

COMPARISON BETWEEN THE EFFECTIVENESS OF THE PICTURE HEALTH WARNING (PHW) AND PICTURE HEALTH WARNING WITH DESCRIPTION (PHWD) SIZE 75 PERCENT OF THE STOP SMOKING INTENTION

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Abstract: This study aims to compare differences in the intention of quitting smoking on subjects given cigarette packaging with PHW 75 percent and subjects given cigarette packaging with PHWD 75 percent. This study is a true experiment design, taking male participants 17-26 years old, has consumed more than 100 cigarettes, and still smokes at least 30 days before the experiment with a total of 74 people. This research succeeded to reveal if there is no difference between the intention to stop smoking between PHW 75 percent and PHWD 75 percent. So it can be concluded that the addition of information on PHW with the size of 75 percent is not effective in reducing the intention to quit smoking. It has also revealed that there is no significant difference in perceived effectiveness and fear appeals from PHW and PHWD packaging.

Keywords: Fear Appeals, PHW, PHWD, Stop Smoking Intent, Perceived Effectiveness

I. INTRODUCTION

Cigarettes are any tobacco products intended to be burned, smoked and / or inhaled including clove cigarettes, white cigarettes, cigars or other forms resulting from nicotiana tabacum, nicotiana rustica, and other or synthetic species whose smoke contains nicotine and tar, with or without additional materials [1]. While tobacco is a plant that contains harmful substances and also addictive so that tobacco can cause health problems throughout a person's life. Therefore, active smokers have various risks of dangerous diseases such as cancer, stroke, heart disease, emphysema and many others. In addition to the smokers themselves, cigarette smoke can also harm the people around him who inhale, including women and children, women are more vulnerable to the risk of cigarette disease, especially when pregnant [2]. Smokers were dominated by men, according to a survey conducted by the National Socio-Economic Survey (SUSENAS) in 1995, 2001 and 2014 also by the Regional Health Research (RISKESDAS) in 2007 and 2010, about 67.4 percent of men and 4.5 percent of women from 35.1 percent of Indonesia's total population currently use tobacco in the form of smoking or not in the form of cigarettes [3]. The data also shows that the average male in Indonesia breathes 13 cigarettes and 8 cigarettes per [4].

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Smoking behavior is a complex behavior and is the result of cognitive, social and psychological interactions. Such cognitive behavior in the sense of smokers will not show a high belief in the dangers of smoking [5]. This is in line with what has been reported that in Indonesia more than 17 million people try to quit smoking each year, 90 percent fail within one year, and in America nearly 50 percent of patients who have had lung cancer surgery due to cigarettes return to habit smoking [6]. Given that smoking behavior is a complex mental process and leads to various health losses, the government is making efforts to reduce the number of smokers. One of the efforts of the minister of health of Indonesia to reduce the number of smokers in Indonesia is by requiring cigarette producers to include health warnings in the form of images and writings in cigarette packaging, this is regulated in the minister of health regulation number 28 of 2013. The picture health warning (PHW) or Picture Health Warning with Description (PHWD).

The Health Warning was first created in Australia in 1973, the health warning was only textual "Warning-Smoking is a health hazard" and in June 2001 Canada became the first country to use PHW on its cigarette packaging, then Australia in 2012 became the first country which creates plain cigarette packaging, but contains only PHW and brands in cigarette packaging [7]. The PHW itself has three groups of images: graphic imagery of diseased organs, imagery of human suffering, and symbolic imagery. These images have content that can elicit emotional responses especially fear, assuming if the image is increasingly describing the disease caused by smoking then the fear of a person is also increasing [8]. The fear of the PHW is believed to be an effective factor in reducing the intention of smokers to continue smoking and makes it possible for people to think twice about the long-term risk of disease in smokers, so smokers can form a negative attitude toward smoking if smokers continue to be exposed to taste feared by PHW [9]. Based on research conducted by Hammond (2011) note that the PHW is included in the group of imagery of diseased organs have the greatest influence on the emergence of negative emotions in a person [9].

In Indonesia, the PHW set forth in the Regulation of the Minister of Health of the Republic of Indonesia number 28 of 2013 Article 5 paragraph 1 requires that producers must include a Picture Health Warning (PHW) as well as a Picture of Health Warning and Description (HDWP) of 40 percent on the back or front of the packaging in product packaging. However, PHW 40 percent in cigarette packaging that has been applied in Indonesia is still not seen the effect on the behavior of people's smoking cease Indonesia. This can be seen from the survey that has been done by the Ministry of Health RI, in 2007 active smokers reached 23.7 percent increased to 24.3 percent of the total population of Indonesia in 2013, the data show that the largest population of smokers in Indonesia is 17 to 26 years old [3]. Efforts to quit smoking are related to the intention of quitting smoking. Intention is an indication of how strongly one's beliefs will attempt a behavior and how much effort will be used to perform that behavior, as evidenced by the high correlation between intention and behavior, so that the intention can be used to predict behavior [10]. Whereas the word stop according to Big Indonesian Dictionary Version In Network has the meaning of not forwarding, ending, or finish [11]. According to Oxford's great dictionary, smoking is an act or habit of inhaling and exhaling tobacco smoke.

So it can be concluded, the intention to quit smoking is the intention of someone not to continue the behavior of burning and smoking cigarettes. The smoking cessation intensity generated by the PHW in Indonesia is in fact ineffective. Research conducted by the Health Research Center of the Faculty of Public Health University of Indonesia (FKMUI) on PHW 40 percent in Indonesia in 2007 showed that PHW 40 percent was not effective in reducing the intention to quit smoking. This is because the picture and writing on the packaging is not specific, informative and scary, other than that the subject does not believe because it has not been proven, not motivated to stop and do not care about the text that is too

small and unclear [12]. Based on the research, PHW 40 percent is not strong enough to give effect to efforts to reduce smoking behavior in Indonesia society, PHW usage that is bigger than standard size, and contains effective content, able to deliver health warning better [13], it is supported by Goldberg et al (1999) that larger PHW sizes can further encourage teen smokers to quit smoking or non-smoker teenagers not to try smoking [14]. However, research conducted by [15-17] indicate that the addition of any size does not cause an increase in smoking intentions to individuals, it can be caused by the impact of PHW will vary depending on the culture of the local community [15-17]. Another strategy, in addition to increasing the PHW 's size, is adding the description for health warning images (PHWD). PHWD is a health warning combination of health warning images and presented textually [18]. According to Halim and Muttaqin (2014) the combination of health warning images and health warning statements is better at improving the intention of quitting a person than just a health warning statement [18]. This is because the use of information serves as a clarification about the dangers of smoking. In addition PHWD also can create side effects that increase the fear of smokers and non-smokers [19], increased fear is related to the intention of quitting smoking as already described above that fear is believed to be an effective factor in reducing the intention smokers to continue smoking [20]. In Indonesia PHWD has also been regulated in the Minister of Health Regulation no. 28 of 2013 which reads a description of information is health-related health information listed on the Tobacco Products Package. The regulation requires that tobacco producers write "WARNING" by using a white arial bold type on a black base with 10 (ten) or proportional (10th of the letter) of the package [1].

Canada made the first Picture of Health Warning with Description (PHWD) with a size of 50 percent and in 2010 increased to 75 percent. [21]. In addition, in 2012 Australia developed a health warning on its cigarette packaging, Australia banned cigarette manufacturers to provide logo branding, color and promotional writing on cigarette packaging and requires cigarette manufacturers to deliver PHWD of 75 percent up front and 90 percent behind the packaging [22].

Research by Environics Research Group in 2008 in Canada was able to reveal if this 75 percent measure is quite effective in providing information on the dangers of smoking and improving the intention of quitting smoking in adult smokers [23]. Based on these studies, the researchers wanted to do research on the effectiveness of adding information when PHW size was also increased to 75 percent to smokers in Indonesia. The use of PHW and PHWD sizes is 75 percent based on the size of the health warning pictures that are up to now and used by the government of [21]. Based on the above exposure, this study aims to compare the extent to which the difference in intention to stop smoking on subjects given cigarette packaging with PHW 75 percent and subjects given cigarette packaging with PHWD 75 percent.

II. MATERIALS AND METHODS

This research is experimental research with two experimental group that is experiment group 1 PHW group and experiment group 2 that is PHWD group. The variables in this research are PHW and PHWD as independent variable and intention to stop smoking as dependent variable. Participants were 37 people in the PHW group and 37 people in the PHWD group. Characteristics of participants are men 17-26 years, have consumed more than 100 cigarettes, and still smoke at least 30 days before the experiment. Data analysis using Independent Sample T Test. Here are the experimental procedures of this study.

II.1 Research Procedures

This research procedures listed in figure bellow.

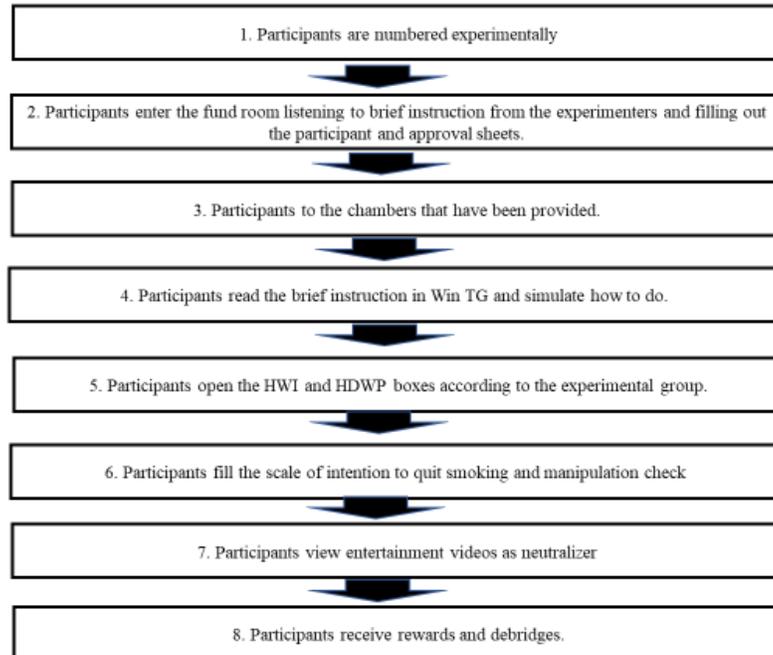


Fig. 1. Experimental procedure

Before the participants enter the room, participants will be given a paper that reads experiment numbers and also posts for laying booths PHW or PHWD group randomly using a randomizer. After the participants have entered the room, participants are asked to sit down and listen to brief instructions from the experimenter on how to follow the course of the experiment. The participant is then asked to fill out the participant sheet and the approval sheet. Then the participants are asked to go to the chambers that have been provided. Inside the room is available one table, one chair, one notebook and one box containing cigarette packaging with PHW or PHWD. Notebooks run WinTG applications that contain instructions and the scale of the intention to quit smoking, manipulation check the scale of fear appeals, and scale perceived effectiveness, but the notebook also functions to play entertainment videos. In WinTG there is a short instruction on how to answer the scale and continued by filling in demographic data form of name, age, education, etc. Then the participants are asked to perform the simulation phase of how to answer. If participants already understand how to answer, participants are asked to open a box containing the packaging with PHW or PHWD according to the experimental group that participants can. Experiment Group 1 will get a box containing PHW and the experiment group 2 will get a box containing PHWD. Participants were asked to observe the packaging of cigarettes which further fill the scale of intention to quit smoking and direct check manipulation using the notebook. Funny videos are shown to participants before the participants exit the room, the use of funny videos is useful as a neutralizer participant condition after seeing PHW or PHWD that can bring negative emotions. The experiment ended with a reward of money and debrief sheets to the participants.

II.2 Research Hypotheses

Ho: There is no significant difference in smoking intention between PHW size 75 percent and PHWD 75 percent.

Ha: There is a significant difference in smoking intention between PHW 75 percent and PHWD 75 percent.

III. RESULTS

Hypothesis test in this research using Independent Sample T-Test to see the interaction between independent variable to dependent that is between PHW and PHWD to intention to stop smoking.

Table 1. Independent Sample T-Test result

Treatment Group	SD	Sig.
PHW	4.709	0.961
PHWD	4.804	

The results of the Independent Sample T Test test of the intention to quit smoking among the PHW group 75 percent ($M = 7.86$, $SD = 4.709$) and the PHWD group 75 percent ($M = 7.92$, $SD = 4.804$) yielded t coefficients of -0.49 with p at $0,961$ ($p \geq 0.05$). So this result rejects H_0 and accepts H_a if there is no difference in the intention to quit smoking significantly between PHW 75 percent and PHWD 75 percent.

IV. DISCUSSION

Based on the results obtained, the study revealed that PHW and PHWD did not differ significantly between the PHW 75 percent and PHWD 75 percent, but the research was not able to find out how high the intention of quitting each participant was, so they could not see whether PHW and PHWD group participants have high or no intention to quit.

This study can be concluded that the giving of health information on cigarette packaging with PHW 75 percent have no significant difference of Stop Smoking Intention with cigarette packing without health description. This may be because participants are aware of the PHWD's health information but do not pay attention to it, other than that participants also know and read the information but tend not to care about it [24].

The absence of a significant difference in the intention of quitting smoking in PHW and PHWD groups can be interpreted as the stop smoking intention in PHW and PHWD groups are both equally low or equal. If the intent of quitting smoking in PHW and PHWD group participants is equally low, it is not in line with the results of research conducted by Environics Research Group (2008) in Canada who managed to reveal if the size of 75 percent is quite effective in providing information about the dangers of smoking and increase the intention of quitting smoking in adult smokers [23]. This can be because the tendency of smokers to underestimate the danger of health warnings, smokers in America know about the dangers of smoking but tends to underestimate the danger [25]. This is in accordance with the survey conducted by Damayanti & Dewi (2008) in Indonesia who found that the information on PHWD is not effective can be because people do not believe the truth of the health warning information, 97 percent of 1.239 respondents people do not believe the truth of health warning on the pack cigarette [26]. In line with the findings that most smokers know the dangers of consuming tobacco-related goods, they tend to underestimate those risks to themselves [27], but it could also be due to impact PHW will vary depending on the culture of the local community [15-17].

Different if the Stop Smoking Intent on PHW and PHWD participants is equally high, it could be because PHW size increases from 40 percent to 75 percent manage to improve the Stop Smoking Intention, so that in line with research by the Environics Research Group in 2008 at Canadians who managed to uncover if the size of 75 percent is quite effective in providing information about the dangers

of smoking and increase the intention to stop smoking in adult smokers [26]. PHW is 75 percent effective according to Hammond and Fong's (2006) statement of PHW that is larger than standard size, and contains effective content, better health warnings [13], PHWD 75 percent which is effective also in accordance with the statement of Morvan (2011) the use of information serves as a clarification of the dangers of smoking so as to create side effects that increase the fear of smokers and non-smokers [19], fear is believed to be an effective factor.

This study can be concluded that if there is no difference in the intention to quit smoking between PHW 75 percent and PHWD 75 percent, so the provision of health information on cigarette packaging with PHW 75 percent did not have significant intention to stop smoking with cigarette packaging without health information. It has also been revealed that there is no significant difference in perceived effectiveness and fear appeals caused by PHW and PHWD.

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