2, religious Jews, females, and immigrants from the countries in the former Soviet Union have a tendency not to go into the IDF.

IV. Analysis

Table 3 indicates the estimation of the differences in the means between conscripts and non-conscripts with the controlling influence of the cofounders. All estimation scores are lower than simple and rough differences in Table 1. It means several cofounders amplify the effect of conscription on the dependent variables, and thus we need a research design to avoid bias induced by an inadequate method. The conscripted experience is not significant and cannot explain the differences in the Social Inequalities and Self-Interest index. The estimation of the difference in Social Tension, for example, is just 0.031 points and insignificant in Table 3, so the simple difference, 0.291-point positive assessment, in Social Tension is the only dissimulation in Table 1. Despite the salience of several social inequalities in Israel and many indications given by political sociologists,[10] military experience does not lead to recognition of them.

Only one item dealing with Strictly Defense Policy is statistically significant at the 0.05 level, so we can know both t-statistics values are greater than the 1.96 levels. As can be seen in Table 3, the conscripted evaluation of Arab Emigration is calculated 0.163 points lower than the non-conscripted group's evaluation. Conscripted Jews assess Territorial Noncompromise at an average 0.147 points lower than citizens without military experience. Although the results contain biases of more than 30 percent, they pass Rosenbaum sensitivity analysis of average treatment effects on conscription, a test to check the result in the presence of an omitted variable bias. We cannot deny a probability that our results in the propensity score analysis for Strictly Defense Policy contain a certain amount of bias, but they still make sense. Generally, it is evident in Table 3 that military experience leads citizens to a preference for lenient policy.

The findings of the mandatory service effect only support the second hypothesis, that military experience leads citizens to believe that Israel can deal with security threats; Figure 1 illustrates that the drafted comparatively prefer territorial compromise, and Figure 2 shows that they oppose the Palestinian transfer policy at some level. The patterns shown in both figures are binomial responses to policies split over estimated grouping, treated and untreated group, by psmatch2. At the same time, our findings do not support the sensitivity hypothesis to social inequalities or the first hypothesis, and the self-interest mechanism underlying the third hypothesis. There is no statistically significant difference in feelings about inequalities or risk-taking in combat units between veterans and non-veterans. It is likely that the Israeli people regard the draft system as the institution to integrate individuals of different and multiethnic backgrounds, and members of society accept the conventional wisdom of respecting the dedication of a combatant in the IDF (Cohen 2008).

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[10] See Krebs (2006), Semyonov and Lewin-Epstein (2004), and Yiftachel (2006).

V. Conclusion

The Middle East Peace Process, the direct talks between Israel and Palestine, faces continual crisis after the turn of the millennium, the outbreak of the Second Intifada. For many Israelis and Palestinians today, there is no hope in sight for the Israel-Palestinian conflict. Both the Israeli government and the Palestinian Authority took unilateral approaches without peace negotiations. Successive Israeli prime ministers have developed and enlarged the area of the West Bank settlements. The Palestinian Authority could not end armed resistance to Israel and made a direct diplomatic approach to the United Nations for the improvement of conditions. Although the Middle East Peace Process progressed on the foundation of the two-state solution, the establishment of a Palestinian state in the future, recent efforts for a renewal of the dialogue between Israel and Fatah have faced political stagnation, and the process is on the verge of death. Most people, including politicians, diplomats, commentators, journalists, and researchers on the Palestine question believe the situation has fallen into diplomatic paralysis and that the two-state solution has almost failed.

This study examines the effect of military service on a multiplicity of opinions about political issues in the case of a state that faces constant external threat, applies universal conscription, and begins wars frequently, the state of Israel. It finds that the mandatory service effect only supports the second hypothesis; military experience produces a specific trend in opinion about the territorial issue. Conscripted citizens comparatively prefer territorial compromise and have a tendency to, at some level, oppose the policy of deporting Palestinians. The findings bring us hope that the two-state solution is still a viable option. The two-state solution must return enough territories to establish an independent state for the Palestinians; they should not be transferred from the occupied territories either from a humanitarian perspective or with respect to international legal standards, despite the risk to the principles of Zionism: a Jewish majority in a Jewish state.

It is interesting that Arian, Talmud, and Hermann (1988) propose a mechanism in which military experience leads citizens to believe Israel has the power to deal with security threats. The findings suggest that the mechanism drives conscripted citizens into a somewhat moderate and centrist position in comparison with the non-conscripted, who adopt a more ethnocentric stance on territorial issues in the post-Cold War era. Notwithstanding the limitations of using the single-year dataset, this study suggests that the universal draft system as a process of political socialization integrates different generations of immigrants and ethnicities into the citizenry of the state with national and moral values. If military experience makes a citizen moderate and more "moralistic" about the dispute, this inference is paradoxical and unintuitive on the issue of war and peace.

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TABLE 1. Summary Statistics

| | (a) Conscripts | (b) Not Conscripts | Difference | | |
	Mean	Mean	(a) - (b)	SD	All Obs
Social Inequalities					
Social Tension	0.424	0.395	0.291	0.039	785
Relationship: Religious-Secular	0.648	0.644	0.004	0.037	828
Relationship: Ashkenazim-Mizrahim	0.532	0.551	-0.018	0.039	820
Relationship: Immigrant-Old timers	0.629	0.595	0.033	0.038	816
Relationship: Rich-Poor	0.807	0.795	0.012	0.031	803
Strictly Defense Policy					
Arab Emigration	0.473	0.723	-0.249	0.038	804
Noncompromise Territories	0.447	0.671	-0.223	0.038	835
Self-Interest					
Service	0.597	0.726	-0.129	0.038	796
Parental Advice Regarding Service	0.392	0.334	0.057	0.039	792
Military Bugdet	0.180	0.182	-0.001	0.030	822

TABLE 2. Estimation of the Propensity Score of Secular

Covariate	Coefficient	Wald	p
Ideology	0.044	1.35	0.177
Age	0.007	2.16	0.030
Former Soviet Union	-0.617	-3.57	0.000
Male	0.601	5.73	0.000
Religiosity	-0.478	-7.76	0.000
Expenditure	0.096	2.58	0.010
Social Class	0.089	1.15	0.250
City	0.167	1.36	0.175
Sabra	0.361	2.39	0.017
Constant	0.142	0.40	0.689

N = 835, Log likelihood = -394.44, Psedo R2=0.189

TABLE 3. Impact of Military Service on Political Attitudes

Dependent Variables	Estimation of Difference by ATE		t-statistics	Bias %	Sensitivity Analysis Γ
Social Inequalities					
Social Tension	0.031	(0.057)	0.56	6.5	
Relationship: Religious-Secular	-0.062	(0.037)	-1.11	-13.0	
Relationship: Ashkenazim-Mizrahim	-0.008	(0.056)	-0.16	-1.8	
Relationship: Immigrant-Old timers	-0.025	(0.055)	-0.46	-5.2	
Relationship: Rich-Poor	-0.020	(0.046)	-0.44	-5.1	
Strictly Defense Policy					
Arab Emigration	-0.163	(0.052)	-3.13	-34.5	2.54
Noncompromise Territories	-0.147	(0.054)	-2.73	-30.5	2.60
Self-Interest					
Service	-0.078	(0.052)	-1.48	-16.6	
Parental Advice Regarding Service	-0.008	(0.055)	-0.15	-1.7	
Military Bugdet	0.012	(0.044)	0.28	3.2	
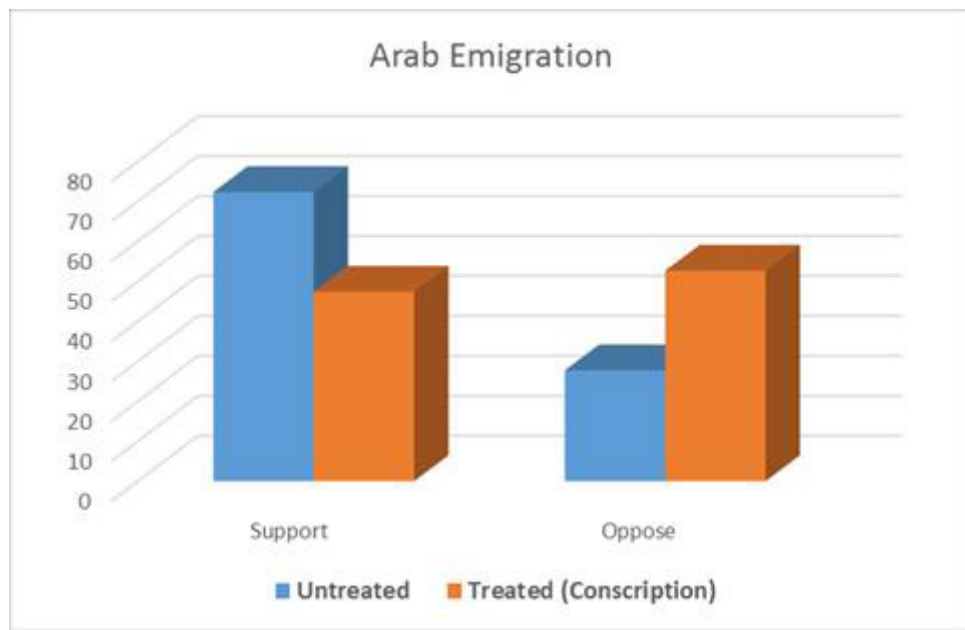
Figure 1
Attitudes toward Arab Emigration Policy (%)
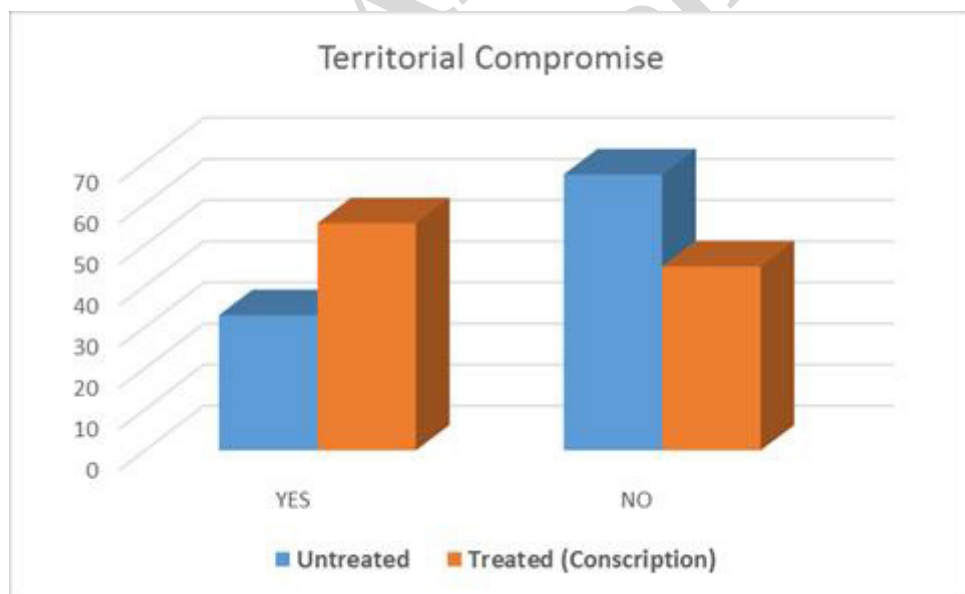
Figure 2
Attitudes toward Territorial Compromise (%)