



CHAPTER I

BACKGROUND AND RATIONALE

The World Bank (1999) revealed that the younger people start smoking, the more likely they become severely addicted smokers. It is estimated that each day 14,000-15,000 young people in high income countries smoke cigarettes and the number of young smokers soar in low and medium-income countries to 68,000-84,000. So, based on these figures, approximately 82,000-99,000 young people across the world are smoking cigarettes in one day and led their lives to be nicotine dependence.

Not only nicotine that was the substance addiction of cigarettes. The poison of cigarette, approximately, 4000 chemical substances consisted in the cigarette smoke and they were dangerous to human body that were severe disease more than 25 diseases.(Wuttanasirichaikul, 2007).

This is consistent with the WHO report published in 2005 which revealed that tobacco is the second major cause of death in the world. It was currently responsibility for the death of one in ten adults worldwide (about 5 million deaths each year). If current smoking patterns continue, it will cause some 10 million deaths each year by 2020. Half the people will eventually be killed by tobacco that harms nearly every organ of body. Tobacco use was the cause of the majority of lung cancer cases, such as, cervical and kidney cancer. Other health risks associated with tobacco included heart attacks, strokes and other cardiovascular diseases, as well as infertility (World Health Organization [WHO], 2008a). And in the year 2008, the WHO reports

the fact of tobacco use that there are more than one billion smokers in the world, use of tobacco products is increasing, although it is decreasing in high-income countries. The epidemic is shifting to the developing world. More than 80% of the world's smokers live in low and middle-income countries. Tobacco use kills 5.4 million people a year - an average of one person every six seconds - and accounts for one in 10 adult deaths worldwide. Tobacco kills up to half of all users, so almost half of the world's children breathe air polluted by tobacco smoke. Tobacco is a risk factor for six of the eight leading causes of deaths in the world and 100 million deaths were caused by tobacco in the 20th century. If current trends continue, there will be up to one billion deaths in the 21st century. Unchecked, tobacco-related deaths will increase to more than eight million a year by 2030, and 80% of those deaths will occur in the developing world (WHO, 2008b).

For Thailand, one of the developing countries, tobacco consumption poses long-term effects towards health and it was the second-ranked cause of illness and immature death of Thai populations, behind HIV/AIDS and followed by alcoholism as the third-ranked (Ministry of Public Health, Bureau of Policy and Strategy, 2005). And in 2006, reported that cancer and carcinoma disease, stroke or cerebral vascular disease and heart disease were the first, the third and the fourth cause of death of Thai populations (Ministry of Public Health, Bureau of Policy and Strategy, 2005).

Despite of the fact that since 1976 there had been continual decreased of smoking prevalence among Thai male and female populations at the aged of 15 years and more, from 30.1% down to 21.9% in 2006 (Ministry of Public Health, Bureau of Policy and Strategy, 2005), as the youth, aged 15-18 years had been decreased from 1991, 1996 and 2001, equal 12.04%, 8.87% and 6.44%, respectively, but in 2004 and

in 2006, had been slightly increased equal 6.58% and 6.68%, respectively (Benjakul et al., 2007).

And according to the Thailand's Tobacco Use Surveillance: Smoking prevalence, 1991-2006, revealed that Thai populations at the aged 15 years and more, 18.94% were daily smokers and 2.97% were infrequent and occasional smokers. The report showed that male smokers outnumber the female 9.02 to 0.52 millions and it revealed that regular male and female smokers start smoking at the average age of 18 and 20 years. In addition, over 90% of them smoked while they were adolescents. The Southern of Thailand was the region which had the highest tobacco consumption (22.13%), followed by the Northern (20.49%), the Northeastern (20.42%), the Central (16.48%) and Bangkok (13.9%), respectively (Benjakul. et al., 2007).

Phuket is one of the provinces in the Southern, the accurate data of the smoking prevalence of adolescents in Phuket and factors which can influence smoking and non-smoking behavior are not available. The third provincial health survey conducted in 2001 was the latest data available and here were the results of the survey; 20% of populations aged over 11 years in Phuket were smokers (Bureau of Policy and Strategy, Office of Permanent Secretary, 2001). Such figure was higher than results of the following studies; Factor affecting smoking habits in adolescents, 2,243 students from 10 governmental and private secondary schools in 4 regions and Bangkok, the results showed that the prevalence of cigarette smoking was 17.6% (Sroythong, 1999), Youth risk behavior survey: Bangkok, Thailand, from 2,311 adolescents in 8 schools, 13 communities and 2 Juvenile Home Institutions, the study found that the prevalence of smoking was 15.4% in male and 3.5% in female (Reuangkanchanasetr et al., 2001) and; the National Statistical Office's survey on

smoking and alcohol consumption behavior of Thai populations aged 15-24 years in 2004 and 2006 showed that 15.1% and 14.1% of the populations were tobacco smokers (the National Statistical Office, 2004; 2006). However, the 20% figure found in Phuket was similar to results of the study of Factors influencing smoking behavior among junior high school, 546 students from 5 large schools in Nonthaburi province, found that the prevalence of smoking was 19% (Lerdpiromluk, 2004).

To raise public awareness of negative impacts of tobacco upon people's health, the World Health Organization (WHO) declared the 31st of May as the World's No Smoking Day and has proposed several measures to control tobacco consumptions; such as, prohibitions of tobacco-related advertisements and sale promotions, rigorous screening and arrest of illegal imported tobacco products smuggling, ban of smoking in public places, set up price control measures and tariff barriers, awareness raising of negative impacts from smoking, publishing warnings about dangers of smoking, providing assistance to smokers who want to quit smoking and creating appropriate social values about non-smoking behavior. Thailand is one of 191 county members which have committed to implementing tobacco control measures proposed by WHO and Thailand has enforced the Non-smokers' Health Protection Act B.E. 2535 and Tobacco Consumption Control Act B.E. 2535 which monitor and control tobacco consumption nationwide. All of these legislations and policies are made to facilitate the promotion of non-smoking campaigns and reduction of illnesses and diseases caused by smoking.

And because of Phuket where is a toured place. The government policy would like to increase economic after there had Tsunamic disaster in December 26, 2004, to establish Phuket to be Tax Free Zone in September 1, 2005 (Phuket Business

Directory and Travel Guide, Thailand, 2008) and the policy of the Ministry of Commercial to establish a pilot standard grocery in each province in 2007 that made convenience shops, such as seven-eleven shops and another mini marts were increased in Phuket province (Focus Paktai: Southurn of Thailand newspaper, 2008).

The researcher as a public health staff in Phuket is very much interested in studying the smoking prevalence and factors which can influence smoking behavior of secondary and vocational school students of both public and private educational institutes which are located in Phuket province. Findings of this research study should be baseline information, disseminated and shared as they may be useful in planning to solve local public health problems caused by tobacco smoking and also in promoting non-smoking behavior and tobacco consumption control campaigns among students in Phuket provinces in the future.

1.1 Research questions

1. What is the smoking prevalence among secondary and vocational school students in the private and public general secondary and vocational educational institutions which are located in Phuket province?
2. What are factors which affect smoking and non-smoking behavior of secondary and vocational school students both in the private and government secondary and vocational educational institutions which are located in Phuket province?

1.2 Objectives of the research

1. To find the prevalence of smoking among secondary and vocational school students in Phuket province.
2. To find factors which can influence smoking behavior of secondary and vocational school students in Phuket province.

1.3 Research variables

1. Independent variables are categorized into 5 groups as follows;
 1. Demographic characteristics of the research population; gender, age, grade point average (GPA), education level, type of education and type of institute.
 2. Socio-economic characteristics; monthly income, accommodations during study and parents' marital status.
 3. Environment characteristics; such as,
 - Closed person smokers
 - Influenced of cigarette advertisements
 - Cost and accessibility to tobacco products
 - Tobacco-related policy and laws and regulations
 4. Attitudes
 5. Self-esteem

1.4 Definitions used in the research

- Smoking prevalence refer to the proportion of the population who are current smokers, daily smokers and occasional smokers at a point in time.
- Cigarette is a ready-to-smoke small paper tube filled with cut pieces of tobacco and it refers to both domestic and imported tobacco product.
- Secondary and vocational school students are individuals who are studying in Mattayom 1-6 and at vocational level in both private and government schools under jurisdiction of Phuket Educational Service Area Office.
- Smoking behavior refer to people's past and present smoking habit including regular and occasional smokers and those who have been smoking by the time of the interview.
- Non-smoking behaviors refer to individuals who have yet to smoke cigarettes.
- Influential factors towards smoking behavior refer to elements or stimulants which can increase the possibility of smoking behaviors or desire to smoke which can be either frequent or occasional smoking habits, depending on the aforementioned independent variables.
- Grade point average is the average grade representing student's performance in the first semester of the academic year of 2007.
- Education level is the level within the education systems by the time of the interview.
- Type of education is the classification of education systems into the general (primary and secondary) and the vocational type (vocational diploma).
- Educational institutes are the classification of schools into private or government types.

- Income refers to the total amount of money which adolescents have received from parents or guardians on the daily or weekly basis and then it will be calculated for the estimation of the total monthly income which is exclusive of school fees and apartment or house rental.
- People with whom students have close relationships refer to their parents, close friends or school teachers whom students know have smoking behavior.
- Influences of cigarette advertisements are the hearing or viewing of smoking behaviors from media channels; such as, movies, videos, magazines, newspapers, etc.
- Difficulties in accessing and purchasing tobacco products refer to obtaining cigarettes from shops or selling venues. Degrees of difficulties are classified into three levels; easy, neutral (sometimes easy and sometimes difficult) and difficult.
- Cost of the cigarette refers to the opinion or perception of students towards the cost of a packet of cigarettes or a cigarette whether it is appropriate or not. Three levels of the cost appropriateness are; too expensive, reasonable and cheap.
- Attitudes refer to feelings and preferences (like or dislike) of adolescents towards tobacco smoking by using Likert's scale in measuring their attitudes. Five scales are applied for measurement; strongly agree, agree, not sure, disagree and strongly disagree. Divided attitude into 2 definitions below.
 - Positive attitude means smoking is a good behavior.
 - Negative attitude means smoking is a bad behavior.

And divided level of attitude average score into 3 groups below.

1. Well attitude ($\bar{x} \geq 3.51$) means there had high corrected score in smoking.

2. Medium attitude ($\bar{x} = 2.51-3.5$) means there had both corrected and incorrect score in smoking.
3. Low attitude ($\bar{x} \leq 2.5$) means there had incorrect score in smoking.
4. Self-esteem is the self-perception of adolescents about their capabilities to accomplish certain activities and realize that they are capable of making significant contributions to their family, friends or schools. Self-esteem can be measured by using the Hare Self-Esteem Scale which has 5 scales; strongly agree, agree, not sure, disagree and strongly disagree. . Divided self esteem into 2 definitions below.
 - a. Positive self esteem means self perception about the questions for own self had value, defined as a good behavior.
 - b. Negative self esteem means self perception about the questions for own self had not value or not good, defined as is a bad behavior.

And divided level of self esteem average score into 3 groups below.

1. Well self esteem ($\bar{x} \geq 3.51$) means there had high corrected score of self esteem.
2. Medium self esteem ($\bar{x} = 2.51-3.5$) means there had both corrected and incorrect score of self esteem.
3. Low self esteem ($\bar{x} \leq 2.5$) means there had incorrect score of self esteem.

1.5 Conceptual Framework

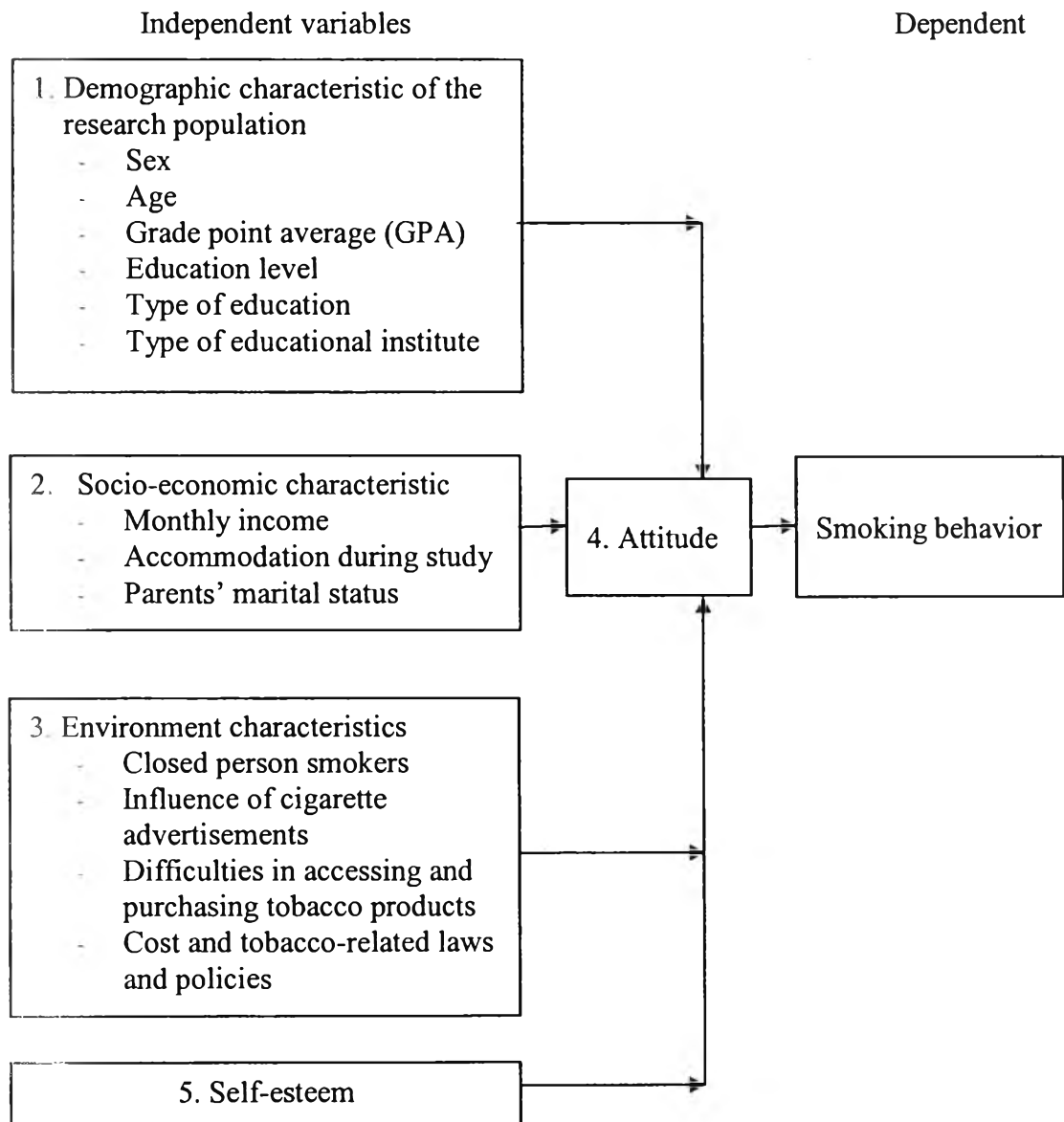


Figure 1: Conceptual Framework

1.6 Expected outcomes

Findings can be shared with agencies under jurisdiction of the Public Health Ministry and educational institutes in Phuket, so they can make use of the findings in developing preventive strategies for tobacco consumption among students adolescents or planning of awareness raising activities or anti-smoking campaigns.