Cigarette Plain Packaging Perceptions on Intent to Abstain from Smoking among Thai Female Youth

Narumon Auemaneekul[*] *Dusit Sujirarat*[**] *Pimpan Silpasuwan*[*] *Pratana Satitvipawee*[***] *Chukiat Viwatwongkasem*[***] *Malinee Sompopcharoen*[****] *Nithat Sirichotiratana*[*****]

ABSTRACT

This study examined the etiological model of cigarette plain packaging perception on intention to abstain from smoking among Thai female youth. The tested hypothesis proposed that the constructs of perception on plain packaging, perceived susceptibility and severity of smoking consequences and fear arousal from salient health warnings will predict intent to abstain from smoking. Structural equation modeling (SEM) was used to analyze the data and variables were assessed using self-report questionnaires. Multistage stratified random sampling was used to select subjects from both high schools and vocational schools in Bangkok. Random sampling of 15- to 24-year-old females was used to recruit a total of 438 subjects. The sample size included nonsmokers (86.3%), former smokers (5.48%) and smokers (8.22%). The SEM showed a good fit to the data (χ^2= 1.060, df=2, P-value=0.589, CFI=0.999, TLI=0.999 and RMSEA<0.001, SRMR=0.005). In the SEM showed that smokers and former smoker had significantly negative associations with intent to abstain (β=-0.49 and-0.087, p<0.001 and 0.026) while perceived severity and fear appeal were significantly positive association with intent to abstain (β=0.237 and 0.124, p<0.001 and 0.003). Nonetheless, SEM revealed that the effect of perception on plain packaging, perceived severity and age of smoker and former smoker subjects on intent to abstain was partly mediated by fear arousal from salient health warnings. In addition, the effect of smokers on intent to abstain was also partly mediated by perceived severity. This information could be useful in designing interventions to promote abstinence from smoking among female youth and advocating and implementing the plain packaging policy in Thailand.

Keywords: cigarette plain packaging, smoking abstinence, female youths, perception

J Public Health 2019; 49(2): 155-169

Article info: Received August 10, 2018; Revised April 1, 2019; Accepted April 4, 2019.

Correspondence: Narumon Auemaneekul. Department of Public Health Nursing, Faculty of Public Health, Mahidol University. Bangkok 10400, THAILAND. E-mail: naruemon.aue@mahidol.ac.th

* Department of Public Health Nursing, Faculty of Public Health, Mahidol University

** Department of Epidemiology, Faculty of Public Health, Mahidol University

*** Department of Biostatistics, Faculty of Public Health, Mahidol University

**** Department of Health Education and Behavioral Sciences, Faculty of Public Health, Mahidol University

***** Department of Public Health Administration, Faculty of Public Health, Mahidol University

Introduction

A strong health warning graphic on tobacco packages is a significant source of health information for smokers and nonsmokers. The World Health Organization (WHO) and Framework Convention on Tobacco Control (FCTC) indicated that plain packaging policy is most likely to be effective in removing brand images, reducing appeal to the product and making health warnings more prominent.[1] Moreover, communication theory suggests that packs deprived of color or plain cigarette packs will increase the prominence of Health Warning Labels (HWLs) and decrease the attractiveness of brand images.[2] Support for plain packaging derives from the belief that tobacco products sold in plain packs could reduce appeal and so are more likely to deter youth and nonsmokers, from starting tobacco use and more likely to motivate smokers to quit and stay quit.

Thailand has a reputation as a country that has successfully implemented control and monitoring policies and measures continuously directed at preventing smoking dangers. Under the conditions of a total advertising ban, packaging designs serve as enormous crucial communication tools to restrict promotion of brand image, although only colorful packages are available in the market in Thailand. However, Thailand began to use pictorial health warnings since 2005 and six warning pictures were rotated on cigarette packages. From then on, Thailand has updated health warnings regularly. In 2009, the last rotation with a new rotation of ten health warning pictures included a baby exposed to smoke, smoke home ban, disapproving look of smoking smell from girls, heart attack, lung cancer, mouth cancer, pulmonary disease, laryngeal cancer, stroke and causing death.[3]

Globally around 40% of men smoke compared with around 9% of woman. However, the epidemic of tobacco use among woman is increasing. More research is needed to understand trends in tobacco use among women. WHO conducted a survey of smoking trends among youth, and the results showed that one half of 151 countries surveyed indicated similar numbers of boys and girls who smoked. Evidence suggested that most of these girls and boys will continue to smoke until adulthood. Therefore, studying intention not to smoke is privileged. Many girls believe that smoking could control weight; moreover, low self-esteem is deemed one factor related to smoking among girls. In addition, the tobacco industry marketing campaign towards women falsely links tobacco use to the concept of beauty, prestige, and freedom. Alarming reports from WHO showed that every year, 1.5 million women die from tobacco use and noted an increased woman's risk for cancer of the cervix. Unless prompt actions are

taken, tobacco used could kill up to 2.5 million women every year by 2030.[4]

The Global Youth Tobacco Survey[2] reported that Thai youth smokers start smoking at 11 years old and the female youth smoker rate has been increasing. Presently, Thailand's Ministry of Public Health (MOPH) is taking plain packaging into account. A current draft of the Tobacco Consumption Control Act (TTCA) is set to recommend more restrictions, including the government imposing the design of tobacco product packaging and facilitating the introduction of plain packaging in Thailand to raise health concerns from tobacco use among smokers and nonsmokers especially among female youth smokers as new target consumers.[6] Female youth smoking prevention and cessation continues to be an important highlight for public health and consumer welfare. Features such as type, picture and HWLs on tobacco packages are important in direct and indirect outcomes of counter-persuasive efforts. One recent study has shown that plain packaging would serve to boost the allure of smoking among youth, as it could clearly present health warning pictures and warnings on the package.[7] However, little is known about how female youth interpret HWLs with plain packaging. Therefore, understanding female youth perceptions on plain packaging would be important and useful to further drive policy in Thailand.

In this study, innovative cigarette plain package production was introduced to female youth participants. It included four colors on covers: plain green, dark brown, black and off-white box. The selected pictures comprised lung cancer, mouth cancer, laryngeal cancer, facial cancer, foot gangrene and a picture of a baby expose to smoke.

Literature[5] showed that health and disease-based anti-smoking images evoked feelings of disgust and sympathy among youth subjects, which appeared to be sufficient to reduce future smoking intentions. Empirical studies regarding social and health psychology theories have also indicated that "fear appeals" are effective in motivating change of health behavior, e.g., quitting, because fear is influenced by negative health beliefs of people about smoking which is ultimately increasing thoughts of quitting.

Therefore, self-administered questionnaires were employed to ask questions related to packaging with the aim of examining the etiological model of cigarette plain packaging perception concerning the effect on intention to abstain from smoking among Thai female youth. The tested hypothesis proposed that the constructs of perception on plain packaging, perceived susceptibility, perceived severity of disease or consequences of smoking and fear arousal of salient health warnings will predict smoking abstinence intention.

Method

Research Design The study employed a predictive design where correlations and Structural Equation Modeling (SEM) were employed to determine correlations between measures and intent to abstain from smoking.

The population: The study was conducted in schools and colleges in Bangkok together with four provinces from four regions of Thailand, from July to August 2012.

The participants: Subjects from all settings were recruited and voluntarily participated in the program by criteria measurement of secondary school and college populations. The subjects were recruited using multistage stratified random sampling from four provinces representing four regions of Thailand (north, northeast, central and south). Later, two schools in each region were selected by simple random sampling. In each school, one class with the sample age 15- to 24-year-old female youths was selected. A total of 438 female youths were recruited using the criteria of one variable per 30 subjects. The sample size included those who nonsmokers 86.3%, smokers 8.22% and former smoking females, 5.48%.

Research instrument: The innovative cigarette plain pack production (mock-ups) included four colors on covers: plain green, dark brown, black and off-white. Fifty percent of health warning pictures covered both sides of the pack. Six of the selected health warning pictures were located on the front. Each cigarette pack was typed in a standard font without logo or brand. The contents and cigarette plain pack designs used as a stimulus agent were identical (Figure 1). Self-administered questionnaires, developed by researchers, comprising seven parts, were used to collect data. The questionnaires included demographic characteristics, smoking status, perception on plain packaging, perceived susceptibility and perceived severity of disease, fear arousal and intention to abstain from smoking. Each question was assigned multiple-choice responses and the participants were asked to select one single response. All responses were measured on a three-point scale ranging from 1 (yes), 2 (unsure) to 3 (untrue). Regarding the intention to abstain from smoking, the scaled responses were scored from 1 to 10 on a continuum with 1 “not at all having confidence to abstain” to 10 “fully having confidence to abstain”. The validity of questionnaires was examined by three experts and instrument reliability (intention to abstain from smoking) was tested among 20 students resulting in an alpha Cronbach coefficient of .80.

Figure 1 Cigarette plain packaging mock-ups

Data collection: The research was reviewed and approved by the Ethics Review Committee for Human Research, Faculty of Public Health, Mahidol University, No. MUPH 2012-180. All participants and their parents were fully informed and signed consent was obtained before participation.

Data analysis

Data Analysis and Statistics Used in the Research

Data was analyzed using SPSS for Windows, Version 18.0.

Statistics used in the analysis are described below.

1. Descriptive statistics and relationship were employed between measures and intent to abstain.

2. SEM was conducted after all assumptions were met to examine and verify the etiological model of cigarette plain packaging perception concerning the effect on intent to abstain from smoking among Thai female youth. The tested hypothesis proposed that the constructs of perception on plain packaging, perceived susceptibility, perceived severity of disease or consequences of smoking and fear arousal of salient health warnings would predict intent to abstain from smoking.

Results

The result showed that the majority of female youth were aged from 15 to 17, followed by 18 to 20 years old. On average, the subjects' age was approximately 17 years. The oldest was 23 and the youngest was 13 (Table 1).

Even though nonsmoking female youth were found to comprise the majority rate of 86%, the study revealed a former smoking rate of 6% and smoking rate of 8% (Table 1). These rates were nearly equal to the survey conducted by the Global Youth Tobacco revealing the female youth smoking rate of 10% was higher than the GYTS in Thailand indicating only 2.3%.

Table 1 General characteristics of participants (n=438)

Variable	Number	Percentage
Age		
<15	82	18.7
15-17	222	50.7
18-20	125	28.5
>20	9	2.1
Mean=16.58 years old SD =2.00 ปี	Min-max=13-23 years old	
Smoking status		
Non smokers	378	86.3
Smokers	36	8.22
Former smokers	24	5.48
Fear	Mean= 7.82 SD =2.02	Min-max=1-10
Low	106	24.20
Moderate	145	33.11
High	187	42.69
Severity	Mean= 28.94 SD =3.52	Min-max=12-33
Low	16	3.69
Moderate	42	9.68
High	376	86.64
Susceptibility(n=435)	Mean= 15.45 SD=2.35	Min-max=7-18
Low	32	7.36
Moderate	72	16.55
High	331	76.09
Perception to package	Mean= 28.97 SD =5.15	Min-max=14-38
Low	106	24.20
Moderate	145	33.11
High	187	42.69
Intentions of abstaining	Mean= 9.29 SD =1.76	Min-max=1-10
Low (1-8)	53	12.10
High (9-10)	385	87.90

The SEM results showed a good fit of data revealing that former smokers and smokers were significantly negative association with intent to abstain while perceived severity and fear arousal from plain packaging were significantly positive association with intent to abstain. However, the SEM results revealed that the effect of perception on plain packaging, perceived severity, age, smokers and former smoker were partly mediated by fear arousal. In addition, the effect on smokers was also partly mediated by perceived severity and fear arousal concerning intent to abstain (Figure 2 and Table 2).

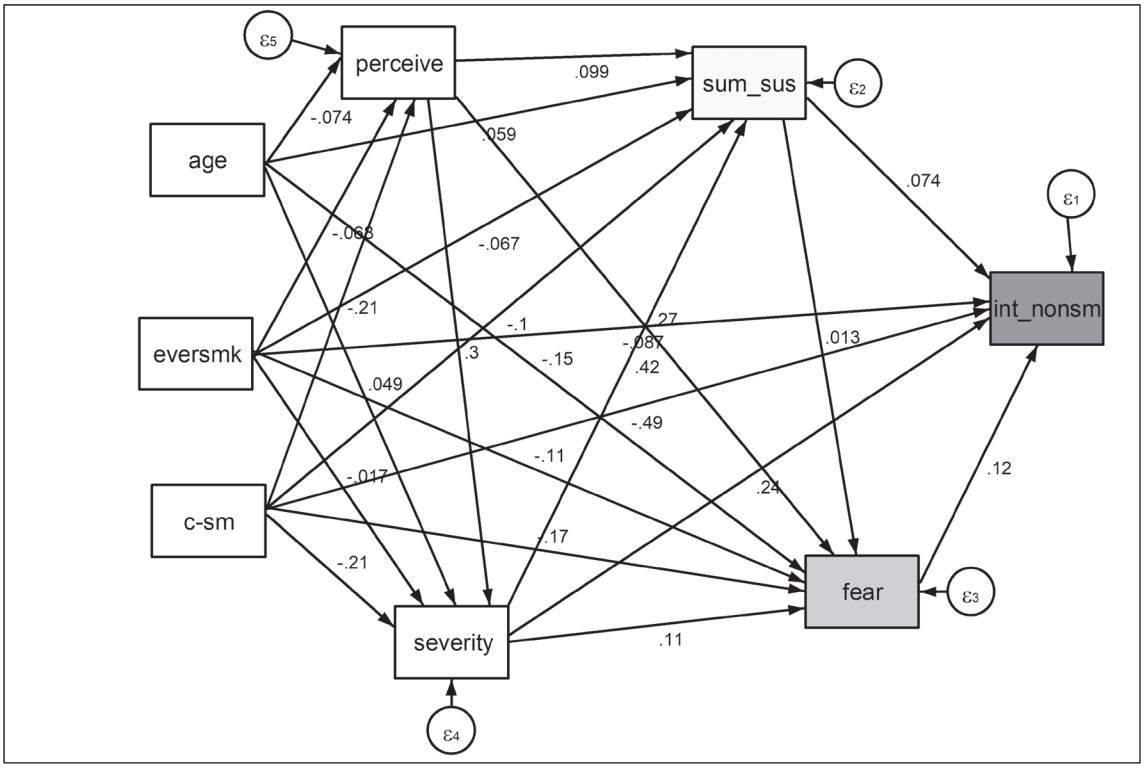

Figure 2 Structural Equation Modeling (SEM) of intent to abstain from smoking among female youth

Note: eversmk = Former smokers, c-m = current smokers or Smokers, sum__sus = susceptibility, int__nosm = intent to abstain from smoking

Fit statistics: chi-square = 1.060 df = 2 p = 0.589, RMSEA <0.001; CFI = 0.999; TLI = 0.999; SRMR = 0.005

Table 2 Result of direct effects (DE), indirect effects (IE) and total effects (TE) of intention to abstain from smoking

		DE		IE		TE	
DV	**IV**	**β**	**P-value**	**β**	**P-value**	**β**	**P-value**
Susceptibility	Severity	0.421	<0.001	-	-	0.421	<0.001
	Perception	0.099	0.044	0.124	<0.001	0.224	<0.001
	Age	0.059	0.198	0.004	0.871	0.063	0.221
	Smokers	-0.067	0.147	-0.022	0.353	-0.089	0.085
	Former smokers	-0.101	0.036	-0.135	<0.001	-0.236	<0.001
Intent to abstain	Susceptibility	0.074	0.098	0.002	0.810	0.076	0.094
	Fear arousal	0.124	0.003	-	-	0.124	0.003
	Severity	0.237	<0.001	0.046	<0.001	0.282	<0.001
	Perception	-	-	0.125	<0.001	0.125	<0.001
	Age	-	-	-0.009	0.610	-0.009	0.610
	Smokers	-0.087	0.026	-0.032	0.075	-0.119	0.005
	Former smokers	-0.493	<0.001	-0.114	<0.001	-0.607	<0.001
Fear arousal	Susceptibility	0.013	0.810	-	-	0.013	0.810
	Severity	0.110	0.053	0.006	<0.001	0.115	0.042
	Perception	0.275	<0.001	0.035	<0.001	0.310	<0.001
	Age	-0.148	0.002	-0.017	0.356	-0.165	0.001
	Smokers	-0.110	0.022	-0.024	0.179	-0.134	0.008
	Former smokers	-0.172	0.001	-0.092	<0.001	-0.264	<0.001
Severity	Perception	0.296	<0.001	-	-	0.296	<0.001
	Age	0.049	0.322	-0.022	0.166	0.027	0.602
	Smokers	-0.017	0.737	-0.020	0.200	-0.037	0.476
	Former smokers	-0.206	<0.001	-0.063	0.001	-0.269	<0.001
Perception	Age	-0.074	0.154	-	-	-0.074	0.154
	Smokers	-0.068	0.190	-	-	-0.068	0.190
	Former smokers	-0.214	<0.001	-	-	-0.214	<0.001

Discussion

This research offered evidence of how female youth are appraising and interpreting HWLs on plain or regular packs and explored how dominant appraisals may affect HWLs, playing a crucial role in youths' perceptions of fear arousal and intent to quit smoking. The HWLs on plain packaging stimulated increased intention not to smoke among female youth. Irrespective of smoking experience, pack image perceptions became more negative over time with plain packs enhancing HWLs pictures to be more obvious than on company-branded packs. However, this study revealed that former smoker and smoker female youth were significantly negative association with intent to abstain, meaning the HWLs pictures on plain packaging could not evoke fear concerning the negative health consequences among female youth who smoked or former smoking. This might have been because those subjects were already familiar with HWLs pictures than those of nonsmokers. They felt no fear regarding the HWLs pictures as they perceived they had no effect on them. This result was supported by Nyman et al.[4] reporting that health-based warning messages did not necessarily evoke fear of experiencing negative health effects with a deterrent effect on youth. However, health and disease-based anti-smoking images may elicit feelings of disgust and empathy among a sample of nonsmoker female youth, which could be sufficient to lower future smoking intentions.[8]

However, the result of this study revealed perceived severity and fear arousal were significantly positive association with intent to abstain. Nonetheless, the effect of perception on plain packaging, perceived severity, age, smokers and former smokers on intent to abstain was partly mediated by fear arousal from salient health warnings. In addition, the effect of smokers on intent to abstain was also partly mediated by perceived severity. Thus, it could be inferred from the results that HWLs on plain packaging could effectively motivate the beliefs of female youth to regard smoking as a potential health risk. HWLs could activate emotional reactions such as fear or worry by female youth because they perceived serious adverse health consequences from cigarette smoking and that guided them to protective behaviors such as curbing or quitting smoking. This was congruent with "Health Behavioral Models" of health behavioral change that set indicators such as smoking status, perception on health warning, perceived disease susceptibility, perceived disease severity and fear arousal, combined in a predictive equation to explain behavioral intent and change. Therefore, this study confirmed that health warning pictures on cigarette packages were strongly associated with intent to abstain

among female youth.

Fear has been shown to be the most compelling emotional persuader in relation to behavioral responses to a physical threat.[9] This effect is likely heightened when the behavior is performed by the individual observing the HWLs on plain packaging, that is, personal vulnerability to a threat based on smoking behaviors leads to greater persuasion to avoid smoking.[10] The model in Figure 2 suggested that the effect of perception on plain packaging, perceived severity, age, smokers and former smokers on intent to abstain were partly mediated by fear arousal from salient health warnings among female youth. In addition, the effect of smokers on intent to abstain was also partly mediated by perceived severity and fear arousal to intent to abstain for female youth. HWLs may not directly affect intent to quit smoking but had an indirect effect through fear. The proposed indirect and total effect of smoker status through emotional response to perceived susceptible risks was supported by the Health Belief Model Theory and findings related to the underlying mechanisms of how HWLs on plain packaging influences smokers' intentions to quit.[11, 12, 13] Therefore, fear arousal from HWLs on plain packs could be effective messages to convince female youth to refrain from smoking. Fear is the dominant mediator resulting in changed behavior in quitting smoking, including empirical and theoretical support that intent to quit brings about real action. This was also in line with the semiotic theory explaining that HWLs on plain packaging could directly and indirectly present adverse effects of tobacco use, especially indirectly applied to youths' perception and emotional response.[14, 15, 16, 17] In addition, youth have sometimes interpreted HWLs images as myths regarding the adverse effects of tobacco use based on their experiences or social norms.[18] Particularly, these include the beliefs or myths of significant others and close friends, that the first smoke could not cause addiction. Moreover, the myth of masculine association motivates smoking among female youths to show gender equivalence and appear fashionable. Moreover, youth in general tend to think that negative consequences of smoking would not occur soon but at an older age.

A substantial and significant association was found between fear arousal and smoking cessation after observing HWLs among female youth. This was especially true concerning plain pack versus company-branded packs featuring warning pictures, though the mediation was incomplete. The study model results help to understanding high fear arousal that affects female youth smokers' intent to quit. This study could not infer causality. However, the model developed from it described possible

mechanisms of susceptibility increasing positive and negative reinforcement expectancy from fear arousal and higher reinforcement expectancy fostering intent to abstain.[19]

This research offered evidence on how female youths evaluated and interpreted graphic warning labels on plain packaging. Moreover, the study explored how dominant factors may affect the role graphic warning labels play. These significant roles include their smoking status, perceived disease susceptibility, perceived disease severity, fear arousal on preventing smoking and intent to abstain among female youth. Cigarette plain packaging could enhance the salience and impact of graphic warning labels. In addition, it could potentially increase the power of the message that cigarette smoking is harmful, especially using plain green, dark brown, black and off white covers.

Implication for best practices

Graphic warning labels on plain cigarette packs are noticed by the majority of female youth. As a result, increased female youths' perception on these messages has the potential to reduce cigarette smoking among Thai female youth. Influencing factors include perceived disease susceptibility, perceived disease severity and fear arousal, which affect intent to abstain from smoking among female youth.

Warning labels on plain green, dark brown, black and off-white box plain covers were considered more serious than similar warnings on regular packaging. Thus, perceived health risk and fear arousal motivated them to reduce or quit smoking more than regular packaging.

Thailand has yet to launch a plain packaging policy as has been implemented in many countries. Many studies have compared regular packaging with plain packaging to confirm the strong association with smoking tendency. Plain cigarette package is perceived to be more effective in warning customers of health risks from smoking as it highlights the health warning pictures.

This study confirmed how female youth interpreted and responded to graphic health warning labels of newly designed plain packaging of cigarettes. Hence, plain packaging could be seen as a practical strategy to deter smoking among teenagers. These visuals stimulated their perceptions of health risks caused by cigarette smoking, and reduced the appeal of cigarette smoking.

Therefore, this information could be useful for all health care providers to prevent smoking among female youth. Abstinence from smoking could be promoted among female youth by advocating the plain packaging policy in Thailand

Conclusion

After enacting the Thai Tobacco Regulation in 2014, the tobacco control policy proposed HWLs to be used in plain packaging. Our findings revealed that HWLs on plain cigarette packs presented a more explicit message about the negative health and image risks related to cigarette smoking. HWLs on plain cigarette packs were associated with heightened perceived severity, susceptibility and fear arousal regarding health risks from cigarette smoking. The plain packaging and negative image facilitated female youth awareness of susceptible health risk from smoking. In addition, it could evoke fear arousal regarding tobacco use leading to abstaining or refraining from smoking. The study showed that plain packaging explained a substantial portion of and more modest but significant amount of variance in actual intent to refrain from smoking among female youth. Therefore, a tobacco control policy focusing on HWLs is important, actionable and an effective strategy for youth, especially among female youth.

Acknowledgement

Funding for this research was fully supported by the Tobacco Control Research Knowledge Management Center (TRC), Mahidol University & Thai Health Promotion Foundation

References

1. WHO. Evidence Brief: Plain packaging of tobacco products: measures to decrease smoking initiation and increase cessation. Regional Office for Europe: Denmark. 2014:1-10. Available at http://www.euro.who.int/____data/assets/pdf__file/0011/268796/Plain-packaging-of-tobacco-products,-Evidence-Brief-Eng.pdf?ua=1, accessed April 27, 2018.
2. Kabir, MA, Goh, Kim-Leng, Khan, MMH. Adolescent tobacco use and its determinants: evidence from Global Youth Tobacco Survey, Bangladesh 2007. Asia Pac J Public Health 2015; 27: NP1578-NP1590.
3. Tobacco Labeling Resource Center. Thailand. Availble at http://www.tobaccolabels.ca/countries/thailand, accessed April 21, 2014.
4. WHO. 1-4. Gender equality is good for health: 10 facts on gender and tobacco. 2010. Available at www.who.int/gender, accessed October 15, 2018
5. Pechmann C, Zhao G, Goldberg ME, Reibling ET. What to convey in antismoking advertisements for adolescents: the use of protection motivation theory to identify effective message themes, Journal of Marketing 2003; 67: 1-18.

6. Adcock A, Evans J. Thailand: tobacco plain packaging and beyond. No. 27 November 2012. Available at https://www.aippi.org/enews/2012/edition27/AlanAdcock.html, accessed May 21, 2018.
7. Smith C, Kraemer J, Johnson A, Mays D. Plain packaging of cigarettes: do we have sufficient evidence? Risk Manag Health Policy 2015; 8:21–30.
8. Pechmann C, Zhao G, Goldberg ME, Reibling ET. What to convey in antismoking advertisements for adolescents: The use of protection motivation theory to identify effective message themes. Journal of Marketing 2003; 67: 1-18.
9. Nabi RL. The Emotional-Cognitive Processing Model, SOLLOWAY. 1999. Available at www.american.edu/soc/communication/upload/Solloway , accessed April 21, 2018.
10. Andrews JC, Richard G, Kees JN, Burton S. How graphic visual health warnings affect young smokers' thoughts of quitting. J Mark Res 2014; 51: 165-83.
11. Chung H, Kang S. Processing anti-smoking ads among college students: the role of emotional response and level of smoking. 2016. Available at http://dx.doi.org/10.1080/10496491.2016.1154918 Pages 370-385, accessed April 21, 2018.
12. Canadian Cancer Society. Focus Canada: Evaluation of New Health Warnings on Cigarette Packages. 2001. Available at http://www.tobaccolabels.ca/wp/wp-content/uploads/2013/12/Canada-2001-Evaluation-of-New-Warnings-on-Cigarette-Packages-Canadian-Cancer-Society-Report1.pdf, accessed May 21, 2018.
13. Chalmers M. Hermeneutics, information and representation. Eur J Inf Systs 2004; 13: 210.
14. John M, Leslie W. An integrative semiotic framework for information systems: The social, personal and material worlds. Information and Organization 2014; 24: 48-70.
15. Brose LS, Chong CB, Aspinall E, Michie S, McEwen A. Effects of standardized cigarette packaging on craving, motivation to stop and perceptions of cigarettes and packs. Psychol Health 2014; 29: 849-60.
16. Dunlop SM, Dobbins T, Young JM, Perez D, Currow DC. Impact of Australia's introduction of tobacco plain packs on adult-smokers' pack-related perceptions and responses: results from a continuous tracking survey. BMJ Open 2014; 4: e005836.

17. Borland R, Yong HH, Wilson N, Fong GT, Hammond D, Cummings AM, et al. How reactions to cigarette packet health warnings influence quitting: findings from the ITC Four-Country Survey. Addiction 2009; 104: 669
18. Netemeyer RG, Burton S, Andrews JC, Kees J. Graphic health warnings on cigarette packages: The role of emotions in affecting adolescent smoking consideration and secondhand smoke beliefs. J Public Policy Mark 2016; 35: 124-43.
19. Auemaneekul N, Silpasuwan P, Sirichotiratana N, Satitvipawee P, Sompopcharoen M, Viwatwongkasem C. et al. The Impact of Cigarette Plain Packaging on Health Warning Salience and Perceptions: Implications for Public Health Policy. Asia Pac J Public Health 2015; 27; 848-59

การรับรู้ฉลากคำเตือนบนซองบุหรี่แบบเรียบต่อความตั้งใจในการไม่สูบบุหรี่ของวัยรุ่นหญิงไทย

นฤมล เอื้อมณีกูล[*] ดุสิต สุจิรารัตน์[**] พิมพ์พรรณ ศิลปสุวรรณ[*] ปรารถนา สถิตย์วิภาวี[***]
ชูเกียรติ วิวัฒน์วงศ์เกษม[***] มลินี สมภพเจริญ[****] นิทัศน์ ศิริโชติรัตน์[*****]

บทคัดย่อ

การศึกษาทดสอบรูปแบบเชิงสาเหตุของการรับรู้ฉลากคำเตือนบนซองบุหรี่แบบเรียบต่อความตั้งใจไม่สูบของวัยรุ่นหญิงไทย สมมุติฐานคือการรับรู้ฉลากคำเตือน การรับรู้ความเสี่ยงและความรุนแรง รวมถึงความกลัวจากภาพคำเตือนสามารถทำนายความตั้งใจไม่สูบได้ ใช้สถิติ Structural Equation Modeling วิเคราะห์ เก็บข้อมูลใช้แบบสอบถาม สุ่มตัวอย่างแบบชั้นภูมิจากโรงเรียนมัธยมศึกษาตอนปลายและอาชีวศึกษาในกรุงเทพ อายุ 15-24 ปี จำนวน 438 คน ไม่สูบ 86.3% เคยสูบ 5.48% และผู้สูบปัจจุบัน 8.22% ผลการวิเคราะห์โมเดลมีความเหมาะสมสอดคล้องกับข้อมูลเชิงประจักษ์ โดยให้ค่า χ^2= 1.060, df=2, p=0.589, CFI=0.999, TLI=0.999 และ RMSEA<0.001, SRMR=0.005 โดยคนที่สูบและคนที่เคยสูบมีความสัมพันธ์เชิงลบต่อความตั้งใจไม่สูบ (β=0.237 และ 0.124, p<0.001 และ 0.003) การรับรู้ความรุนแรงและความกลัวมีความสัมพันธ์ทางบวกต่อความตั้งใจไม่สูบ (β=0.237 และ 0.124, p<0.001 และ 0.003) อย่างไรก็ตามการรับรู้ฉลากคำเตือนบนซองบุหรี่แบบเรียบ การรับรู้ความรุนแรง อายุของคนสูบและคนเคยสูบต่อความตั้งใจไม่สูบจะผ่านตัวแปรความกลัวจากภาพคำเตือนบนซองบุหรี่แบบเรียบ นอกจากนี้ผู้สูบกับความตั้งใจไม่สูบส่วนหนึ่งผ่านตัวแปรการรับรู้ความเสี่ยง ผลการวิจัยจะเป็นประโยชน์ในการออกแบบกิจกรรมส่งเสริมการไม่สูบบุหรี่ในวัยรุ่นหญิงและใช้ผลักดันนโยบายซองบุหรี่แบบเรียบสำหรับไทย

คำสำคัญ: ซองบุหรี่แบบเรียบ, การไม่สูบบุหรี่, วัยรุ่นหญิง

วารสารสาธารณสุขศาสตร์ 2562; 49(2): 155-169

[*] ภาควิชาการพยาบาลสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล
[**] ภาควิชาระบาดวิทยา คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล
[***] ภาควิชาชีวสถิติ คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล
[****] ภาควิชาสุขศึกษาและพฤติกรรมศาสตร์ คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล
[*****] ภาควิชาบริหารงานสาธารณสุข คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล