The 2nd STOU Graduate Research Conference

ปัจจัยที่มีความสัมพันธ์กับการสูบบุหรี่ในนักเรียนอาชีวศึกษาชาย เมืองแอนยาง ประเทศเวียดนาม

Factors Related to Smoking among Male Vocational Students in An Giang Province, Vietnam

Nguyen Anh Tuan * Pornnapa Homsin ** Suwanna Junprasert ***

Abstract

Smoking in adolescents is also a major public health problem in Vietnam. Most current knowledge on cigarette smoking among adolescents has come from studies completed in other countries, not in Vietnam. Thus, the objectives of this study were to identify the prevalence of smoking and to examine the factors related to smoking.

This study was a correlational study. Data were collected with self-administered questionnaires. The sample of the study was 261 male vocational students in An Giang province, Vietnam. The triadic influence theory (TTI) was used as a conceptual framework. Statistics including frequency, percentage, standard deviation, mean, median, and binary logistic regression were used for data analysis.

The results of the study demonstrated that among Vietnamese male vocational students, 31% of them were current smokers. The average age of first use was 16.7 years old. Factors related to smoking significantly were academic success (OR = 3.41, 95%CI = 1.95-5.97), self-esteem (OR = 1.81, 95%CI = 1.01-3.23), smoking refusal self-efficacy (OR = 76.95, 95%CI = 18.25-324.35), attitude towards smoking (OR = 7.91, 95%CI = 4.20-14.89), cigarette accessibility(OR = 7.29, 95%CI = 2.52-21.05), parent smoking (OR = 1.93, 95%CI = 1.07-3.46), and school attachment (OR = 2.27, 95%CI = 1.31-3.94). The findings will be useful to contribute to the overall understanding and knowledge of smoking among Vietnamese adolescents. Then, the effective interventions could be developed to prevent adolescents from cigarette smoking.

Keywords: Smoking, Vocational students, Male adolescent

^{*} MS Candidate, Community Nursing Department, Faculty of Nursing, Burapha University, Email address: anhtuanthyt@yahoo.com

^{**} Assistant Professor, Community Nursing Department, Faculty of Nursing, Burapha University, Email address: phomsin09@gmail.com

^{***} Associate. Professor, Community Nursing Department, Faculty of Nursing, Burapha University, Email address: suwanna@yahoo.ac.th

The 2nd STOU Graduate Research Conference

Introduction

Adolescent's smoking is also a major public health problem in Vietnam. Vietnam is among the countries with the highest smoking rates in the world (WHO, 2009). The prevalences of current smoking were found 47.4% in male adults, 1.4% in women. Prevalence of cigarette smoking among Vietnamese adolescents who were male medical students was 20.7% (Hai & Kinh, 2006).

An Giang is a province located in the Mekong river delta. It has the border 95 kilometers along with Cambodia on the northwest. Cigarette smuggling from Cambodia bring into An Giang very easy. Then, tobacco can sale at open market along the border with low price. A huge numbers of Vietnamese men take up smoking in their teenage years. It is common to see them smoke cigarettes in special occasions such as wedding, funerals and having a meeting with friends. Many male teenagers believe that the ones who do not smoke are often laughed as "chicken". Although Vietnam has the regulation to prohibit selling cigarettes for people under 18, a lot of young people still purchase cigarettes. Moreover, cigarettes are sold almost everywhere in the country through street vendors and small shops (Dang, 2010). This indicates that adolescence is a critical time in the process of becoming a smoker, especially in males. In An Giang province, there is an only one vocational college. Most of the students in that college are male students and they live in the context of this province, which has smoking problem. Therefore, they are at risk to get into cigarette smoking.

Smoking has a lot of negative effects on adolescent smokers including physical, mental, social and economic. Smoking is a complex behavior (Homsin, 2006). There are various kinds of factors related to smoking such as self-esteem, self-efficacy, peer smoking, perceived prevalence, disapproval of smoking, gender, age, race and parental education (Kim, 2005; Ma et al. 2008; Eisenberg & Forsters, 2003).

In Vietnam, there are a small number of smoking studies and all of them are survey studies that just describe the prevalence of smoking. There is no studies that examine the association between factors. In addition, no studies focused on cigarette smoking among adolescents. Obviously, in Vietnam, far less is known about factors related to adolescent smoking. In the absence of such understanding, it is difficult to aid efforts for effective prevention programs for adolescents. The present study, therefore, examines factors related to smoking among male vocational adolescents. Theory of Triadic Influence (TTI) provides a framework for the study (Flay & Petraitis, 1994). Based on the TTI, the factors were classified into 3 groups: intrapersonal factors including age, academic success (GPA), self-esteem, smoking refusal self-efficacy; attitudinal factor including attitudes towards smoking, and social factors including cigarette accessibility, peer smoking, parent smoking, parent-child attachment and school attachment. The findings will be useful to develop interventions to prevent adolescents in Vietnam to start smoking.

Objectives

- 1. To identify the prevalence of smoking among male vocational students.
- 2. To examine the association between factors; intrapersonal, attitudinal, social, and smoking among male vocational students.

Methodology

Sample:

The 2nd STOU Graduate Research Conference

The sample was 261 male vocational students in An Giang, Vietnam. An appropriate sample size was calculated using the formula for proportion with knowing a finite population. (Parel, Cadito, Ferrer, De Guzman & Tan, 1973). Inclusion criteria consisted of (a) not having circulatory and/or respiratory health problems such as heart disease and asthma, because they are contraindications of smoking, (b) willing to participate in the study.

Sampling

An Giang province has only one vocational college. It includes eight faculties (faculty of mechanical engineering, faculty of aerodynamic, faculty of information technology, e-electronic and electric of air conditioning, faculty of electronic, faculty of economic, faculty of woman's affair and faculty of construction). In the faculty of woman's affairs, all students are female. Thus only 7 faculties were selected for data collection. The number of students to be sampled from each faculty was proportionate to the number of student enrolled in each faculty. Each faculty has several classrooms depending on the programs of the study and each class includes about 30 students. The number of classrooms, that were to be the sampled, depended on the proportional sample of each faculty and the classrooms were randomly selected. Finally, a sample of male vocational students who were a unit of analysis of the study was drawn from the selected classrooms.

Instruments:

The instruments used in this study were self-administered questionnaires. They comprised of single-item and multiple-item questionnaires to measure both the dependent and independent variables.

The instruments included demographic characteristics, smoking behaviors, self-esteem, smoking refusal self-efficacy, attitude towards smoking, parent-child attachment, and school attachment questionnaires. All questionnaires were translated into Vietnam by back-translation technique (Cha, Kim, & Erlen, 2007) with two Vietnamen who were experts in English. The reliabilities of the questionnaires computed by Cronbarch's alpha coefficient were sufficiently large to be acceptable (ranging from .75 to .91).

Data collection procedures and protective of human subject:

- 1. The study proposal was approved by IRB of the University. Then, researcher approaches the principle of the vocational college and the dean of selected faculties to inform about the study and asked for collaborations in survey procedures.
- 2. A passive consent procedure was used to obtain parental consent two week before the survey. The parents are informed about the study and asked for permission for their children to participate. The participants were also informed that their participation of the study is voluntary and that they can refuse to participate without penalty.
- 3. Data are collected with self-administered questionnaires at the most convenient time by researcher. The questionnaires were filled out in the classroom with adequate time (30-40 minutes) and the teachers were not in the classrooms during the assessment.
- 4. The researcher will remind the participants to check the completed questionnaires before returning them to the researcher. The participants also are informed that their answers will be analyzes anonymously and that only general conclusion will be drawn.
- 5. To ensure confidentiality, students were assigned code numbers rather than names. In addition, the students were instructed to seal their completed questionnaires in envelopes to maintain confidentiality.

Data analysis:

Descriptive statistics such as frequency, percentage, mean, median, and standard deviation (SD) are used to describe demographic characteristics and the prevalence of

The 2nd STOU Graduate Research Conference

smoking. Binary Logistic Regression (OR) with 95% confidence interval was used to explore the relationship between independent and dependent variables.

Results of the study

Demographic characteristics:

There were 34.5% of the respondents studying in electronic & e-electronic faculties. The percentages of other respondents studying in construction, technology & economic, and engineering & aerodynamic were 23.0%, 21.8% and 20.7%, respectively. The respondents distribution of educational levels were almost equal. Most of them (83.2%) were living with their parents. Regarding the educational level of parents, the distribution was similar between fathers and mothers. Approximately, 65% of the sample's parents had completed primary education and secondary education. The educational level of fathers was a little higher than those of mothers. Almost 10% of the fathers had completed diploma or higher compared to 5% of the mothers. Over half of them were agriculturists and about 20% of them were tradesmen.

The prevalence of smoking:

There were 65.6 % of respondents were non-smokers while 31.0% and 3.4% of them were current smokers and ex-smokers respectively. The average age of first use was 16.7 years old (SD = 2.28). In this study, smoking status was categorized into two groups: non smokers and current smokers. Therefore, the ex-smokers (n = 9) were excluded from the study and only 252 were used for further analysis.

The factors related to smoking:

There were seven variables including academic success, self-esteem, smoking refusal self-efficacy, attitude towards smoking, cigarette accessibility, parent smoking and school attachment significantly associated with smoking behavior. The results revealed that the respondents with lower GPA (\leq 6.5) were more likely to smoke cigarettes by 3.41 times (95% CI = 1.95 -5.97), compared to those with higher GPA. The respondents with low selfesteem were 1.81 times (95% CI = 1.01-3.23) likely to smoke, compared to those with low self-esteem. Similarly, the respondents with low refusal self-efficacy were 76.95 times (95%) CI= 18.25-324.35) more likely to smoke than those with high smoking refusal self-efficacy. The respondents with favorable attitude towards smoking and with poor school attachment increased the risk of smoking by 7.91 times (95% CI = 4.20-14.89) and 2.27 times (95% CI = 1.31-3.94), compared to those with unfavorable attitude towards smoking and those with good school attachment respectively. Compared to respondents who perceived that getting cigarettes to smoke was difficult, those who perceived that cigarette accessibility was easy were 7.29 times (95% CI = 2.52-21.05) more likely to smoke. Compared to respondents having no parent smokers, those whose parents smoked cigarettes were more likely to smoke 1.93 times (95% CI = 1.07-3.46). There was no significant association between age, peer smoking, and parent-child attachment with smoking (see Table 1).

การประชุมเสนอผลงานวิจัยระดับบัณฑิตสึกษา มหาวิทยาลัยสุโขทัยธรรมาธิราช ครั้งที่ 2 The 2nd STOU Graduate Research Conference

Table 1. Logistic Regression Analysis for Each Variable and Smoking Status (n = 252)

Variables	Non-Smoke		Smoke		OP	059/ CI	n ualua
	n	%	n	%	OR	95% CI	p value
Age							
$\leq 20^{(R)}$	100	66.7	50	33.3			
> 20	71	69.6	31	30.4	0.87	0.51-1.50	.624
Academic success (GPA)							
High $^{(R)}$ (> 6.5)	130	76.9	39	23.1			
Low (≤ 6.5)	41	49.4	42	50.6	3.41***	1.95-5.97	<.001
Self-esteem							
High ^(R)	69	40.4	22	27.2			
Low	102	63.4	59	36.6	1.81*	1.01-3.23	.043
Smoking refusal self-efficacy							
High ^{(R}	113	98.3	2	1.7			
Low	58	42.3	- 79	57.7	76.95***	18.25-324.35	<.001
Attitude towards smoking	•		,,	0,.,	, 0.50	10.20 0200	
Unfavorable ^(R)	113	87.6	16	12.4			
Favorable	58	47.2	65	52.8	7.91***	4.20-14.89	<.001
Cigarette accessibility	20	. 7 . 2	0.5	02.0	7.51	1.20 11.09	
Difficulty (R)	47	92.2	4	7.8			
Easy	124	61.7	77	38.3	7.29***	2.52-21.05	<.001
Peer smoking	121	01.7	, ,	30.3	7.29	2.32 21.03	<.001
No (R)	16	84.2	3	15.8			
Yes	155	65.5	78	33.5	2.48	0.75-9.48	.125
Parent of smoking	133	03.3	70	33.3	2.40	0.75-7.40	.123
No ^(R)	69	76.7	21	23.3			
Yes	102	63.0	60	37.0	1.93*	1.07-3.46	.027
Parent-child attachment	102	03.0	00	37.0	1.93	1.07-3.40	.027
Good (R)	65	71.4	26	28.6			
Poor	106	65.8	55 55	34.2	1.29	0.74-2.27	.362
	100	03.8	33	34.2	1.29	0.74-2.27	.302
School attachment	0.1	77 1	27	22.0			
Good (R)	91	77.1	27	22.9	2 27**	1 21 2 04	002
Poor	80	59.7	54	40.3	2.27**	1.31-3.94	.003

Note: (R) = reference group *p < .05 **p < .01 ***p < .001

Discussion

The prevalence of smoking among male vocational students in An Giang, Vietnam This study found that the prevalence of current smoking was 31.0%. The result of the study was higher than that was found from the previous study in Vietnam. A global survey in 2006 among male medical students reported that 20.7% of male medical students smoked cigarettes (Hai & Kinh, 2006). The samples of those two studies are different. The medical students study very hard and have high responsibility. They likely spend more time for studying and practicing. Meanwhile vocational students have more time to enjoy with their peers in the varieties of situations. Thus it can be assumed that vocational students have more opportunities to smoke cigarettes. Compared to other studies conducted in Asian countries, the prevalence of smoking among adolescents in Vietnam is much higher than that

The 2nd STOU Graduate Research Conference

found in Thailand (19.8%) (Assanangkornchai, Pattanasattayawong, Samangsri, & Mukthong, 2007) in China (15.7%) (Mak et al, 2010) and in Korea-Chinese (9.9%) (Park, Yoon, Yi, Cui, & Nam, 2011. The prevalence of current male smokers was 3.0% and 9.9%, respectively. The explanation is that smoking is a part of the life the social culture of the Vietnamese community. Low price of tobacco and easily cigarette accessibility were also comfortable for smoking cigarette (Dang, 2010). Adults and children smokers can buy cigarettes from coffee shops, restaurants or street vendors conveniently (Global Youth Tobacco Survey [GYTS], 2003). However, Vietnamese adolescents start smoking in older age, comparing to the studies of Homsin (2009) and Naing et al. (2004). Smoking initiation found in the studies of Homsin and Naing et al. were 12.8 and 15.0 years old, respectively.

Relationships between each independent variables and smoking behavior

The variables including academic success, self-esteem, smoking refusal self-efficacy, attitude towards smoking, cigarette accessibility, parent smoking and school attachment were significantly associated with smoking behavior. These significant variables are discussed in the following paragraphs.

The students with academic successful are more likely to spend more time for studying and then they may have fewer opportunities to be exposed to cigarettes (Homsin, Srisuphan, Pohl, Tiansawad, Patumnanond, 2009). Li and Armstrong (2009) mentioned that low academic achievement leads to a loss of self value that was a reason may be explain the relationship of smoking and GPA. The results are similar to previous studies (Homsin et al., 2009; Li & Armstron., 2009; Naing et al., 2004). According to The Theory Influence (TTI), it mentions that one's general ability to control behaviors and emotions might effect one's sense of self, defined in terms such as self-esteem, and self image. Lacking of self-esteem is problem in adolescents and that has consequences for problem health behaviors such as alcohol and tobacco use (Mann et al., 2004). These findings were consistent with some of previous studies (Jackson, 1997; Kim, 2005; Glendingning & Inglis, 1999; Guillon, Crocq, & Bailey, 2007). Similarly, refusal self-efficacy indicated an ability to avoid smoking and intention to continue smoking (Sterling et al., 2007). Then, students who have low refusal selfefficacy are more likely to smoke. The findings are consistent with previous studies (Fagan et al., 2003; Guillon, Crocq, & Bailey, 2007; Hiemstra, Otten, De Leeuw, Van Schayck, & Engels, 2011; Ma et al., 2008).

Attitudes towards smoking are related to smoking. The findings support the theory of Reasoned Action (Azjin & Fishbein, 1980) and Planned Behavior (Azjen, 1991), which posited that behavior is a function of a person's intention, which, in turn, are determined by personal attitude and social norms. Adolescent smokers are more likely than nonsmokers to discount the negative health consequences of smoking, but perceive the positive functions of smoking (USDHHS, 1990, 1994 cited in Homsin, 2006). Other studies also found the relationship between smoking and attitude towards smoking (Haddad & Malak., 2002; Homsin et al., 2009; Piko, 2001).

Cigarette accessibility in Vietnam is easy. Adolescents can buy cigarettes from coffee shops, restaurants or street vendors conveniently. Tobacco is sold at open markets along the border at low prices. The price of cigarettes in Vietnam was cheaper than 2 to 3 times, compared to neighboring countries (Minh, 2011). Doubeni, Li, Fouayzi and DiFranza, (2008) pointed out that cigarettes accessibility is the gateway for all risk factors that contribute to smoking in adolescents. Students who get cigarette easily were likely more smoke than male students who get cigarettes difficulty. The results in this study consistent with several previous studies (Doubeni et al., 2008; Gilpin, Lee & Pierce, 2004).

The 2nd STOU Graduate Research Conference

Parental smoking behavior had a direct effect to adolescent smoking behavior which provides higher risk of lifetime experimental smoking for adolescents. The findings of the present study are supported with previous studies (Jamison, Muula, Siziya, Graham, Rudatsikira, 2010; Harakeh et al., 2004; Morton et al., 1999; Naing et al., 2004; Ma et al., 2008). School attachment is also related to smoking. Adolescents who have affective ties are less likely to engage in risk behaviors. (Eccles et al., 1996 cited in Homsin, 2006). The students with strongly bonds in the school usually focus on their studies, other educational activities or social associations/clubs. Then, they have less opportunity to get into cigarette smoking. The results are similar to previous studies (Chang et al., 2011; Chen & Mayshen, 2006; Tucker et al., 2011).

Recommendations

According to the findings demonstrating the factors related to smoking among male vocational students in Vietnam, recommendations which are based on the consideration all of the related factors discussed previously are provided in the following paragraphs.

First, various kinds of informations about cigarette smoking should be provided for adolescents such as chemicals in cigarettes, harmful health effects from smoking. These lead to the development of negative attitudes about smoking and reduce the attractiveness of smoking among adolescents.

Second, there is a need for providing programs to enhance refuseal self-efficacy skills and self-esteem. Therefore, health personel or teachers should be supported for special training to implement the program correctly.

Third, parents who smoke should be encouraged to stop smoking, as they are a role model for their children.

Fourth, school activities such as sport, music should be supported. As the adolescents spend more time at schools, various kinds of activities provided will lead them to have an oppotunity to joy with other students and teachers. They feel enjoyable and happy to study in schools. These can build up the relationship between students and their schools, which will reduce the risk of smoking among adolescents. Moreover, students who do poorly in schools should be more attended and helped for improving academic performance. They should be encouraged to spend more time for reading, doing homework or other academically related activities. These will decrease the opportunities to engage into deviant behavior, including smoking.

Fifth, the specific policy such as a smoking-free areas, high tax on cigarettes, selling cigarettes for young people are prohibited should be suggested to the government and other organizations that may concern. They will reduce the accessibility of adolescents to get a cigarette to smoke easily.

Last, the future research shoud study in female or other representative samples such as adolescents who studying in secondary schools or who are outside the schools, as the smoking factors might not be the same as those found in this study. Moreover, the effectiveness of specific preventation program may be developed, which are based on the findings of this study.

References

Ajen, I. (1991). The theory of planed behavior. *Organizational Behavior and Human Decision Process*, 50, 179-211.

Ajen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Englewood-Cliffs, NJ: Prentice-Hall.

The 2nd STOU Graduate Research Conference

- Assanangkornchai, S., Pattanasattayawong, U., Samangsri, N., & Mukthong, A. (2007). Substance use among high-school students in Southern Thailand: Trends over 3 years (2002-2004). *Drug and Alcohol Dependence*, 86, 167-174.
- Cha, E. S., Kim, K. H., & Erlen, J. A. (2007). Translation of scales in cross-cultural research: Issues and techniques. *Journal of Advanced Nursing*, *58*, 386-395.
- Chang, H., Wu, W., Wu, C., Cheng, J., Hurng, B. S., & Yen, L. (2011). The incidence of experimental smoking in school children: An 8-year follow-up of the child and adolescent behaviors in long-term evolution (CABLE) study. *BMC Public Health*, 11, 844.
- Chen, M. (2006). Guan, parental attachment, school bonding, and susceptibility to initiate smoking in non-smoking Chinese Americans. *ProQuest Web site*. Retrieved December 17, 2011 from http://gradworks.umi.com/32/20/3220840.html
- Dang, V. (2010). Moi Anh Mot Dieu!. Retrived June, 25, 2011, from http://talk.onevietnam.org/moi-anh-mot-dieu/
- Doubeni, C. A., Li, W., Fouayzi, H., & DiFranza, J. R. (2008). Perceived Accessibility as a Predictor of Youth Smoking. *Annals Of Family Medicine*, 6, 323-330.
- Eisenberg, M. E., & Forster, J. L. (2003). Adolescent Smoking Behavior Measures of Social Norms. *American Journal of Preventive Medicine*, 25, 122-128.
- Fagan, P., Eisenberg, M., Frazier, L., Stoddard, A. M., Avrunin, J. S., & Sorensen, G. (2003). Employed adolescents and beliefs about self-efficacy to avoid smoking. *Addictive Behaviors*, 28, 613-626.
- Flay, B. R., & Petraitis, J. (1994). The theory of triadic influence: a new theory of health behavior with implications for preventive interventions. *Advances in Medical Sociology*, *4*, 19-44.
- Gilpin, E. A., Lee, L., & Pierce, J. P. (2004). Does adolescent perception of difficulty in getting cigarettes deter experimentation? *Preventive Medicine*, *38*, 485-491.
- Glendinning, A., & Inglis, D. (1999). Smoking behaviour in youth: the problem of low self-esteem? *Journal of Adolescence*, 22, 673-682.
- Global Youth Tobacco Survey [GYTS] (2003). The 2003 GYTS In Vietnam: A Preliminary Report On Youth Tobacco Use. Retrieved 24, November, 2011, from http://www.wpro.who.int/NR/rdonlyres/D24A22BD-13C0-4D5B-ADA0-B26F5CA1EDFA/0/VietNam.pdf
- Guillon, M. S., Crocq M. A. & Bailey, P. E. (2007). Nicotine dependence and self-esteem in adolescents with mental disorders. *Addictive Behaviors*, *32*, 758–764.
- Haddad, L. G., & Malak, M. Z. (2002). Smoking habits and attitudes towards smoking among university students in Jordan. *International Journal of Nursing Studies*, *39*, 793-802.
- Hai, P. T., & Kinh, L. N. (2006). Điều tra toàn cầu về tình hình hút thuốc lá của sinh viên Y khoa, nghiên cứu tại Việt Nam, năm 2006. [Global Survey of smoking among medical students in Vietnam, 2006]. Retrieved November 16, 2011 from http://www.vinacosh.gov.vn/?mPage=0FN80J01T179
- Harakeh, Z., Scholte, R. H. J., Vermulst, A. A., De Vries, H., & Engels, R. C. M. E. (2004). Parental factors and adolescents' smoking behavior: an extension of The theory of planned behavior. *Preventive Medicine*, *39*, 951-961.
- Hiemstra, M., Otten, R., De Leeuw, R. N. H., Van Schayck, O. C. P., & Engels, R. C. M. E. (2011). The changing role of self-efficacy in adolescent smoking initiation. *Journal of Adolescent Health*, 48, 597-603.

The 2nd STOU Graduate Research Conference

- Homsin, P. (2006). *Predictors of Smoking Uptake among Thai male Adolescents: Early Smoking Stages*. Doctoral dissertation, Graduate School, Chiang Mai University.
- Homsin, P., Srisuphan, W., Pohl, J. M., Tiansawad, S., & Patumannond, J. (2009). Predictor of Early Stages of Smoking Uptake among Thai Male Adolescents. *Thai Journal of Research*, 13, 28-42.
- Jackson, C. (1997). Initial and experimental stages of tobacco and alcohol use during late childhood: relation to peer, parent, and personal risk factors. *Addictive Behaviors*, 22, 685-698.
- Jamison, B., Muula, A. S., Siziya, S., Graham, S., & Rudatsikira, E. (2010). Cigarette smoking among school-going adolescents in Lithuania: Results from the 2005 Global Youth Tobacco Survey. *BMC research notes*, *3*, 130.
- Kim, Y. H., (2005). Korean adolescent's smoking behavior and its correlation with psychological variables. *Addictive Behaviors*, *30*, 343-350.
- Li, H., & Armstrong, D. (2009). Is There a Correlation between Academic Achievement and Behavior in Mainland Chinese Students? *Asian Social Science*, *5*, 3-9.
- Ma, H., Unger, J. B., Chou, C., Sun, P., Palmer, P. H., Zhou, Y., Yao, J., et al. (2008). Risk factors for adolescent smoking in urban and rural China: findings from the China seven cities study. *Addictive Behaviors*, *33*, 1081-1085.
- Mak, K., Ho, S., Thomas, G. N., Lo, W., Cheuk, D. K., Lai, Y., & Lam, T. (2010). Smoking and sleep disorders in Chinese adolescents. *Sleep Medicine*, 11, 268-273.
- Mann, M., Hosman, C. M. H., Schaalma, H. P. & Vries, N. K. (2004). Self-esteem in a broad-spectrum approach for mental health promotion. *Health Education Research*, *19*, 357–372.
- Minh, N. (2011) Tăng sức mạnh của Luật Phòng, chống thuốc lá [Enforcement of the Tobacco Control Act]. Retrieved May 16, 2012 from http://www.baokinhteht.com.vn/home/2011082610599855_p0_c121/tang-sucmanh-cua-luat-phong-chong-thuoc-la.htm
- Morton, B. S., Crump, A. D., Haynie, D. L., Saylor, K. E., Eitel, P., & Yu, K. (1999). Psychosocial, School, and Parent Factors Associated with Recent Smoking among Early-Adolescent Boy and Girl. *Preventive Medicine*, 28, 138-148.
- Naing, N. N., Ahmad, Z., Musa, R., Hamid, F. R. A., Ghazali, H., & Bakar, M. H. A. (2004). Factors Related to Smoking Habits of Male Adolescents. *Tobacco induced diseases*, 2, 133-140.
- Parel, C. P., Caldito, G. C., Ferrer, P. L., Sinsioco, C. S. & Tan, R. N. (1973). Sampling design and procedures. The Research Training Programm of the Philippine Social Science Council.
- Park, S. E., Yoon, S., Yi, Y., Cui, W., & Nam, B. (2011). Prevalence and Risk Factors of Adolescents Smoking: Difference Between Korean and Korean-Chinese. *Asian Nursing Research*, *5*, 189-195.
- Piko, B. (2001). Smoking in adolescence do attitudes matter? *Addictive Behaviors*, 26, 201-217.
- Sterling, K. L., Diamond, P. M., Mullen, P. D., Pallonen, U., Ford, K. H., & McAlister, A. L. (2007). Smoking-related self-efficacy, beliefs, and intention: assessing factorial validity and structural relationships in 9th-12th grade current smokers. *Addictive Behaviors*, *32*, 1863-1876.
- Tucker, J. S., Edelen, M. O., Go, M. H., Pollard, M. S., Green, H. D., & Kennedy, D. P.(2011). Resisting Smoking When a Best Friend Smokes: Do Intrapersonal and Contextual Factors Matter?. Journal of Research on Adolescence. Retrieved 11

The 2nd STOU Graduate Research Conference DecemberNovember, 2011, from

http://onlinelibrary.wiley.com/doi/10.1111/j.1532-7795.2011.00761.x/abstract World Health Organization [WHO] (2009). Tobacco control Background. Retrieved June, 24, 2011, from

http://www.wpro.who.int/vietnam/sites/dhp/tobacco_control/background.htm