HEALTH WARNING LABELS ON CIGARETTES PACKAGES: A STUDY OF YOUNG SMOKERS IN BALI

Compiled by: I Made Yoga Dwi Prabawa Mimba

Advisor
Gunawan Jiwanto
International Business and Management Program
Universitas Atma Jaya Yogyakarta
Jalan Babarsari No. 44 Yogyakarta

ABSTRACT

This research aims at investigating the relation between Indonesian Government regulation of the health warning labels on cigarettes packages towards the young smokers' smoking behavior and their purchase intention. This research is done based on the similar previous research by Madyasta, M.N. (2015). Data has been collected from 157 respondents in questionnaire form and this research took the sample of young smokers in Bali. The method will be using Regression and will be operated by using SPSS 16.00 for Windows.

The result showed that health warning labels and also the smokers' smoking behavior have significant effect on the purchase intentions. Meanwhile, regarding to the smoking behavior of the young smokers, health warning labels have insignificant effect.

Keywords: Cigarettes; Health Warning Labels; Smoking Behavior; Purchase Intentions.

INTRODUCTION

According to WHO, smoking is claimed to be harmful for people's health. Bad skin, yellow teeth and bad breath could be caused by smoking. These are all visible factors, but there are also effects that we cannot see, such as decreased athletic performance, and overall poor condition of the body. Smoking is an individual choice, which is why it is a habit that can be regarded as a preventable addiction.

The increasing number of smokers in recent years makes the government giving serious attention to this problem. Based on Global Youth Tobacco Survey, the number of young smokers in Indonesia on 2006 was 12.6% and increasing sharply on 2009 become 20.3% and on 2014 the young smokers become 29.3%. In Bali, based on the survey which was conducted by Lembaga Demografi Faculty of Economics Universitas Indonesia in 2013, the number of young smokers is 36.3%. This number is quite big comparing with another provinces in Indonesia. The law that warns the Indonesian people about the negative impact of cigarettes is officially and firmly written in Law number 36 of 2009 on Health,

particularly Article 114 and 199. Article 114 puts an obligation for every person producing or importing cigarettes to Indonesia to add health warning labels and images on the packaging of cigarettes. Article 199 determines that if the company fails to comply this obligation, the person will be given a maximum of five years imprisonment (Madyasta M.N., 2015).

Based on the aforementioned situations, the author is interested to examine the impact of health warning labels on packaging of cigarettes towards young smokers. The purpose of this research is to investigate how health warning labels can affect smoking behavior and after that affect the purchase intention of young consumers in Bali. This research, which examined the effect of health warning labels, smoking behavior, and purchase intention had several objectives of research. Those objectives are: 1) to analyze whether health warning labels on cigarettes packages influence the smoker's smoking behavior or not. 2) to analyze whether smoking behavior has any influences to the purchase intention or not. 3) to analyze whether health warning labels on cigarettes packages influence the purchase intention or not.

LITERATURE REVIEW

Cigarettes

According to Government Regulation number 19 of 2003 on the Safekeeping of Cigarettes for Health, a cigarette is processed tobacco wrapped in cylinder shape, including cigars and other forms, consist of Nicotine and similar ingredients completed with or without tar. It is consumed by burning the other edge of the cigarette and smokes it. Nicotine is not the only component of tobacco products. They also include a lot of other harmful ingredients. Carbon monoxide, arsenic, hydrogen cyanide and benzene are all present in cigarette smoke, along with hundreds of other ingredients (Zaridze, 1991; Martin, 2014 cited in Mohebbi, B., 2014)

Packaging

Every company cannot sell the product without something that covers the product. Packaging is tangible in nature, means that it is a three-dimensional marketing communication vehicle that represents the performance of the product offering. The package is becoming an intimate part of the customer's life, it means a phenomenon that represents a type of an experience between consumer and the brand (Lindsay, 1997 cited in Madyasta, M.N., 2015). Packaging is called "silent salesman" because self-service has transferred the role of incoming the customer from the sales assistant to advertising and to packaging (Sonsino, 1990). The "silent salesman" will inform us the quality and benefits that we are going to obtain if we consume the product. The ability that packaging has is that it can persuade possible buyers before brand selection (McDaniel and Baker, 1977).

Health Warning Labels

According to Article 11 of the World Health Organization (WHO) Framework Convention on Tobacco Control (FCTC), a pictorial health warning labels means a picture that is applied on cigarettes packages in order to increase

awareness about the dangers of tobacco use effectively. Two major purposes of warning labels were formulated by the Institute for Global Tobacco Control (2013). First, they provide important information about the full range of harmful consequences of tobacco products use for human health. Second, they aim to reduce the use of tobacco products, encourage quitting smoking, and prevent non-smokers and formal smokers from using tobacco products. Indonesia issued regulations requiring text warnings on all tobacco products in 2003. In December 2012, the government issued regulations requiring pictorial health warnings on all cigarette packages by June 24, 2014. The pictorial warnings are required to cover 40% of both the front and back of all cigarette packages.

Smoking Behavior

Smoking is the act of smoking cigarettes or other similar substance. Behavior, according to Oxford English Dictionary, is the way of action of one person towards other. This action can be repeated in daily life, in every condition. Therefore, smoking behavior means the act of smoking that is repeated in daily life.

Purchase Intention

Dodds, et al, (cited in Wu, 2015) indicated that purchase intention means the possibility that consumers have the intention to purchase the products. Engel, et al., (cited in Wu and Tsai, 2013) suggested that purchase behavior is the psychological decision making. In order to satisfy the needs, consumers will search for the related information according to their experience and external environment. After the information is accumulated, consumers start the evaluation and consideration. Upon comparison and judgment, they make purchase decision. Purchase intention is the possibility, willingness, and chance for consumers to purchase a product. Tsai et al., cited in Wu (2015) suggested that, purchase intention is associated with the life cycle and value of a product). Once consumers develop purchase intention and behavior and their needs are satisfied, they will further develop repurchase behavior and behavior of recommending others to purchase.

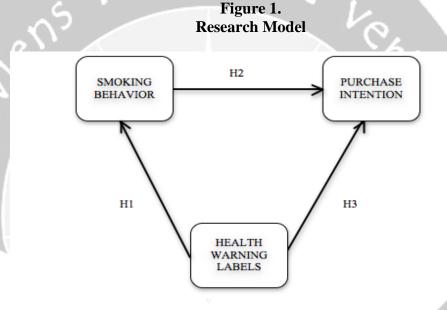
Previous Studies

There are some previous studies have been done with similar topic and the four studies will be explained in this section. The first previous study is "The Impact of Health Warning Labels on Cigarettes Packages towards Young Smokers" by Madyasta, M.N., in 2015. This study found that the smoking behavior and health warning labels give impact to the purchase intention. This study also found that the health warning labels influence the smoking behavior even it is not that big influence. The second previous study is A Consumer Evaluation of Health Warning Labels on Cigarettes Packages in Canada, written by Crane, F.G and MacLean, V.A in 1996. Third previous study is The Potential Effectiveness of Warning Labels on Cigarette Packages: The Perceptions of Young Adult Canadians written by Koval, J.J, Aubut, J.A.L, Linda. L, O'Hegarty, M and Chan, S (2005). The fourth study that is becoming the reference for this

study is from Kim, A.E., Nonnemaker, J.M., Loomis, B.R., Shafer, P.R., Shaik, A. in 2014 entitled Influence of Point-of-Sale Tobacco Displays and Graphic Health Warning Signs on Adults: Evidence from a Virtual Store Experimental Study.

Research Model

The research model is mainly to investigate the relationship among health warning labels, smoking behavior and purchase intention. According to the research purpose and analyses on relevant studies, the three variables in this study are: "health warning labels," "smoking behavior," and "purchase intention" respectively. The research model is as in Figure 1.



Source: adaptation from Madyasta, M.N., 2015

Based on the literatures and the research model that already developed, there are several hypotheses that we want to analyze in this research:

H1: Health warning labels on cigarettes packages can give impact to smoker's smoking behavior of young smokers in Bali.

H2: Smoker's smoking behavior can give impact to consumers purchase intention of young smokers in Bali.

H3: Health warning labels on cigarettes packages can give impact to consumer's purchase intention of young smokers in Bali.

RESEARCH METHODOLOGY

Data Collection

This research is applying purposive sampling to take the sample. The process is done by giving questionnaires to respondents. This research will use primary data. In order to collect the primary data, the author prepared a

questionnaire which is based on the adaptation from a research "The Impact of Health Warning Labels on Cigarettes Packages towards Young Smokers" (Madyasta, M.N., 2015). Questionnaire was a formalized set of questions which could obtain the require information from the respondents. It must translate the information need into a set of specific questions that the respondents can understand and willing to answer. The questionnaire is distributed to respondents in Bali. The student age is within the range of 16 years old until 25 years old. The entire questionnaire is translated in Bahasa Indonesia.

Method

The data in this research was analyzed in simple regression. Simple regression lets us explain and predict. Simple regression means that we have to work in two dimensions on a media. It leads the prediction of Y value that corresponds to any particular of X value. Field (2009) described both validity and reliability as "one way to try to ensure that measurement error is kept to a minimum is to determine properties of the measure that give us confidence that it is doing its job properly. The first property is validity, which is whether an instrument actually measures what it sets out to measure. The second is reliability, which is whether an instrument can be interpreted consistently across different situations." This research utilizes SPSS as the software to measure both validity and reliability.

DATA ANALYSIS AND INTEPRETATION

In doing a study research, we have to make sure that the data can be reliable to be analyzed. According to Hatcher (1994), he recommended a ratio of 5:1 between the minimum subject to items ratio. This research's questionnaires are based from Madyasta, M.N., (2015) question items model that consist of 30 items in total. The minimum subject to be collected is 150 based from above explanations. However, this research had successfully gathered more than the minimum requirement, used 157 respondents in total. All of the questionnaires are distributed towards smokers in Bali. The entire questionnaire is written in *Bahasa Indonesia* (Indonesian Language). Before distributing the questionnaire, the researcher already makes a pre-test by distributing 10 questionnaires at the first time to see the response of the respondents whether they have any doubt or questions about the questionnaire or not. And the result shows that all of the respondents understand the question and they are able to answer it.

Respondents' Profile

Based on the result all of the respondents are young smokers which is 100%, therefore, the answer can be used to be analyzed in this research study. The second profiling question is about the respondent's age. The majority of the respondents were young smokers who aged 16-20 years, which accounted 55% (88 respondents). The rest of respondents were young smokers who aged 21-25 years (45%). Majority of the respondents answered that they consume cigarettes less than 15 cigarettes per day, with percentage 80% (126 respondents). The rest of the respondents which is 20% (31 respondents) are heavy smokers because they

consume more than 15 cigarettes per day. Based on the result about the smoking duration, 57% or 90 respondents have been smoking for more than 2,5 years. Meanwhile, the rest of the respondents with percentage 43% or 67 respondents have been smoking for less than 2,5 years. Even though there are many brands of cigarettes, the respondents of this research choose only some specific brand to buy. Based on the result, the most chosen brand over all brand cigarettes is Marlboro with percentage 41% or 64 respondents. Meanwhile, the second most chosen brand is Sampoerna with percentage 19% or 30 respondents.

Validity Test

Validity measurement is needed in this research. It is measured by using SPSS 16.00 for Windows. The level of confidence is 95% and the degree of freedom (df) equals to n-2, which is 157-2 and the result is 155. The measurement is seen by comparing the corrected item-total correlation with the value in r table that is mentioned for 155 df. The value of the r table is 0.157, therefore we need to see which one of the item that has r-count > r-table to be concluded as a valid item. Based on the result at Table 1. all of the items are valid because the r-count for each question is bigger than the r-table which is 0.157. It means that all items can be used for further analysis

Table 1
Table of Validity Test Result

VARIABLES	QUESTION	CORRELATED ITEM-TOTAL CORRELATION	R-TABLE	DESCRIPTION
Health Warning Labels	1	0.729	0.157	VALID
	2	0.763	0.157	VALID
	3	0.747	0.157	VALID
	4	0.832	0.157	VALID
	5	0.780	0.157	VALID
	6	0.801	0.157	VALID
	7	0.781	0.157	VALID
	8	0.758	0.157	VALID
	9	0.643	0.157	VALID
	10	0.775	0.157	VALID
	11	0.817	0.157	VALID
	12	0.726	0.157	VALID
Smolring	13	0.829	0.157	VALID
Smoking Behavior	14	0.622	0.157	VALID
Bellavior	15	0.327	0.157	VALID
	16	0.627	0.157	VALID
	17	0.596	0.157	VALID
	18	0.742	0.157	VALID
	19	0.587	0.157	VALID

Purchase Intention	20	0.826	0.157	VALID
	21	0.719	0.157	VALID
	22	0.737	0.157	VALID
	23	0.728	0.157	VALID
	24	0.732	0.157	VALID

Reliability Test

Reliability was conducted to examine the stability and the consistency in measurement and by looking at the Cronbach Alpha reported, it shows the internal consistency of the items in the scale. According to Sekaran (1992,), the closer Cronbach Alpha is to 1, the higher the internal consistency reliability. In addition, Sekaran (1992) indicates that if reliabilities less than 0.6 are generally considered to be poor. The variables can be indicated as reliable if the value of Cronbach's alpha is equal or above 0.6. Therefore, the author determined 0.6 as the Cronbach's alpha criterion to identify the reliabilities of all items. In order to have reliable variable, we have to make sure that the value of the α (alpha) more than 0.6. It is measured by using SPSS for Windows.

Table 2.
Table of Reliability Test Result

VARIABLES	CRONBACH'S ALPHA	RESULT
Health Warning Labels	0.904	RELIABLE
Smoking Behavior	0.875	RELIABLE
Purchase Intentions	0.802	RELIABLE

Data Processed in 2017

Based on the result, all of the variables showed that the Cronbach's alpha is bigger than 0.6. This means that all of the variables that analyzed in this research were reliable.

Regression Analysis

To analyze the hypothesis, author use regression analysis tool. As discussed in previous chapter, this tool will help us to understand more about the relationship among the variables. All of the data is analyzed by using SPSS for Windows. There are three hypotheses in this research. Below is the result for the regression analysis.

Table 3. Regression Analysis Result

regional initially side it contains						
Hypothesis	Adjusted R	Standardized Coefficient Beta	Description			
H1: Health warning labels on cigarettes packages can give impact to smoker's smoking behavior of young smokers in Bali.	0.7% U	-0.076	Not Significant			
H2: Smoker's smoking behavior can give impact to consumers purchase intention of young smokers in Bali.	44%	0.717	Significant			
H3: Health warning labels on cigarettes packages can give impact to consumer's purchase intention of young smokers in Bali.	2.5%	-0.156	Significant			

In the questionnaire there are 8 questions about the health warning labels, 11 questions about smoking behavior and 5 questions about purchase intentions for the respondent. It aimed to investigate respondents' perception whether they aware about the health warning labels on the cigarettes packages and does the health warning labels give influence to their smoking behavior also purchase intention. The regression runs to analyzing the data to test the first hypothesis (H1), which is health warning labels on cigarettes packages can give impact to smoker's smoking behavior of young smokers in Bali, the second hypothesis (H2) which is smoker's smoking behavior can give impact to consumers purchase intention of young smokers in Bali, and the third hypothesis (H3), which is health warning labels on cigarettes packages can give impact to consumer's purchase intention of young smokers in Bali.

H1: Health warning labels on cigarettes packages can give impact to smoker's smoking behavior of young smokers in Bali.

To see the impact of health warning labels toward the smokers' smoking behavior, the data is analyzed by using regression. The values to be considered are that Adjusted R-Squared refers to the how the fitness of the model and how well is the explanatory power of the model. Based on the result of the regression analysis, Adjusted R - square of: 0.007 = 0.7%. It means that the variation of the variable changes smoking behavior (dependent variable) that can be explained by variable health warning labels (independent variable) amounted to 0.7% and the balance of 99.3% can be explained by other independent variables outside the model. So, the health warning labels itself can influence the smoking behavior

with 0.7% and smoking behavior can be influence by other variables which not included in this research. This result is low because it is less than 50%.

Based on the result from the coefficients table, the standardized coefficient beta is -0.076. It means that the correlation between health warning labels towards smoking behavior is negative. Meanwhile, based on the F-Test the result is not significant, which means that the independent variable (health warning labels) did not influence the dependent variable (smoking behavior).

This result is different with the previous research by Madyasta, M.N., (2015). The previous research shows that health warning labels give influence to the smoking behavior. The result of this research is different from the previous study because of some reasons. The differences of place in doing the research might be one of the reasons that the result in this research is not significant. While the previous research was done in Yogyakarta, meanwhile this research was done in Bali.

The fact that Indonesia implemented this regulation on 2014 might be another reason. Madyasta M.N. research was done in 2015 which is one year after the regulation applied in Indonesia. In the research study by Crane, F.G and MacLean, V.A (1996), the authors tried to evaluate consumer's perception about health warning labels on cigarettes packages in Canada. At that time, health warning labels recently added to the cigarettes packages, it was new among the citizen of Canada. The result of previous research by Crane, F.G and MacLean, V.A (1996) shows that consumers were able to evaluate the health warning labels as an effective method to help smokers reduce their smoking behavior. Both of the previous study was done when the regulation was recently added, while this research is done in 2017 which is three years after the regulation of health warning labels was applied in Indonesia. These might be the reasons of differences in result on the research.

While based on the research by Elliot and Shanahan (2002), they found that smokers of the younger age groups (15-24 years old) and the older age groups (50-70 years old) were less likely to think that Health Warning Labels would motivate them to quit. Younger smokers found that warning messages personally irrelevant because they were too young to have the health issues depicted in the warning labels (cited in Chuen Li, J.M., 2015). It supports the finding from this research that health warning labels did not give influence to the smoking behavior for the young smokers.

H2: Smoker's smoking behavior can give impact to consumers purchase intention of young smokers in Bali.

For the second hypothesis, to see the impact of smoking behavior toward the purchase intention, the data is analyzed by using regression. The values to be considered are that Adjusted R. Based on the result of the regression analysis, adjusted R of: 0.44 = 44%. It means that the variation of the variable changes purchase intention (dependent variable) that can be explained by variable smoking behavior (independent variable) amounted to 44% and the balance of 56% can be explained by other independent variables outside the model. So, the smokers'

smoking behavior itself can influence the purchase intention with 44% while the remaining percentage in variable purchase intention can be influence by other variables which not included in this research.

Based on the result from the coefficients table, the standardized coefficient beta is 0.717. It means that the correlation between smoking behavior towards purchase intention is positive. Meanwhile, based on the F-Test the result is significant, which means that the independent variable (smoking behavior) can influence the dependent variable (purchase intention).

The result of data analyzes for the second hypothesis is supported with the result of the previous study by Madyasta, M.N. (2015), which shows that smokers' smoking behavior have impact to the purchase intention. The result from the previous research is smoking behavior indeed has some of the factors that makes this action is repeated in a certain periodic time. By repeating this action, it is very possible that the higher the smoker has positive smoking behavior, the higher his or her intention to buy cigarettes (Madyasta, M.N., 2015).

H3: Health warning labels on cigarettes packages can give impact to consumer's purchase intention of young smokers in Bali.

For the third hypothesis, to see the impact of health warning labels toward the purchase intention, the data is analyzed by using regression. The values to be considered are that Adjusted R. Based on the result of the regression analysis, Adjusted R of: 0.025 = 2.5%. It means that the variation of the variable changes purchase intention (dependent variable) that can be explained by variable health warning labels (independent variable) amounted to 2.5% and the balance of 97.5% can be explained by other independent variables outside the model. So, the health warning labels itself can influence the purchase intention with 2.5% while the remaining percentage in variable purchase intention can be influence by other variables which not included in this research.

Based on the result from the coefficients table, the standardized coefficient beta is -0.156. It means that the correlation between smoking behavior towards purchase intention is negative. Meanwhile, based on the F-Test the result is significant, which means that the independent variable (health warning labels) can influence the dependent variable (purchase intention).

The result of the previous study by Madyasta, M.N. (2015) shows that health warning labels significantly give impact to the smoker's purchase intention. Another research from Kim, A.E., et al (2014) analyzed whether there is a significant impact that health warning labels on cigarettes packages give to consumer's purchase intention. The research by Kim, A.E., et al (2014) found that there is significant impact from health warning labels towards purchase intention. Both previous studies show that there is significant impact from health warning labels towards purchase intention, which is supported the result of this research.

One-Way ANOVA Analysis

In this research, there are some categories of respondent's profile that we can analyze to get more understanding regarding the topic. These categories are

age, consumption of cigarettes per day and smoking duration. By these categories, the researcher believes that those categories must be having different percentage towards the dependent variables in the research. The dependent variables in this research are smoking behavior and purchase intention. The purpose of doing this analysis by comparing the category is to see further whether the profiling categories of respondents is affecting the dependents variables of the research or not.

Smoking Behavior ANOVA Analysis

Based on this research, there are three factors that can support the smoking behavior of the smokers, which are age, cigarettes consumption per day, and also smoking duration of the smokers. The table below provides information about these factors in differentiating smoker's smoking behavior.

Table 4.
Differentiate Factors on Smoking Behavior

3.					8
Factors	Categories	n	Mean	F	Sig
Age	16 - 20 Years Old	70	2.9792	2.223	0.129
	21 - 25 Years Old	87	3.1902	2.223	0.138
Cigarettes	< 15 pieces of cigarettes	126	3.0296	2 671	0.057
Consumption per day	> 15 pieces of			3.671	0.057
per day	cigarettes	31	3.3666		
Smoking	< 2.5 Years	67	2.6947		
Duration	> 2.5 Years	90	3.3949	28.266	0.000

Data Processed in 2017

Based on the result, the only factor that shows significant result is based on the smoking duration. This factor divided into two categories, which are smokers with smoking duration less than 2.5 years, and smokers with smoking duration more than 2.5 years. The significant value based on the table above is 0.000. The value is less than 0.05, and it means that this factor is significant in determining the smokers smoking behavior. If we look at the means of this category, there is the difference mean with the smokers with smoking duration less than 2.5 years and also the smokers with smoking duration more than 2.5 years. The questionnaire that already developed from the previous research is representing the smoker's smoking behavior.

The value of mean for smokers with smoking duration less than 2.5 years is 2.6947, this value is less than the mean value of smokers with smoking duration more than 2.5 years which is 3.3949. Smokers with smoking duration more than 2.5 years has higher mean value, therefore this type of smoker will do smoking behavior repeatedly. In other word, we can assume that smokers with smoking duration more than 2.5 years have more self-confidence because of smoking. This

type of smokers also can feel strange if they don't smoke for even one cigarette in a day.

Purchase Intention ANOVA Analysis

Another dependent variable besides smoking behavior that we can analyze based on the respondent's profile is the purchase intention. Same as the analysis for smoking behavior, in this section the author tries to analyze the different level of smoker's purchase intention based on the categories in this research. There are three categories that can determine different purchase intention towards the young smokers. We can see the result as the table below.

Table 5.
Differentiate Factors on Purchase Intention

(0)					
Factors	Categories	n	Mean	F	Sig
Age	16 - 20 Years Old	70	2.7771	3.163	0.077
	21 - 25 Years Old	87	3.0483	3.103	0.077
Cigarettes Consumption per day	< 15 pieces of				
	cigarettes	126	2.9000	0.522	0.471
	> 15 pieces of	V A.		0.322	0.471
	cigarettes	31	3.0387		
Smoking Duration	< 2.5 Years	67	2.6687		
	> 2.5 Years	90	3.1200	9.000	0.003

Data Processed in 2017

Based on the result, the only factor that showed significant result is the smokers' smoking duration. This factor divided into two categories, which are smokers with smoking duration less than 2.5 years, and smokers with smoking duration more than 2.5 years. Result showed that the significant value of this factor is 0.003, which is less than 0.05. Therefore, it shows significant value and it proves that smokers based on this factor have different percentage based on their smoking duration.

There is the difference of mean between smokers with smoking duration less than 2.5 years and smokers with smoking duration more than 2.5 years. Based on the mean value, the result of smokers with smoking duration more than 2.5 years is 3.1200, which has greater value than the smokers with smoking duration less than 2.5 years with the result of 2.6687. The variable of purchase intention in this research is represented by several questions in the questionnaire such as smokers intention to buy cigarettes in the next day, whether smoking is their priority or not and also whether they are going to keep consume cigarettes or not. It means that smokers with smoking duration more than 2.5 years show more intention in buying cigarettes, and they are going to consume cigarettes in the future.

CONCLUSION AND SUGGESTIONS

This research was conducted to know about the relationship between three variables which are smoking behavior, health warning labels, and also the purchase intention. The perception of young smokers in this topic is the main discussion regarding to this issue.

For the first hypothesis, which discusses about the impact of health warning labels on the cigarettes packages towards the smoking behavior, it shows that the result is not significant. This result is different from the previous study because of several reasons. Even thought every cigarettes brand in Indonesia should apply the health warning labels, but it seems like this method is not quite effective if we see from the result. Most of the previous studies were done when the health warning labels was newly added as a new regulation, while this study is conducted after 3 years of this regulation was applied in Indonesia. The respondents of this research seem did not really affected by the warning labels. From the result, it is shown that health warning labels cannot give significant affect toward the young smokers' smoking behavior. Which means that the new regulation of health warning labels on cigarettes packages as a tool to warn smokers about the danger of smoking in Indonesia did not effective on young smokers.

The second hypothesis regarding to smoking behavior affects smokers' purchase intention shows significant in result. Smoking behavior affects purchase intention for 44%. The standardized coefficient beta is also positive, which means that the more smokers smoke, the higher the intention to purchase cigarettes. The more smokers are addicted to the cigarettes, the more likely they buy cigarettes continuously.

The last hypothesis about the health warning labels towards the purchase intention also shows significant result. The health warning labels is affecting the smokers' intention to purchase cigarettes. But, if we take a look on the standardized beta, the result is negative. The negative beta means that the more smokers see health warning labels, the less purchase intention the smokers will have. But, the percentage of health warning labels can affect the smokers' purchase intention is not big enough, since it is only 2.5% and far below 50%. There must be other variables that can give more influence to the smokers' purchase intention which is not included in this research model.

These findings from the research are important information to the cigarettes companies in Indonesia. The cigarettes companies in Indonesia can take this information about the smokers' perception regarding to the health warning labels, smoking behavior, and purchase intention to consider about their next strategy in selling their product. In this research, the cigarettes companies can obtain knowledge about the situation that happens regarding to the young smokers and how their perception on the health warning labels on the cigarettes packages in Bali.

In this research there were some limitations. The limitation bordered the research because unconditional situation and the weaknesses during conducting the research. There are some suggestions that were made regarding to this

research. These suggestions can be useful for future research with similar topics. Future research might be not only focus on young smokers with age range from 16 until 25 years old, but also the adult smokers. Perhaps adult smokers have different perception regarding this topic, and by that it might make the result different from this research. Future research might also add another demographic factor that are not listed in this research like gender, income, and also education. By adding another demographic factor perhaps the future researcher can find something new that this research could not. The more total amount of respondents is needed. Future similar research would need more respondents to better represent the situation in a region or a place, so that we can see further about the result and know better about the situation in a certain place.

References

- Chuen Li, J.M., (2015). "The effects of Tobacco Graphic Health Warnings on Smokers" Thesis at University of Otago, Wellington, New Zealand; published.
- Crane, F.G and MacLean, V.A., (1996), "A Consumer Evaluation of Health Warning Labels on Cigarettes Packages in Canada", *Health Marketing Quarterly*, Vol 13 (3).
- Field, A. P. (2009). Discovering statistics using SPSS: and sex and drugs and rock 'n' roll (third edition). London: Sage publications.
- Hatcher, L. (1994). A Step-by-Step Approach to Using the SAS® System for Factor Analysis and Structural Equation Modeling. Cary, N.C.: SAS Institutte, Inc
- Kim, A.E., Nonnemaker, J.M., Loomis, B.R., Shafer, P.R., Shaik, A. (2014) "Influence of Point-of-Sale Tobacco Displays and Graphic Health Warning Signs on Adults: Evidence From a Virtual Store Experimental Study" *American Journal of Public Health*. Vol 105, No 5.
- Koval, J.J., Aubut, J.A.L, Linda. L, O'Hegarty, M and Chan, S (2005). The Potential Effectiveness of Warning Labels on Cigarette Packages: The Perceptions of Young Adult Canadians. Canadian Journal of Public Health; 96, pg. 353
- Madyasta, M.N., (2015). The Impact of Health Warning Labels in Cigarettes Packages towards Young Smokers. Thesis at Faculty of Economics Atma Jaya Yogyakarta University; published.
- McDaniel, C.; Baker R.C. (1977): Convenience Food Packaging and the Perception of Product Quality, *Journal of Marketing*, 41, 57–58.
- Mohebbi, B., (2014): The art of packaging: An investigation into the role of color in packaging, marketing, and branding, *International Journal of Organizational Leadership* 3, pg. 95--101
- The WHO Framework Convention on Tobacco Control, January 2015. Accesed on http://www.who.int/fctc/WHO_FCTC_summary_January2015_EN.pdf ua=10n December 3, 2016.
- Sonsino, S. (1990). *Packaging design: graphics, materials, & technology*. London: Thames and Hudson

Wu, Chao-Sen. (2015). A Study on Consumers' Attitude towards Brand Image, Athletes' Endorsement, and Purchase Intention. *The International Journal of Organizational Innovation* Vol 8(2): 233 – 253.

Wu, Chao-Sen., and Tsai, Li-Fen. (2013). The Research on Relationship among Online Game Endorsement, Adolescent Involvement and Game Purchase Intention. *International Journal of Management, Economics and Social Sciences* 2013, Vol. 2(3), pp. 205 –216.

