# The Higher Price of Cigarettes and Students' Intention to Stop Smoking by Sri Widati

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#### The Higher Price of Cigarettes and Students' Intention to Stop Smoking

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#### Keywords: Cigarettes, Rising price, Intention to stop smoking.

Abstract: The price of cigarettes in Indonesia is one of the lowest in ASEAN. The low price of cigarettes has been one of the triggering factors for the increase in the number of active smokers. We have proposed to raise the price in an effort to reduce smoking behavior. The purpose of this research is to see the effect of increasing cigarettes prices to stop smoking intention. This research is analytical and quantitative. Data collection was done by primary technique through 110 chosen respondents. The instrument for this research was questionnaire. This study was done in the Management Major of Economy and Business Faculty of Airlangga University. The result showed that variable of allowance had strong effect for respondents' smoking behavior. There was no relationship between the rising price of cigarettes and the respondents' intention to stop smoking. Respondents felt that they would buy cigarettes even at the higher price. Respondent also felt comfortable with their smoking behaviour and that it had become a habit to do so.

### 1 INTRODUCTION

According to the World Health Organization (WHO), there are six million deaths each year caused by cigarettes and there are 600,000 passive smokers who die because of exposure to second hand smoke. In 2030, WHO predicted that there will be eight million deaths from cigarettes every year 80% of which will occur in poor and developing countries (WHO, 2011). Most people first smoked in their teen years (Salim, 2013). WHO recommends increasing the price of cigarettes in order to reduce the number of smokers. The highest price of cigarettes in the world is in Europe, while the lowest price is in the Middle East region. The following table shows the price of cigarettes in ASEAN:

Table 1: Average Prices of Cigarettes in ASEAN	Table 1: A	Average	Prices of	Cigarettes	in	ASEAN
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No	Country	Price of a pack of cigarettes (IUSD=9.115 Rupiah, February 2012)
1	Singapura	USD 8,3 / ± Rp75.000
2	Brunei Darussalam	USD 5.9 / ± Rp54.000
3	Malaysia	USD 3,32 / ± Rp30.000

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No		Price of a pack of cigarettes
	Country	(IUSD=9.115 Rupiah, February
	H PL	2012)
4	Thailand	USD 2,36 / ± Rp22.000
5	Laos	USD 1.46 / ± Rp13.000
6	Indonesia	USD 1.24 / ± Rp11.000
7	Kamboja	USD 1.19 / ± Rp11.000
8	Vietnam	USD 0.74 / ± Rp7.000
9	Filipina	USD 0.63 / ± Rp6.000
Source:	ASEAN Toba	acco Tax Report Card, Regional

Comparison and Trends, February 2012

One of the government efforts to reduce the number of active smokers is to increase cigarette taxes and legislation. In fact, Indonesia has not focused on reducing the number of smokers. This is due to the lack of strong regulations related to cigarettes. In addition, cigarette tax is one of the state's efforts in increasing and filling the state treasury. In Indonesia, cigarettess tax is very low and the price of cigarettess too. That's why a number of smoker tend to raise every year. Especially, smoker teenager feel that they can buy the cigarettess and feel free to consume it. In ten years, smoker teenager tend to raise.



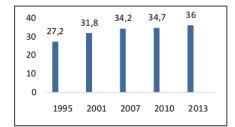


Figure 1: Number of Smokers in Indonesia

Based on Figure 1, it is known that the number of smokers in Indonesia has increased every year. Based on data by Global Youth Tobacco Survey (GYTS), 2,074 respondents of Indonesian students aged 15-20 years showed that 43.9 percent of boys ever smoked. The increased prevalence of smoking in adolescents in Indonesia has caused a seriously cigarettes problem (Tulakom and Bonet, 2003).

According to Basic Health Research (Departemen Kesehatan RI,2013), the highest active smokers in the 30-34 age group was 33.4%. The number of active smokers at age 20-24 also has a high number of 27.2%. The highest proportion of daily smokers occurs in men by 47.5%. The cigarette market has a large number of consumer in this country. Even the economic crisis c in Indonesia has not decreased cigarette consumption, rather, it is increasing (Aan, 2001).

The discussion on raising cigarette prices to Rp50.000 has become a current issue in Indonesia. This is based on the results of Thabrany's (2016) study which found that 72% of 1,000 respondents said they would stop smoking if the price of cigarettes went up to Rp50,000. Thabrany (2016) recommends increasing the price of cigarettes in Indonesia in order to prevent young people from smoking. Not everyone agrees about increasing cigarette prices, especially the cigarette industry (Martiany, 2016). The increase in cigarette prices is considered to reduce morbidity and reduce the amount of cigarette consumption. The increase in cigarette prices is expected to make smokers stop smoking

#### 2 METHODS

This research is analytical quantitative. Data collection was done by primary technique through 110 chosen respondents. All of respondents are smokers. The instrument for this research was

questionnaire. Data analysis was done by multiple logistic regression test. This study was done in the Management Major of Economy and Business Faculty of Airlangga University through January-June 2017.

#### **3 RESULTS**

Table 2: Distribution of Respondents at Airlangga University of Management Program, 2017

	F	%
Allowance		
Low <rp500.000< td=""><td>17</td><td>15.5</td></rp500.000<>	17	15.5
Middle Rp500.000-	48	43.6
Rp1.000.000		
High >Rp1.000.000	45	40.9
Length of Consumption of Cigarett	es	
<1 Year	10	9.1
1-4 Year	45	40.9
>4 Year	55	50.0
Attitude		
Good	77	70.0
Not Good	33	30.0
Behavior Control		
Good	5	4.5
Not Good	105	95.5
Total Respondents	110	100

Table 2 shows that more than 80% of respondents have an allowance of more than Rp500,000. Which means they have no difficulty in purchasing cigarettes. Teenager tend to buy the cigarettes and easy to consume it. The price of cigarettes only Rp 10.000/pack (it is about US\$1).

Almost all respondents stated that they had been smoking for more than one year. The longest was more than four years with 50.0% of respondents. This means they were smoking before they studied at Airlangga University. They still do smoking in Airlangga University and tend to smoke in the campus area.

Mostly, respondents had a good attitude about the benefits if they stopped smoking. But, although they have a good attitude, they are still smoking. This is happening because of addcition.

Only 4.5% of respondents had good behavior control. This could be the biggest problem in getting them to stop smoking cigarettes. Behavior control in this research means their perception about the availability of cigarettes and the increase in their price.

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Table 3: Cross-tabulation Between Allowance and Attitudes Against Smoking Habit Behavior Among Respondents in Prodi Management University of Airlngga Surabaya, 2017

		Atti	tude		т	otal
Allowance	Not	Good	G	ood	1	otai
	Ν	%	Ν	%	Ν	%
Low <rp500.000< td=""><td>13</td><td>76.5</td><td>4</td><td>23.5</td><td>17</td><td>100</td></rp500.000<>	13	76.5	4	23.5	17	100
Middle						
Rp500.000-	38	79.2	10	20.8	48	100
Rp1.000.000						
High >Rp1.000.000	26	57.8	19	42.2	45	100
Total	77	70.0	33	30.0	110	100

Table 3 shows that respondents with a low allowance tend to have a bad attitude. Respondents with middle and high category of allowance are able to budget well for essential needs and still buy cigarettes.

Table4:Cross-tabulationBetween thePeriod ofConsumptionofCigaretteswithAttitudesAgainstSmokingHabitBehaviorAmongRespondentsinProdiManagementAirlanggaUniversitySurabaya, 2017.

Length of		Atti	tude		т	otal
consumptio	Not	Good	G	ood	10	otai
n of Cigarettes	F	%	F	%	F	%
<1 Year	7	70.0	3	30.0	10	100
1-4 Year	32	71.1	13	28.9	45	100
>4 Year	38	69.1	17	30.9	55	100
Total	77	70.0	33	30.0	110	100

Almost all respondents, more than 69%, have a bad attitude about cigarettes' impact.

Table 5: Cross -tabulation Between Allowance andSmoking Behavior Control Among Respondents inAirlangga University Management Program, 2017.

	H	Behavio	r Cont	rol	т	otal
Allowance	Not	Good	G	ood	1	otai
	Ν	%	Ν	%	Ν	%
Low <rp 500.000</rp 	1	5.9	16	94.1	17	100
Middle Rp500.000- Rp1.000.000	1	2.1	47	97.9	48	100
High >Rp1.000.000	3	6.7	42	93.3	45	100
Total	5	4.5	105	95.5	110	100

Table 5 shows respondents who have money tend to have poor behavioral control.

Table 6: Cross-tabulation of Period of CigarettesConsumption and Behavior Control Among Respondentsin Airlangga University Management Program, 2017

Length of		Behavio	Total			
Consumptio	Not	Good	G	bod		otai
n of Cigarettes	N	%	N	%	N	%
<1 Year	1	10	9	90	10	100
1-4 Years	2	4.4	43	95.6	45	100
>4 Years	2	3.6	53	96.4	55	100
Total	5	4.5	105	95.5	110	100

Table 6 shows that respondents who have a long period of cigarette consumption tend not to have good control behavior. They find difficulties when they want to stop smoking.

Table 7: Cross-tabulation of Attitude and Intention to Stop Smoking Among Respondents in Airlangga University Management Program, 2017

Aminuta	Intention to Stop Smoking			Total		
Attitude	1	No	1	Yes		
	F	%	F	%	F	%
Not Good	25	32.5	52	67.5	77	100
Good	22	66.7	11	33.3	33	100
Total	47	42.7	63	57.3	110	100

Table 7 shows that respondents who have good attitude tend to have an intention to stop smoking. However, respondents who do not have a good attitude tend to not have intention to stop smoking. This is compatible with theory that people who have good attitude tend to have good behavior. This study confirm this theory.

Table 8: Cross-tabulation Between Behavior Control with Intention to Stop Smoking Among Respondents in Airlangga University Management Program, 2017

Behavior	]	Intention Smo	n to Sto king	op	Т	otal
Control	N	No	Y	es		
	Ν	%	Ν	%	Ν	%
Good	1	20.0	4	80.0	5	100
Not Good	46	43.8	59	56.2	105	100
Total	47	42.7	63	57.3	110	100

Table 8 shows that the majority of respondents have good behavior control to intend to stop

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smoking. The result of logistic regression analysis shows that the variable that influences the attitude is the variable of allowance. It can be seen from the result of significance, which is 0.028, which is smaller than  $\alpha$  (0.05). The variable of length of cigarette consumption has no effect on attitude and behavior control. This can be seen from the results of significance greater than  $\alpha$  (0.05). From the result of logistic regression analysis there is influence of attitude variable to the intention to stop smoking and there is no influence between the behavior control variable with the intention to stop smoking. It can be seen that the significance value of attitude variable is smaller than  $\alpha$  (0.05). These variables are further influenced in the possibility of respondents who have the intention to stop smoking. Variables that have no effect on the intention to stop smoking are behavior control variables. These variables have a significance value greater than  $\alpha$  (0.05). Regression model was obtained based on the calculation of probability value of behavior to quit smoking among the respondents who have good attitude of 0.676 rather than respondents who have bad attitude

#### 4 DISCUSSION

This study states that the allowances earned by the respondents are in enough categories to meet the needs for one month, including the need to buy cigarettes. In accordance with research conducted by Maharani (2014)<sup>9</sup> that there is a strong relationship between the amount of allowance to smoking behavior. The relationship. This states that the higher the amount of allowance, the greater the increase in the smoking behavior in adolescents. Respondents who smoked felt that they were still able to buy cigarettes.

This suggests that the allowance variable can show a well-behaved behavior. Cigarette consumption does not affect the attitude and behavior control. The variable of length of cigarette consumption is the time from the respondent first consuming cigarettes until now. Most of the respondents in this study had consumed cigarettes for more than four years. This suggests that the variables of length of cigarette consumption have not been able to determine the extent of the ability to control attitude and behavior control to intend to quit smoking.

The analysis was conducted to determine the effect of attitudes and the behavior control on the intention to stop smoking. The results showed that not all variables have an effect on the intention to

stop smoking. The result shows that attitude variable significantly influences intention to stop smoking. The B value for the attitude variable is 1.426, and states the probability of behavior to quit smoking in the respondents who possess it. Amounting to 1,426, this shows a probability of behavior to quit smoking in respondents who have a good attitude of 0.676 as opposed to respondents who have a bad attitude. Attitudes towards behavior are considered as major factors that can affect a person's behavior. Attitude is determined by individual beliefs about the consequences of a behavior.

This result is different from the research conducted by Prof Habullah Thabrany. In the results of his research, he mentioned that 72.3% of smokers agreed that the price of cigarettes at Rp50.000 / pack or more would make smokers quit smoking. In this study, the majority of respondents said that if the price of cigarettes increased they would still not stop smoking. This is because the respondents felt that they were addicted to smoking behavior. In this case, the respondents also said that they preferred to reduce the number of cigarettes they consumed than to stop smoking. Almost all respondents stated that they preferred not to eat rather than not having to smoke for a day. Raising the prices of cigarettes is not considered a matter that needs to be regretted for cigarette consumers. Respondents said that no matter how expensive their cigarettes were, they could still afford them. This can be seen from the low price of cigarettes in Indonesia where the average price per pack is Rp11.000

#### **5** CONCLUSION

The respondents consisted of 110 active smokers students of Airlangga University among Management Program. Most of the respondents came from the students of 2013. The majority of the respondents' allowance was between Rp500.000-Rp1.000.000 each month. The majority of respondents had been consuming cigarettes for more than four years. The increase of cigarette prices will not affect the intention to stop smoking among the University respondents in the Airlangga Management Program. The allowance affects attitudes, but the variables of length of cigarette consumption do not affect attitude and behavior control. The attitude variable influences the respondents' intention to stop smoking. Behavior control variables do not affect the intention of quitting smoking

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