

## **CHAPTER IV**

## RESEARCH RESULTS

This research was to find the prevalence of smoking and the factors influenced to smoking behavior among secondary school and vocational school students in Phuket province

The research results were collected 716 questionnaires that were analyzed by SPSS and are summarized in tables. The prevalence, each variable, the frequencies and the percentage distribution were described. The factors influenced were related and compared between five parts of the independent variables and smoking behavior.

According to **Table 1** showing the demographic data (N = 716), 56.8% of the respondents were female whereas 43.2% were male. Concerning the age of the respondents, 41.3% of the respondents were aged 16-17 years old, 35.3% were 14-15 years old, 20.8% were 18-19 years old, 1.5% were 13 years old or less and 1.1% were ages 20 or over. The class of respondents could be divided into Mathayomsuksa 2 (Grade 8, 37.6%), Vocational 2 (19.6%) and Mathayomsuksa 5 (Grade 11, 12.9%). The respondents studied in government school (57.5%) and private school (42.5%). By this research the type of education was categorized as secondary school (80.4%) and vocational school (19.6%). In terms of the grade point average (GPA), most respondents got the GPA of 2-3 (81.6%), GPA of over 3 (11.0%) and GPA less than 2 (7.4%), respectively.

Table 1: Distribution of the respondents by demographic characteristics

Characteristics	Frequency $(N = 716)$	Percentage
Sex $(N = 716)$		
Male	309	43.2
Female	407	56.8
Age $(N = 716)$		
≤ 13	11	1.5
14-15	253	35.3
16-17	296	41.3
18-19	149	20.8
≥ 20	7	1.1
Class $(N = 716)$		
Mathayomsuksa 2	269	37.6
Mathayomsuksa 5	307	42.9
Vocational 2	140	19.6
Type of school $(N = 716)$		
Government school	412	57.5
Private school	304	42.5
Type of education $(N = 716)$		
Secondary school	576	80.4
Vocational school	140	19.6
Grade Point Average (N = 716)		
< 2	53	7.4
2-3	584	81.6
> 3	79	11.0

From **Table 2**, most respondents got the income per month in the amount of 1,001-2,000 Baht (62.5%), 1,000 Baht or less (33.0%), 3,001 Baht or over (2.5%) and 2,001 – 3,000 Baht (2.0%), respectively. Most respondents did not earn any extra income (95%), some earned OT in daytime (3.6%) whereas some earned OT in night time (1.4%). Concerning the accommodation, most of the respondents still stayed with their parents (82.3%); some stayed with cousins (7.5%); some stayed with others

(6.0%); some stayed alone (2.5%) and some stayed with friends (1.7%). In terms of the status of parents it was found that parents lived together as couple (73.0%); the parents were separated (17.5%); the father was died (7.1%), the mother was died (1.3%); the parents were died (0.3%) and other status (0.8%).

Table 2: Distribution of the respondents by socioeconomic characteristics

Characteristics	Frequency $(N = 716)$	Percentage
Income per month (N = 716)		
$\leq$ 1,000 Baht	236	33.0
1,001 - 2,000 Baht	447	62.5
2,001 - 3,000 Baht	14	2.0
≥ 3,001 Baht	18	2.5
Extra income $(N = 104)$		
Nonė	68	95
OT in daytime	26	3.6
OT in night time	10	1.4
Source of income		
-Parents	793	93.1
-Brother or sister	16	1.9
-Grandfather or grandmother	22	2.6
-Etc.	21	2.4
Accommodation $(N = 716)$		
Stay with parents	589	82.3
Stay with friends	12	1.7
Stay with cousin	54	7.5
Stay alone	18	2.5
Etc.	43	6.0
Status of parents $(N = 716)$		
Couples	523	73.0
Separate	125	17.5
Father was died	51	7.1
Mother was died	9	1.3
Parents were died	2	0.3
Etc.	6	0.8

Table 3 showed the environmental characteristics of the respondents. Concerning the closed persons smoking, it could be summarized that no person smoked (74.0%); the father smoked (10.7%); other persons smoked (1.9%); the peers smoked (5.8%); the brother or the sister smoked (4.3%); the teachers smoked (2.8%); and the mother smoked (0.5%). In addition, it could be noticed that 94.6% of the respondents had seen the smoking from the advertisements and media while 5.4% did not. In case that the respondents had seen the smoking from the media/advertisement, they saw it from the foreign movies (22.1%), Thai movies (19.6%), foreign VDOs (15.5%), Thai dramas TV (15.3%), Thai VDOs (13.1%), UBC & CTV (8.2%), magazines (4.7%) and other types of media/advertisements (1.5%), respectively.

Table 3.1: Distribution of the respondents by environment characteristics

Characteristics		Frequency $(N = 716)$	Percentage	
Cl	lose person smoking (N = 716)			
	Father	297	41.5	
	Mother	15	2.1	
	Peers	160	22.3	
	Teachers	77	10.8	
	Brother or sister	119	16.6	
	Etc.	53	7.4	
	eeing smoking advertising media  V = 716)			
	No (Not seen)	39	5.4	
	Yes (Ever seen)	677	94.6	
Ty	ype of media that the respondents have seen	ı		
	Thai movies	438	19.6	
	Foreign movies	493	22.1	
	Thai dramasTV	342	15.3	
	USC, CTV	183	8.2	
	Thai VDOs	292	13.1	
	Foreign VDOs	345	15.5	
	Magazines	104	4.7	
	Etc.	36	1.5	

Concerning the accessibility of cigarettes buying, most respondents thought that the smoking accessibility was easy (78.2%); some could access the smoking sometimes (11.7%) while some thought that the smoking accessibility was difficult (10.1%). The respondents gave the reasons or causes why the cigarettes were easily accessed / bought as follows: A lot of shops selling cigarettes (69.1%), violations against regulations and laws committed by the sellers (20.0%), no restrict acts (7.5%) and no fear of the buyers toward the laws (3.4%). The places where the cigarettes were easily accessed / bought included the groceries (72.4%), mini marts (26.8%) and

super markets (0.8%), respectively. The smokers could buy the cigarettes easily because the sellers were willing to sell the cigarettes (81.0%), no restrict laws (14.2%) and some respondents could buy them from others (4.8%). In addition, 100% of the respondents agreed that the cigarettes were difficult to be bought because the sellers did not sell any cigarettes to persons aged less than 18 years old.

Table 3.2: Distribution of the respondents by environment characteristics

Characteristics	Frequency $(N = 716)$	Percentage
Accessibility to buy cigarettes (N = 716)		
Easy	559	78.2
Sometimes	84	11.7
Difficult	72	10.1
The causes why it is easy to buy cigarettes $(N = 559)$		
- No restrict acts	42	7.5
- No fear of the buyers against the laws	19	3.4
- The seller do not follow the laws	112	20.0
- A lot of shops selling cigarettes	386	69.1
The shops where the cigarettes are easily sold and bought $(N = 716)$		
- Mini marts	192	26.8
- Super markets	6	0.8
- Groceries	518	72.4
The causes why the cigarettes cannot be sometimes bought $(N = 84)$		
- No restrict laws	12	14.2
- The sellers are willing to sell the cigarettes	68	81.0
- The smokers try to buy the cigarettes with some wrong action	4	4.8
The causes why it is difficult to buy cigarettes $(N = 72)$		
- The merchants do not sell cigarettes to persons aged below 18 years old	72	100

From the table, concerning the shops located near school and selling cigarettes, there was no shop (28.9%); there were two shops (25.6%), there was one shop (22.5%) and there were over three shops (23.0%), respectively. The respondents thought that the cigarettes were expensive (58.0%), suitable (28.2%) and cheap (13.8%). The data showed that 76.7% of the respondents had known about the smoking act while 23.3% did not. Most respondents knew that no person is allowed to sell the tobacco products to the persons aged less than 18 years old (64.9%); no person is allowed to smoke in the public places (28.9%); the tobacco products were not allowed to be sold in front of the shop / at shop counter (3.3%); the tobacco products were prohibited to be advertised in all media (1.9%); any person selling the tobacco products had to be authorized by the authority first (0.5%) and the tobacco products had to exhibit the labels with warning pictures (0.5%)

Table 3.3: Distribution of the respondents by environment characteristics

Characteristics	Frequency $(N = 716)$	Percentage
The shops near school selling cigarettes (N = 716)		
No shop	207	28.9
1 shop	161	22.5
2 shops	183	25.6
More than 2 shops	165	23.0
The price of cigarettes $(N = 716)$		
Expensive	415	58.0
Suitable	202	28.2
Cheap	99	13.8
Knowledge about the smoking act $(N = 716)$		
Not known	549	76.7
Known	169	23.3
The smoking act that the respondents know $(N = 211)$		
<ul> <li>No person is allowed to sell the tobacco products to persons aged below 18 years old.</li> </ul>	137	64.9
- No person is allowed to smoke in the public places.	61	28.9
- No person is allowed to sell the tobacco products at the shop counter.	7	3.3
- No person is allowed to advertise the tobacco products in all media.	4	1.9
- Any person selling tobacco products must be allowed by the authority first.	1	0.5
- The tobacco products must be exhibited with the warning pictures.	1	0.5

Table 4 showed the smoking behavior and prevalence of smoking. From the table, 89.1% of the respondents were the non-smoker; 10.9% smoked cigarettes; 4.1% used to smoke but quitted smoking and 6.8% still smoked cigarettes at present.

Table 4: Distribution of the respondents toward smoking behavior and the prevalence of smoking.

Characteristics	Frequency $(N = 716)$	Percentage
Non-smokers	638	89.1
Smokers	78	10.9
Ever smoked and quitted	29	4.1
Currently smoking	49	6.8

From **Table 5**, the smoking and quit of smoking were summarized. It could be seen that the respondents started their smoking when they were 12-13 years old (62.1%), 14-15 years old (20.7%), 11 years old or less (13.8%) and when they were 16 years old or over (3.4%). Most respondents had quitted smoking for 2 years (37.9%), 3 years (24.1%), over 5 years (20.8%), 1 year (13.8%) and 4 years (3.4%). The respondents quitted smoking because of their parents (48.3%), the expensive price of cigarettes (10.4%), the pictures on the cigarette packages (6.9%), the brother and sister (3.4%) and other reasons (31%).

Table 5: Distribution of the respondents toward ever smoked and quitted smokers

Characteristics	Frequency $(N = 29)$	Percentage
Age of starting to smoke $(N = 29)$		
- ≤ 11 years old	4	13.8
- 12 -13 years old	18	62.1
- 14 – 15 years old	6	20.7
- ≥ 16 years old	1	3.4
Number of years the respondents have quitted $(N = 29)$		
- 1 year	4	13.8
- 2 years	11	37.9
- 3 years	7	24.1
- 4 years	1	3.4
- > 5 years	6	20.8
The causes to quit smoking (N = 29)		
Parents	14	48.3
Expensive price	3	10.4
- Brother or sister	1	3.4
Picture on the label cigarette packages	2	6.9
Etc.	9	31

According to **Table 6** indicating the behavior of the current smokers, the respondents started their smoking when they were 12-13 years old (57.1%), 14-15 years old (22.5%), 16 years old or over (12.2%) and 11 years old or less (8.2%). Most respondents had continuously smoked for 2 years (36.6%), 1 year (22.5%), 10 years or more (20.4%), 3 years (16.3%) and 4 years (4.1%). It was found that 73.5% of the respondents smoked everyday; 20.4% smoked 1-3 days per week and 6.1% smoked 4-6 days per week. Concerning the amount of cigarettes, 82% of the respondents smoked 1 cigarette; 36.2% smoked 4 cigarettes or more; 30.6% smoked 3 cigarettes and 25.0% smoked 2 cigarettes per day. The amount of cigarettes smoked for 1-3 days

per week was 1 cigarette (40%), 2 cigarettes (40%), 3 cigarettes (10%) and 4 cigarettes or more (10%) while the amount of cigarettes smoked for 4-6 days per week was 2 cigarettes (66.7%) and 3 cigarettes (33.3%). From the table, the time the respondents preferred smoking was when they finished the meal (34.7%), when they were stressed or nervous (24.5%), when they stayed with peers (18.4%), when they went to toilet/restroom (10.2%), when they were alone or lonely (8.2%), when they woke up (2%) and other times (2%).

Table 6.1: Distribution of the respondents toward current smoking

Characteristics	Frequency $(N = 716)$	Percentage
Age of starting to smoke (N = 716)		-
- ≤ 11 years old	4	8.2
- 12 – 13 years old	28	57.1
- 14 – 15 years old	11	22.5
- ≥ 16 years old	6	12.2
Number of years of continuous smoking (N = 49)		
1 year	11	22.5
2 years	18	36.7
3 years	8	16.3
- 4 years	2	4.1
≥ 4 years	10	20.4
Frequency of smoking (N = 49)		
Everyday	36	73.5
- 1 – 3 days / week	10	20.4
- 4 – 6 days/week	3	6.1
Amount of cigarettes that are smoked per day $(N = 36)$		
- 1 cigarette	3	8.2
- 2 cigarettes	9	25.0
- 3 cigarettes	11	30.6
- ≥ 4 cigarettes	13	36.2
Amount of cigarettes that are smoked 1-3 days per week $(N = 6)$		
- 1 cigarette	4	40
- 2 cigarettes	4	40
- 3 cigarettes	1	10
- ≥ 4 cigarettes	1	10
Amount of cigarettes that are smoked 4-6 days per week (N = 3)		
- 1 cigarette	0	0
- 2 cigarettes	2	66.7
3 cigarettes	1	33.3
- ≥ 4 cigarettes\	0	0
The time for usual smoking $(N = 49)$		
- When waking up	1	2
- After meals	17	34.7
- When going to rest room / toilet	5	10.2
- When being alone / lonely	4	8.2
- When staying with peers	9	18.4
When being stressed / nervous	12	24.5
- Etc.	1	2

According to **Table 6**, most respondents, however, could not quit smoking because of the habitual smoking (67.3%); some respondents felt addicted to smoking (16.3%); some smoked cigarettes because they were lonely (8.2%); some smoked cigarettes because of the friends' attempt and some smoked cigarettes for the social reasons (4.1%).

Table 6.2: Distribution of the respondents toward current smoking

	Characteristics	Frequency $(N = 716)$	Percentage
	nost important causes why the indents cannot quit smoking (N = 49)		
	Habitual smoking	33	67.3
2	Attempt of friends	2	4.1
	Loneliness	4	8.2
	Addictive feeling	8	16.3
-	Social living	2	4.1

According to **Table 7**, the respondents (both current and former smokers) began their first smoking because they wanted to try the cigarettes (46.2%); they were persuaded by peers (21.8%); they imitated the smoking behavior of peers (16.7%); they smoked cigarettes due to the stress (10.3%); they imitated the smoking behavior of parents (2.5%) and some respondents smoked due to other reasons (2.5%).

Table 7: Distribution of the respondents toward current and former smokers

	Characteristics	Frequency	Percentage
The c	ause of smoking at the first time $(N = 78)$		
ě	Persuasion/attempt of friends	17	21.8
-	For trial	36	46.2
1,1	Imitation to friends	13	16.7
	Imitation to parents	2	2.5
-	Stress	8	10.3
-	Etc.	2	2.5

According to the table 8 showed that the attitude level of the respondents for this research, 77.5% was well, 20% was medium and 2-5% was low attitude in smoking as table.

Table 8: Distribution of the respondents toward the group of smoking attitude score.

Characteristics	Frequency	Percentage
Well attitude ( $\bar{x} \ge 3.51$ )	555	77.5
Medium attitude ( $\bar{x}$ 2.51-3.50)	143	20.0
Low attitude ( $\bar{x} \le 2.51$ )	18	2.5
Total	716	100

According to the table 9 showed that the self esteem level of the respondents for this research, 56.4% was well, 42.9% was Medium and 0.7% was law self esteem in smoking as table .

Table 9: Distribution of the respondents toward the group of smoking self esteem score.

Characteristics	Frequency	Percentage
Well self - esteem ( $\bar{x} \ge 3.51$ )	404	56.4
Medium self - esteem ( $\bar{x}$ 2.51-3.50)	307	42.9
Low self - esteem $(\bar{x} \le 2.51)$	5	0.7
Total	716	100

This **Tble 10**, showed that the relationship and comparison between demographic characteristics of the respondents and smoking behavior were strongly significant relationship P. value < 0.001 both in gender and class, for strongly significant difference p. value < 0.001 was G.P.A., for significant relationship, P-value < 0.05 was type of learning and the others were not significant.

Table 10: The relationship and comparison between Demographic Characteristics and smoking behavior (current smoker)

Characteristics	Non - smoker		Smol	ker	P. Value	
	$(\overline{X})$ ,(SD)	N, %	$(\overline{X})$ ,(SD)	N, %	*= ttest  **=Chi square T.	
Age	(16.25)		(1.898)		0.329*	
Gender						
Male	269	87.1%	40	12.9%	0.000**	
Female	398	97.8%	9	2.2%		
Class						
M2	243	90.3%	26	9.7%	0.000**	
M5	303	98.7%	4	1.3%		
Vae.2	121	86.4%	19	13.6%		
School						
Gov.	386	93.7%	26	6.3%	0.551**	
Private	281	92.4%	23	7.6%		
Learning						
Secondary	546	94.8%	30	5.2%	0.001**	
Vocational	121	86.4%	19	13.6%		
G.P.A.	2.7561	0.51944	2.269	0.35836	0.000*	

According to the table 11 showed that the relationship and comparison between socio – economic characteristics of the respondents and smoking behavior, all of them were not significant relationship

Table 11: The relationship and comparison between socio – economic characteristics and smoking behavior (current smoker).

Characteristics	Non - smoker		Smo	ker	P. Value	
	$(\overline{X})$ ,(SD)	N, %	$(\overline{X})$ ,(SD)	N, %	*= t-test **=Chi square.T	
In come (per month)	(2203.97)	(969.598)	(1796.00)	(451.752)	0.355*	
Stay with						
Parents	548	93.0%	41	7.0%	0.789**	
Others	119	93.7%	49	6.3%		
Parents status			36			
Live together	487	93.1%	13	6.9%	0.945**	
Not together	180	93.3		6.7%		

This table12, showed that the environment characteristics of the respondents related toward smoking behavior, for strongly significant relationship P-value < 0.001 was closed person whom smoked and significantly relationship P-value < 0.05 was amount of cigarette shops where were war school, for the others were not significantly.

Table 12: The environment characteristics related to smoking behavior (current smoker)

	Non - sı	noker	Smol	ker	P. Value *= t-test **=Chi square T	
Characteristics	$(\overline{X})$ ,(SD)	N, %	$(\overline{X})$ ,(SD)	N, %		
Closed person smoking						
Not have	177	99.4%	1	0.6%	0.000**	
Have	490	91.1%	48	8.9%		
Smoking medias						
Not seen	38	97%	1	2.6%		
Seen	629	92.9%	48	7.1%	0.509**	
Cigarette accessibility						
Easy	519	92.8%	40	7.2%	0.596**	
Not easy	148	94.3%	9	5.7%		
Amount of cigarette shops						
(near school)						
- No shop	184	88.9%	23	11.1%	0.028**	
- 1 shop	155	96.3%	6	3.7%		
- 2 shops	172	94.0%	11	6.0%		
-> 2 shops	156	94.5%	9	5.5%		
Known the smoking Act						
Not known	507	92.3%	42	7.7%	0.121**	
Known	160	95.8%	7	7.2%		
Price						
- Expensive	384	93.4%	31	7.5%	0.874**	
- Medium	190	94.1%	12	5.9%		
- Cheap	93	93.9%	6	6.1%		

This table 13 showed that the attitude and self – esteem of the respondents compared toward smoking behavior, attitude factor was strongly significant difference P. value < 0.001 and the other, self – esteem was significant difference ,p value < 0.05.

Table 13: Attitude and self – esteem comparison between non – smokers and current smokers (smoking behavior)

Characteristic	$\overline{X}$	SD	Т	P- value -	95% CI of the Difference	
					Lower	Upper
Attitude				-		
Non – smokers	4.1479	0.69207	8.071	0.000	0.62674	1.02966
Current smokers	3.3197	0.70983				
Self - esteem						
Non – smokers	3.6164	0.48136	2.520	0.012	0.03967	0.31964
Current smokers	3.4367	0.48688				