

Warning Labels on Cigarette Packages: A Special Stimulus for Moslem Smokers to Quit Smoking

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Abstract

Purpose - This study aims to explore the influence of combining "non-halal" labels with visual and textual warning labels on cigarette packages to induce the intention to quit smoking and boost the stop-smoking campaign.

Research design, data, and methodology - This study examines "non-halal" labeling on cigarette packages using an experimental method. A total of 120 smokers, aged 18-23, were chosen from among Universitas Indonesia students. Data obtained were analyzed using ANOVA and T-Test.

Results - The use of a "non-halal" label as a warning on cigarette packages is more effective to influence Muslim smokers to quit smoking. The results also suggest that "non-halal" labels more effectively increase intentions to quit smoking when use din combination with textual-visual labels.

Conclusions - The study found that the addition of "non-halal" labels in textual or textual-visual warning labels on cigarette packages would significantly increase the intention of Moslems smokers to quit smoking. These results support previous research findings, that if cigarettes are labeled as "non-halal" (haram) products for Moslem teenagers, it will induce them to quit smoking.

Keywords: Warning Label, Non-Halal Label, Religiosity, Demarketing.

JEL Classifications: M31, M37, M38, C92, I18.

1. Introduction

Cigarettes become one of the important health issues in the world. According to WHO there are about 5.4 million people dies each year because of smoking habit. Indonesia is one of the countries which has largest smokers population in the world. WHO has started cigarette demarketing campaign or commonly referred as stop-smoking campaigns since 2003. WHO has made an agreement with several countries to reduce cigarette consumption by stop-smoking campaign. one of the policy is to put pictorial warnings on each pack of cigarettes. The deal was welcomed by the State concerned of the dangers of cigarettes just as Canada, U.S, Brazil, and European countries, Australia and even Singapore and Malaysia.

Previous studies on effectiveness of warning label on cigarette package were not considering the respondents characteristic especially for Muslim smokers. From the perspective of consumer behavior, religion is recognized as an important variable in affecting the purchase decision, determining the advertising appeal to use, and deciding media to use (Emslie, Bent, & Seaman, 2007). El-Bassiouny (2013) stated that consumers' purchasing behavior has strong relation with the consumers' belief.

One of important consumers belief in Indonesia is their religion besides their habit and tradition. For example, Muslim consumers who have high religiosity prefer halal products in their purchase decision. There are 87% of Indonesian population of about 247 million people are Muslim. Hence the Muslim population becomes an important segment in the Indonesia domestic market.

Besides Drug and Food Supervisory Agency (Badan Pengawas Obat dan Makanan), Indonesia also has Indonesian Ulema Council (Majelis Ulama Indonesia) who oversee not only food but also activities in order to be a good Muslim. For examples, smoking has already stated as "haram" (forbidden or non-halal) for Muslim by Indonesian Ulema Council. Yet smoking is still not considered illegal by Indonesian law even the Indonesian government has already started to campaign a no-smoking area. At present there are many public areas were set as a no-smoking areas by law or regionals regulation.

The current study is trying to prove that adding "non-halal" statement in cigarette packages' warning label are more effec-

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tive in influencing stop smoking especially for Muslim population. Considering limitations of previous study, the current study aims to explore the influence of combining "non-halal" statement with pictorial and textual warning labels in cigarette package.

2. Literature Review

The first scientific publications on pictorial warnings label appeared in 2003 (Hammond, Fong, McDonald, Cameron & Brown, 2003) and then followed by other studies, particularly done by public health researchers. This study underscores that a non-halal label as a warning labels on cigarette package are more effective than textual only or pictorial only or combination of those two in influencing behavioral intentions. Warning label will act upon cognitive, affective reaction and behavioral. Cognitive reactions caused by pictorial warning labels are more clearly visible and easier to understand so it can increase awareness and knowledge about the health hazards caused by smoking (Hammond, Fong, Borland, Cummings, McNeill & Driezen, 2006; Thrasher, Rousu, Hammond, Navarro, & Corrigan, 2011; O'Hegarty, Pederson, Nelson, Mowery, Gable, & Wortley, 2007). Pictorial warnings label which has been implemented in Canada since 2000 proved that this type of warning label is more effective to make young people think about quit smoking (Koval, Aubut, Pederson, O'Hegarty, & Chan, 2005; Hammond et al. 2003).

The second impact of warning label is affective reaction which found by Hammond, Fong, McDonald and Borland (2004), Crespo, Barrio, Cabestrero and Hernandez (2007), Gallopel-Morvan, Patrick, Marine, Sophie and Bertrand (2006). They highlighted that loss-framed pictorial warnings result in emotional reaction such as fear, disgust, or anxiety. These emotional reactions have a positive impact on trying to stop, stop or reducing smoking. Finally, pictorial warning labels are more effective than textual warning label in motivating smokers to quit and to prevent non-smokers to start smoking (Kees, Burton, Andrews & Kozup, 2006). We summarized the previous studies in the <Table 1> below.

2.1. Warning Messages and non-halal(haram) label.

Individual consumer characteristic play an important factors in shaping ethics and morality of the consumer market (Schrader, 2007). From the Islamic perspective, extrinsic and intrinsic values that are reflected by doing good and avoiding hostility are ethic codes which are held by every person. Holy Qur'an (16:90) states: "Indeed, Allah orders justice and good conduct and giving to relatives and forbids immorality and bad conduct and oppression. He admonishes you that perhaps you will be reminded".

This is a comprehensive morality, internally and externally, and in terms of both means and ends, ideally reflecting proper behavior of individual Muslim consumers. As a consequence,

this morality should be reflected in both of personal welfare (through the consumption of halal products and services such as Islamic Banking) and social welfare in all marketing activities and all segments (Al-Hashimi, 2007; Al-Qaradawi, 1993, 1997; Ayooob, 2006, in El-Bassiouny, 2013). These proper behaviors include protecting those who are vulnerable, such as, women, elderly, different ethnic groups, minorities, the poor, and children. Because the ideology of Islam emphasizes the welfare of all human in general (not just Moslems), therefore products / services / ideas that are harmful for the planet (e.g. activity with high CO2 emissions, toxic chemicals, etc.) should not be executed not only because of rational reason but also theological reasons related to the ideology of Islam itself. In addition, Islamic law asserts that an individual goal and how to achieve that goal should be "halal". Product that is not-halal (haram), for instance alcoholic beverages, which is prohibited by Holy Qur'an should also be avoided. Therefore El-Bassiouny (2013) in his study conclude that: "Muslim consumers with higher religiosity will absolutely consume halal products and services".

Depending on the level of religiosity, Moslem consumer will take serious attention in choosing good and service to minimize the risk of consuming not-halal product (Wilson & Liu, 2011). Thus it can be said that religiosity is very important factor in influencing Moslems' consumer decisions. Related to smoking, Indonesian Ulema Council (Majelis Ulama Indonesia) states: "Smoking is forbidden for Teens and Children". Teenagers are one of the anti-smoking campaign targets globally, as well as in Indonesia. As explained earlier section, the majority of Indonesian smokers are Moslems. By linking the results of previous studies that Moslem consumers who have high religiosity tend to consume halal products, the authors believe that putting a non-halal label on cigarette packs will increase the intention to quit smoking.

As said by El-Bassiouny (2013) that Muslim consumers who have high religiosity tend to choose halal products to be consumed, the authors suspect that the Moslem teen will be more likely to stop smoking if they knew that cigarettes are dangerous and forbidden for teen and children. Therefore this study will examine the effect of the use of stimulus (textual, visual, and both combination) warning labels on cigarette packages. Then the hypotheses are as follows:

- <H1> Participants were given textual warning label combined with non-halal label will have a higher intention to quit smoking than that of participants given textual warning labels without non-halal label.
- <H2> Participants were given textual-visual warning labels combined with non-halal label will have a higher intention to quit smoking than that of participants given a textual-visual warning labels without non-halal label.

<Table 1> Summary of Previous studies

Authors	Topic	Findings
Strahan, White, Fong, Fabrigar, Zanna & Cameron (2002)	Enhancing The Effectiveness Of Message Labels On Tobacco Packaging: A Social Psychological Perspective	Tobacco warning labels represent a potentially effective method of influencing attitudes and behaviors. This review describes social psychological principles that could be used to guide the creation of more effective warning labels.
Hammond et al. (2003)	First scientific publication about visual warning for tobacco control.	Graphic cigarette warning labels serve as an effective population based smoking cessation intervention. The findings add to the growing literature on health warnings and provide strong support for the effectiveness of Canada's tobacco labeling policy.
Hammond et al. (2004)	Knowledge and Adoption of Cessation Assistance in a Representative Sample of Daily Smokers	This research suggests that many smokers may be unaware of effective cessation methods and most underestimate their benefit. Further, this lack of knowledge may represent a significant barrier to treatment adoption
Hammond et al. (2006)	Text and Graphic Warnings on Cigarette Packages: Findings from the International Tobacco Control Four Country Study	Comprehensive warnings on cigarette packages are more likely to be noticed and rated as effective by smokers. Changes in health warnings are also associated with increased effectiveness.
Kees et al. (2006)	Tests of Graphic Visuals and Cigarette Package Warning Combinations	The findings indicate that including both graphic visual warnings, such as those used in Canada, and warning statements currently used in the United States can decrease the perceived attractiveness of the package and create higher levels of negative affect, such as fear or anxiety.
Cismaru and Lavack (2007)	Tobacco Warning Labels and the Protection Motivation Model.	This paper examines the issue of tobacco warning labels within the context of the Protection Motivation Model. Based on this psychological model, we provide recommendations as to how tobacco warning labels could be revised to include specific recommendations and coping advice that would outline the benefits of quitting (response efficacy) and offer encouragement (self-efficacy).
Berg, Thrasher, Westmaas, Buchanan, Pinsker and Ahluwalia (2011)	Factors associated with perceiving different types of pictorial cigarette health warning labels as most effective in motivating smokers to quit or preventing smoking initiation among college students.	Understanding factors related to perceived effectiveness of different pictorial warnings among subpopulations should inform health warning labels released by the FDA.
Miller, Hill, Quester and Hiller (2011)	This study applies the reasoned action approach to assess the relevance of graphic health warnings (GHW)-related beliefs and attitudes to smokers' behavioral intentions and smoking behavior.	The results show that GHW-related beliefs and attitudes were predictive of intention to quit smoking. Intentions to quit were, in turn, predictive of quitting behaviour as measured in the follow up stage. New GHW warnings, smokers are presumed to have been exposed to, were also associated with changes in beliefs over time.
Gallopel-Morvan et al. (2011)	The effect of graphic warnings inserted on cigarette packs	This study also enabled us to identify the most effective themes of the European set: health warnings and social messages. Regarding future public health applications, if fear appeals are used, they need to be combined with self-efficacy and cessation support messages since they provoke avoidance reactions.
Bansal-Travers, Hammond, Smith and Cummings (2011)	The impact of cigarette pack design, descriptors, and warning labels on risk perception in the U.S.	The findings support larger, graphic health warnings that convey loss-framed messages as most effective in communicating health risks to U.S. adults. The results also indicate that color and product descriptors are associated with false beliefs about risks. Plain packaging may reduce many of the erroneous misperceptions of risk communicated through pack design features.
Thrasher et al. (2011)	Differences in demand for cigarette packages with different packaging and health warning label formats.	Results suggest that prominent health warnings with graphic pictures will reduce demand for cigarettes. Regulators should not only consider this type of warning label, but also plain packaging policies for tobacco products.
Thrasher, Carpenter, Andrews, Gray, Alberg, Navarro, Friedman and Cummings (2012)	Cigarette warning label policy alternatives and smoking-related health disparities	Pictorial health warning labels with graphic images have the most-pronounced short-term impacts on adult smokers, including smokers from groups that have in the past been hard to reach.

Source: Summarized from previous studies

3. Methodology

The experimental design was used for this research. The experimental design is used to explain the evidence of a causal relationship (Malhotra, 2007). Factorial design in this research is 2 (textual and textual-visual warning labels) x 2 (non-halal label, and without non-halal label) between subjects test. There are totally 120 participants were assigned randomly into four cells. All of the participants are smokers. The participants' distribution among the four cells can be seen in <Table 2>.

<Table 2> Experimental Design

	Textual warning label	Textual-visual warning label
With non halal label	30 participants	30 participants
Without non halal label	30 participants	30 participants

Source: authors

Dependent variable in this study is the intention to quit smoking (Hammond et al., 2003 and Kees et al., 2006). We also measure level of religiosity as a control variable following Shukoor and Jamal (2013).

Shukoor and Jamal (2013) revealed that there are some important factors constructing religiosity, which is as follows:

- always perform my duty as a Muslim (e.g. pray five times a day, fasting during the month of Ramadhan, pilgrimage to Mecca) to Allah.
- It is important for me to follow Allah's Commandments conscientiously.
- Religious beliefs influence all my dealings with everyone.

3.1. Manipulation check.

To determine appropriate stimulus, this study first perform manipulation checks. This was done by giving several pictures of warning label to the participants and asks their opinion about each picture. The pictures chosen plus textual warning labels will serve as stimulus. From the results of manipulation checks this study chose 2 stimulus: first, textual stimulus labels and second, textual-visual stimulus labels.

Experiment procedures are as follows; Firstly, 6 up to 8 university students were asked voluntarily to participate as one group in this experiment. Using snowballing approach, other groups were form to fulfill the required number of participants for every experimental cell. Every participant in each experimental group was shown the relevant warning label(see appendix) as a treatment experiment for about 3-5 minutes. Then they were asked to fulfill the questionnaire that consists of demographic profile and their religiosity level and intention to quit smoking. Each participant was given a souvenir after completing the questionnaire.

4. Results

As described in the previous section, the levels of religiosity amongst the Moslems consumers influence their purchase decisions behavior. Moslem teens who have high religiosity are believed to choose halal products to be consumed. From the research results, as seen in the Table 3 below, all participants have a high level of religiosity. Participants who were given textual warning labels combined with "non-halal" labels have an average level of religiosity of 6.14 (Likert scale 1-7). Participants were given stimulus textual-visual warning label with "non-halal" label have an average level of religiosity of 5.87. Participants who were given textual warning labels without "non-halal" label and participants who were given textual-visual without "non-halal" label have an average of religiosity of 5.98, and 6.31 respectively.

<Table 3> Average level of religiosity

Stimulus	level of religiosity
Textual combined with "non-halal" label	6.14
Textual-Visual combined with "non-halal" label	5.87
Textual with out "non-halal" label	5.98
Textual-Visual without "non-halal" label	6.31

Source: data processing

This study found that participants who were given textual-visual warning label combined with "non-halal" label have average of intention to quit smoking of 5,483 (Likert scale: 1is very unlikely and 7 very likely). Meanwhile, the participants were given textual-visual warning labels without "non-halal" label have an average of 4.10. Comparing those result, an addition of "non-halal" label has significant impact in intention to quit smoking. This difference can be seen from t test result (see <Table 4>).

This study also found that participants who were given textual warning label combined with "non-halal" label have average of intention to quit smoking of 4,6167. Meanwhile, the participants were given textual warning labels without "non-halal" label have an average of 3,9667. These result also conform the previous result about "non-halal" label addition to warning label impact on intention to quit smoking.

<Table 4> Mean of Intention to quit smoking

Stimulus	Mean comparison	Sig.	T Value
Textual withnon-halal labelversusTextual withoutnon-halal label	4.6167vs 3.9667	0.014	2,533
Textual-Visual with non-halal labelversusTextual-Visual without non-halal label.	5.4833vs 4.100	0.000	7,584

Source: data processing

5. Discussion

The study found that addition of "non-halal" label in a textual or textual-visual warning label in cigarette packages will significantly increase the intention of Moslems smokers to quit smoking. These results support the previous study, that if cigarettes are communicated as non-halal (haram) product for Moslems' teenagers, it will influence them to quit smoking. The results also suggest that "non-halal" labels more effectively increase intentions to quit smoking when using in combination with textual-visual labels. With these findings, it can be said that religiosity is one of the important factors that influence Moslems consumer decision. Communications that conveying messages that smoking is non-halal (haram) will increase intentions to quit smoking. Using the findings of this research, then there is a unique strategy in making anti-smoking campaign for Indonesian consumers that is adding non-halal label as a warning for religious Moslems' smokers.

The findings of this research are also consistent with El-Bassiouny(2013) who say that Moslems' consumers who have high religiosity tend to choose halal products to be consumed. The study also found that there are two types of fear-appeal that are effectively used in anti smoking campaign. Firstly, the fear-appeal messages that contain fear through the dangers of smoking to the health. Secondly, the fear-appeal messages that contain fear associated with religiosity (in this case, we call "non-halal" label). Non-halal label has been plays as an effective tool for quit smoking campaign especially for Moslems smokers.

This study is useful for Government, social marketing practitioners such as anti-tobacco organization and World Health Organization (WHO). With the results of this research, the Government and social marketing practitioners may use warning labels as a means of persuasion to reduce cigarette consumption. This effort sometimes called with demarketing efforts. Demarketing is a marketing activity that aims to reduce demand temporarily or permanently. In this case, The Ministry of Health, and The Ministry of Trade, Republic of Indonesia, can strengthen anti-smoking campaign by put a larger size of pictorial warnings on cigarette packages. In addition, this study also suggests that the use of non-halal labels on cigarette packages will effectively reduce the number of smokers by increasing the intention to quit smoking.

This study suggests specific strategy for Moslem smokers should be use warning labels are combined with non-halal label. For enrichment, the future research need to extent by using other method such as field research, in-depth interview, or observation. Further study also needs to enlarge the sample by using the difference demographic profile, region, etc.

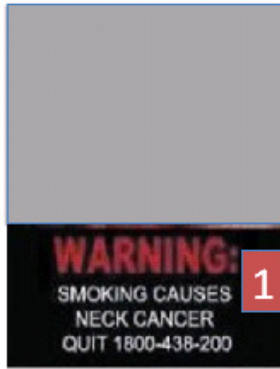
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Appendix A:

Warning Labels without Non-Halal Label



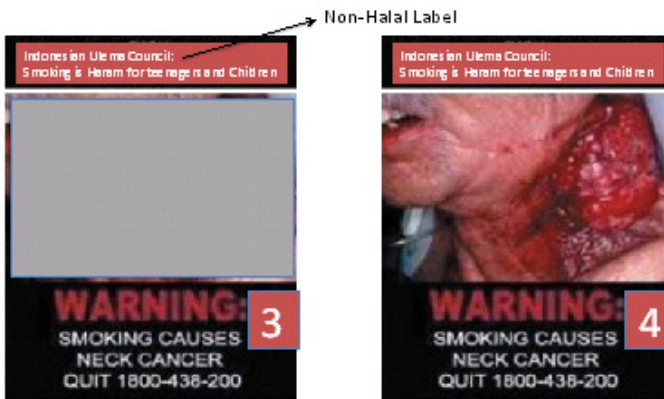
Textual only



Textual-Visual

Appendix B:

Warning Labels with Non-Halal Label



Textual only

Textual-Visual