
Warning Label Placement: The Difference Effect of Social Risk and Health Risk Consequences

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Abstract

Purpose: The warning label tested in this study is a textual visual warning label that is concerned with warning of health risks, the source of warning messages, the layout of warning labels, and the use of children's idol images on warning labels. The main targets of marketing unhealthy products are children and adolescents. Accordingly, this study targets the kids and tweens age groups.

Design/Methodology/Approach: One tool that is believed to change the consumption behavior of products that are at risk for health is to use warning labels on product packaging. The method used in this study is a lab experiment, involving participants from two age groups, namely kids and tweens. As a persuasive measure, both visual and textual warning labels are believed to be able to change people's consumption behavior.

Findings: The negative effects that arise from business marketing activities cause social marketing to be one of the academic urgencies in the realm of marketing science. In the past decade, the international community has been very concerned about advertising unhealthy products for children and adolescents. The results of the study found that the difference in location of the warning label placement, and the use of idol images significantly affected the effectiveness of the warning label.

Practical Implications: The results of this study are useful for the development of social marketing science, especially the study of warning labels, namely recommending alternative warning labels that can be used in addition to health risks, namely warning labels with social consequences.

Originality/Value: For policy makers and observers of social marketing, this research provides a set of innovations that can be used to support the success of junk food product demarketing strategies.

Keywords: Social marketing, warning label, kids and tweens, unhealthy food and drinks.

JEL Codes: C31, D11, D12, M31.

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1. Introduction

Although the literature on warning labels has developed rapidly, there are still some gaps in research studies regarding warning labels. First, literature regarding current warning labels is mostly focused on certain products. In the meta-analysis Purmehdi *et al.* (2017) stated that currently the largest research study found on cigarette products as many as 104 studies, as many as 50 chemicals, and alcohol as much as 28, while all other product categories had only 60 studies. To protect children and adolescents from unhealthy products, sellers must limit or improve their exposure to advertisements for unhealthy products (Pechmann *et al.*, 2005). Warning labels on unhealthy foods are a possible way to achieve these goals. It is thus important to examine how warning labels affect children and adolescents of various ages.

Second, the warning label is competing with other advertising elements for consumer attention and cognitive. Ads usually contain pictorial framings about the product. Warning and pictorial framings may expose conflicting information, which children and adolescents are unable to process the information correctly. The appearance of warning labels is often defined by the company's obligations under applicable laws regarding advertising. So, many warning labels on products are not properly designed to convey hazard information about product use. This allows the company as a seller to override the negative impact of health warnings.

Third, the emphasis on prevention is an important way to overcome the problem of consumption patterns of teenagers and children. Warning labels that include strong threats, have proven effective among adults (Hammond *et al.*, 2003). However, the impact of labels like in adolescents has not been fully investigated (Dance *et al.*, 2007). Emphasizing specific research on adolescence is very important because adolescents have different characteristics from adulthood. In addition, adolescents have self-doubt than adults, which in part can explain why teens tend to respond differently than adults to marketing risky products, such as junk food and beverages. To protect the age of children and adolescents, ad exposure to unhealthy products must be limited or further corrected (Pechmann *et al.*, 2005). Warning labels on unhealthy food and drinks is one solution to protect children and adolescents.

2. Theoretical Framework

2.1 Warning Label

Warning labels on product packages in advertisements are often considered as a solution to balance two interests between consumer protection and company interests. Research on warning labels has gone through a long history of research. For example, in the United States, the regulation of warning labels on cigarette packs has been around since 1965 and for cigarette advertisements since 1972. Warning labels, even though they have been informed that they are not guaranteed to get the desired response, even more are skeptical or critical views that labels can

affect children or adolescents to make complete information in purchasing decisions. Based on a review of the literature study, there are several empirical studies showing clear effects of warnings on consumer behavior, other studies only show partial effects, and other research groups show no significant effect at all. Three types of findings persist from time to time. Many studies have investigated the effectiveness of warning labels (Wogalter and Young 1991; Wogalter *et al.*, 1991a, 1991b), specifically the combination of acoustic and visual messages (Morris *et al.*, 1989) or the use of warning images and non-written ones (Borland *et al.*, 2009; Kees *et al.*, 2010). When new warnings are introduced, novelty benefits run out over time (Hunt *et al.*, 1989; Moodie *et al.*, 2010; Pezdek *et al.*, 1989; Schuker *et al.*, 1983), or do not attract attention, even though they have novel values (Fox *et al.*, 1998). As a theoretical foundation, a systematic heuristic model might explain this phenomenon by proposing that information that is too complex and contradictory is treated as heuristic (Petty *et al.*, 1983a, b). In order for warnings to be effective, they must be present, understood (Barlow and Wogalter 1993), storytelling, and, finally, must be taken into account when consumption decisions are taken by consumers (Monaghan and Blaszczyński 2010).

The majority of studies found that the effects were weak or even no warning effects on consumer awareness (Laughery *et al.*, 1993a, 1993b; MacKinnon *et al.*, 2001), or behavioral effects (Andrews 1995; Bang 1998; Hilton 1993), even when warnings recognized as true in information and easily remembered and memorized by consumers (Moodie *et al.*, 2010). A preliminary study from Schneider (1977) used the presumption that perceptions and evaluations of warnings depend on the approval of all the characteristics of a particular product. Therefore, warnings that interact and compete with other advertising features have an effect on attention (Krugman *et al.*, 1994). Strategies to strengthen the effectiveness of warnings by increasing their importance to other aspects of advertising are relatively ambiguous (Braun and Silver 1995; Gupta 1998; Jaynes and Boles 1990; Wogalter *et al.*, 1991a; 1991b; 1992).

2.2 Effectiveness of the warning label depends on the characteristics of the message receiver

2.2.1 Adolescent response to warnings

Extensive research on warning labels provides insight into advertising design and the personality aspects of the recipient of the message, but previous research findings are limited with respect to age. A review of research revealed that the most empirical research on warnings in advertising only used students in their experiments (Argo and Main 2004; Bushman 1998). However, acceptance of warnings by adolescents and young adults is often considered different (Cox *et al.*, 1997; Rogers *et al.*, 2000). While there is limited empirical evidence, Argo and Main (2004) argue in their meta-analysis that age is negatively correlated with perceptions of warning. Therefore, Rogers *et al.* (2000) state that younger students are more aware of the warnings given. Although age differences appear to exist, they

depend on certain environmental conditions and aspects of the design of warning labels. Thus, it is a difficult task to design warning claims that affect consumption in the desired way because the effect is subject to the development process. This is an important point, for our knowledge, has not been addressed by empirical research. Research has shown that children change their risk preferences, that is, make risky decisions when entering puberty (Casey *et al.*, 2011; Cauffman and Steinberg 2000; Pechmann *et al.*, 2005). Some studies suggest that risk is something that young people look for during puberty and even follows an upside down stream (Burnett *et al.*, 2010; Van Leijenhorst *et al.*, 2010) and peaks around 14.5 years. Cognitive performance seems to get impaired during puberty (McGivern *et al.*, 2002).

2.2.2 Interaction effect between warning and picture framing

In addition to examining the understanding of warnings and the interpretation of pictorial framing across age groups, it is very interesting to study the interactions of these two effects. Previous research has shown that emotions affect the perceptions of adolescents (Bingel *et al.*, 2007; Clore and Huntsinger 2007; Kidwell *et al.*, 2008b) and, consequently, their evaluation in decision choices (Schwarz and Clore 1996). However, only a few studies have examined the combination of warning effects and pictorial framing. Kelly *et al.* (2002) for example show that images in beer and cigarette advertisements create a more positive attitude towards advertising, brands, and similar product groups. Brown and Locker (2009) found the existence of defense reactions from producers of advertisements arising from "anti-advertising" groups that caused negative emotions that negatively affected the perception of the risk of consuming alcohol. A recent study by Figner and Weber (2011) revealed that consumers of adolescents tended to choose risky products, even more feared they would instead want to use these products. Subjects who take risky choices are also more likely to ignore relevant information. Cox *et al.* (2006) found that participants exposed to framing risk messages in consumption would react against the possibility of product risk, while those affected by messages basically ignored risks when forming product evaluations and intentions.

2.3 Label characteristics

Labels are a tool to increase awareness of hidden aspects of products / consumption that may not be identified for ordinary consumers (Argo and Main 2004; Hassan *et al.*, 2007). Labels meet two general goals: (1) provide consumers with the information they need before using products and (2) help producers avoid potential lawsuits (Shuy 1990). In the literature, the strategy used to increase the effectiveness of labels has increased the sharpness of label details by manipulating the characteristics of the design. This manipulation is operated through the message content label, textual and pictorial format, and the location of the product / packaging warning label placement. Content label refers to vocabulary choices, the tone of the message, the use of signaling words, the existence of guidance information (or lack thereof), the source of the message, and the use of applicable regulatory standard guidelines (Bansal-Travers *et al.*, 2011; Borland 1997; Wogalter

et al., 1987; Wogalter and Laughery 2006). Characteristics of content that effectively warns about hazards, is able to explain the consequences, and provides instructions to avoid that danger. Things that need to be considered in the text are the text warning label to cover all the characteristics of the text format such as font color, font size, text direction, space ratio, instructions, bold text, and so on so that the message text is easier to read or well visible (Adams And Edworthy 1995; Barlow and Wogalter 1993; Frantz 1992; Hammond *et al.*, 2007; Malouff *et al.*, 1993; Strawbridge 1986a; 1986b; Wogalter, Fontenelle and Laughery 1985; Wogalter, Conzola, Dan Smith-Jackson 2002). The location of warning labels on a product, or in relation to other packaging design elements (eg, included in instructions for use), can also influence whether the warning label can be seen and whether or not to realize the recipient of the message. Labels can be placed on locations more prominently than others (for example, front not back or side). Thus, the location of the label is positioned under the label characteristics of the product category (Barlow and Wogalter 1993; Heiser 2007; Halim, 2015; Halim, 2017; Halim and Zulkarnaen, 2017).

2.4 Attention and effectiveness of warning labels

Attention to the contents of the message on the warning label displayed on the product packaging depends on the attractiveness of the message. Attention given by the message reader will affect the effectiveness of the warning label. For that marketers must pay attention to the level of attractiveness of the contents of the warning label displayed. Attention is influenced by several things, this has been alluded to in several studies regarding the effectiveness of warning labels such as in Bansal-Travers *et al.* (2011), Barlow and Wogalter (1993), Bhalla and Lastovicka (1984), Borland (1997), Braun and Silver (1995), Goldhaber and DeTurck (1988; 1989), Hammond *et al.* (2007), Hassan *et al.* (2007), and Purmehdi *et al.* (2017) state that the attention level is a measure of "Notice, seeing the warning, conspicuousness, salience of warning, awareness, attention to ad, attention to brand".

2.5 Behavior and effectiveness of warning labels

One measure of the effectiveness of the message content on the warning label displayed on the product packaging depends on the action taken by the message reader after receiving the message delivered. Effective warning message recipient behavior is influenced by the contents of the warning label message can be, stop consuming products, become less consuming (Halim, 2015), or even without any differences before reading the contents of the warning message. Behavior is influenced by several things, this has been alluded to in several studies regarding the effectiveness of warning labels such as in Bansal-Travers *et al.* (2011). Braun and Silver (1995), Halim *et al.* (2015) and Purmehdi *et al.* (2017) state that the level of behavior can be; behavior compliance, purchase intention, use of gloves, smoking intent, motivation to quit, perceived effectiveness to encourage others to quit,

wearing protective tools, shaking the bottle, more likely to drive, stubbing out a cigarette at least once, smoke less, quit likelihood, quit confidence, alcohol use, drinking less.

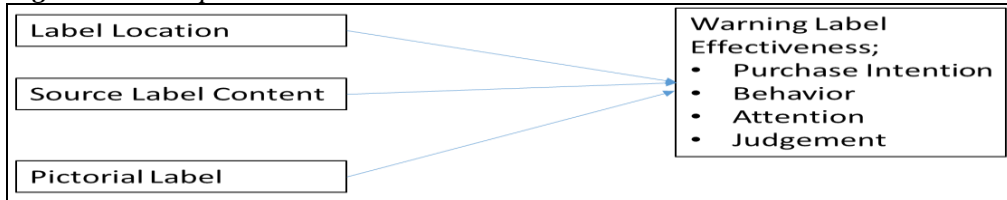
2.6 Judgement and effectiveness of warning labels

Quality of message content, assessment of consumers is obtained from the quality of the message they get after reading the contents of a particular message. Keller (2008) states, with regarding to brand equity there are 3 important factors that influence brand equity, namely brand credibility, for example body slimming supplements, if there are many positive and real testimonials about the success of the product to lose weight, the community will choose that product. Brand considerations, is useless if consumers give positive responses about the products we offer, but don't decide to buy them. Praising a product but not buying it can be one of the benchmarks that our products are less attractive to customers. And finally brand excellence, if consumers feel confident that our products will provide more benefits than other similar products on the market, then we can say if our products have got good brand judgment from consumers. For example, in Indonesia, the average upper class chooses private schools compared to public schools because there are more offers for children's education even if they have to pay more. With regard to warning label messages Purmehdi *et al.* (2017) state that warning label judgment is interpreted on the ability of warning labels to influence consumers' judgments whether the product is considered dangerous or even vice versa is not harmful to consumers receiving warning label messages on the packaging of products they buy.

3. Conceptual Model Overview

The development of a study of warning labels in the world of social marketing academics still leaves a lot of empty space that needs to be filled. The Purmehdi *et al.* (2017) research model illustrates that there are several dimensions of effectiveness of warning labels that determine the success of warning labels in delivering messages. Still in the red thread of previous research pioneered by Argo and Main (2004), the Purmendi *et al.* (2017) model also emphasizes the effectiveness of warning labels on the characteristics of labels used. Label characteristics as described in the previous section, are still weak in some respects, especially in the study of the location of warning labels. Based on observations in previous research studies, it was found that the location of warning labels placed on packaging tends to determine whether the warning will attract attention, be easy to remember, even affect consumer behavior to reduce or even stop buying unhealthy food and beverage products. This is in line with the findings of Purmedi *et al.* (2017) research that the location of the warning label placement affects the effectiveness of the warning label. After conducting a literature study and processing the previous research data, many assumptions and expectations need to be confirmed through the research that we have put in the research model as follows:

Figure 1. Conceptual Framework



Independent variables in this study are warning labels consisting of 6 types of labels namely: Textual Visual Front Packaging Packaging Labels, Textual Visual Warning Labels behind Location Packaging, Visual Textual Warning Label included message source, Textual Visual Warning Label not included message source, Label Textual Visual Warning with children's idol images, and Textual Visual Warning Labels with pictures of ordinary people.

As explained in the previous section, research on the label warning in social marketing has proven that the warning label can influence the intention to purchase a product (Kees *et al.*, 2006; Halim, 2015; Effertz 2013; Morvan, 2011; Rajagopal 2017). In line with the development of research on warning labels, the analysis of this topic has become increasingly sharp, as in Murdock and Rajagopal (2017), Kees *et al.* (2006), Halim (2015). Although many previous studies have shown that the effectiveness of warning labels influences consumer consumption patterns, social marketing scholars still worry that the promotion of health-threatening products such as beverages and junk foods is increasingly taking a greater role in creating unwanted consumption behaviors. This concern is evidenced by the increasing demand for these products and so are the health effects experienced by consumers. Visual warning labels especially for unhealthy food and beverage products are still very rarely found in the market for these products. Unlike cigarettes, food and beverage products seem to be in a 'safe' position for years putting textual warning labels on product packaging. What is meant by 'safe' here is that there is no government regulation intervention that requires placing a warning label other than textual on the packaging. Plus the placement of textual warning labels seems to be less attractive for consumers to see, even many who place in a position rarely read on product packaging. Therefore it is not surprising that the demand for these products is increasing. Kees *et al.* (2006), Morvan (2011) in their study suggested the use of visual warning labels to be more attractive to consumers. Therefore researchers in this study use visual elements as warning labels. In addition to testing the effectiveness of the label, it is also to add literature to the use of visual warning labels on unhealthy food and beverage products. The use of visual warning labels is an urgency in empirical research trials to add academic repertoire in the field of warning labels.

Furthermore, the use of both visual and textual warning labels has been applied to developed and developing countries. Especially in Indonesia warning labels on unhealthy food and beverage products still seem to get less attention from

consumers. The warning label used seems to only be a complement to packaging as a product requirement in the market. An example of a warning label for a snack product used is a textual label that uses normative writing and does not attract attention, both in terms of design and content. With regard to design, many have been presented in previous studies (Kees *et al.*, 2006; Morvan 2011; Halim, 2015) that the warning label design factor is one of the important factors in attracting consumer attention, so that the purpose of warning labels can be achieved optimally.

In terms of content, warning label elements generally use descriptive information about health risks arising from consuming food and beverage products. Since the 90s, this label has proven effective in reducing consumption behavior. Growing along with the pace of research on warning labels, the elements used are growing even more, the most recent example in Murdock and Rajagopal's (2017) warning label content used is using social content as a derivative of the health risks experienced by product users. In his research, it was explained that the condition of Obesity resulted in people suffering from being susceptible to chronic disease, diabetes and the consequences of a person's social life such as being less attractive, having difficulty finding clothing size, etc. Their results revealed that the use of social content proved to be effective in influencing consumer behavior in buying risky products. But in the study, it did not measure the effectiveness of labels on unhealthy food products. Their research suggests that it is also necessary to do label effectiveness testing on many products and age groups, especially young people.

This is an academic urgency in the field of warning labels. Returning to the main focus of the anti-food campaign, reducing, preventing and eliminating the behavior of consumer purchases is the main purpose of using warning labels. For this reason, the main focus is to examine the warning label factors which most influence the purchase intention variable as the dependent variable of the study. In line with the purpose of the study to fill the gap in the warning label research, this study will also test dependent attention, behavior, and judgment. This research's variable purchase intention uses question items according to those defined by Baker and Churchill (1977). While attention, behavior and judgment in Purmedi *et al.* (2017) research on a scale of 1 to 7 from insignificant to very important. The biggest concern about anti-junk food activists is the marketing advertising of food and beverage products targeting the age groups of school children. Advertising massively tries to seduce, persuade and even cheat the 6-12 year olds to buy and be loyal to the products they sell. Therefore this study will target the participation of children and adolescents in the 6-12 year age group.

4. Hypotheses Development

4.1 Effect of location of warning label

The location of the warning label placement affects the effectiveness of the warning label. This is evidenced in previous studies such as Barlow and Wogalter (1993), but

in the literature it is still not clear how much influence the location of the effectiveness of warning labels. Based on the results of observations in the field it was found that, warning labels placed on parts of the packaging that are rarely reached by consumers' vision will affect the effectiveness of delivering warning messages. Warning labels placed on the front and aligned with the packaging image tagline tend to be more attractive to consumer attention than to the rear of the product. Therefore we hypothesize as follows:

H1: *Warning labels on the front of the product packaging have a significant effect on attention when compared to the warning label on the back of the product packaging.*

Furthermore, Kees *et al.* (2006) in their findings stated that purchase intention is part of consumer behavior. In line with the statement Argo and Main (2004), effective labels are labels that are able to change consumer behavior. The author believes that labels that get more attention by consumers will be able to influence consumer purchasing behavior. Therefore we hypothesize as follows:

H2: *Warning labels on the front of the product packaging have a significant effect on behavior when compared to the Warning label on the back of the product packaging.*

4.2 Effect of context messages on warning labels

The limitation of our previous research was the source of the warning message not included in the message on the warning label on the package. Whereas in the observation notes that we did in the research in the previous field, it was found that there were still many participants who asked whether the information the message delivered was correct or just making it up. Even though they believe the message information provided is correct, there are still people who ask the source of the message. This is in line with the statement from Ward and Trvers *et al.* (2011) that message sources influence the level of consumer confidence in warning messages. In line with that, we suspect:

H3: *Warning labels that are included in the message source on product packaging have a significant influence on judgment when compared with warning labels without message sources on product packaging.*

4.3 Effect of pictorial on warning labels

Regarding the pictorial label, although it has become a major focus in many research literature and many have proven effective. However, in our opinion there is still a need to deepen the character of the image displayed. Based on observations in the field, the interest of the Kid and Tween groups on the warning label is influenced by the shape of the image displayed. For example, prominent and creepy images are

more of a concern than normative images that only display images of disease. Therefore we suspect that more imaginative images and in accordance with the character of the age such as images of cartoon idols and fictional films, influence the effectiveness of warning labels. Thus our final hypothesis is:

H4: *Warning labels that use images of idol figures are more effective in influencing Purchase intention compared to pictures of ordinary people on product packaging warning labels.*

5. Research Methodology

The first step we did was to carry out a pilot study to determine the warning label stimulus used. The pilot study consisted of 11 stages that were passed with the aim of getting a stimulus that was truly tested. The second step is to test the validity and reliability of the dependent variable gauge. From the results of the validity test using the analysis factor technique as a result of the data states that the KMO value is above 0.5, the value of loading factor and MSA is above 0.6. Meanwhile the cronbach alpha value is above 0.6. Based on the requirements stated by Malhotra (2007), the measuring instruments in this study are valid and reliable for use in actual research.

5.1 Procedures and sample

The first step is to carry out a pilot study to determine the warning stimulus used label. The pilot study consisted of a stimulus that was truly tested. The second step is to test the validity and reliability of the dependent variable gauge. From the results of the validity test using the analysis technique as the data states that the KMO value is above 0.5, the value of loading factor and MSA is above 0.6. Meanwhile the cronbach alpha value is above 0.6. Based on the requirements stated by Malhotra (2007), the research is valid and reliable for use in actual research.

6. Results and Analysis

Stimulus as an experimental tool in this study was generated through pilot study stages. Before conducting experiments in the field, measuring instruments in this study have gone through a series of tests of validity and reliability. Using factor analysis and the Cronbach alpha test in accordance with what was stated by Hair *et al.* (2006), the results show that all measuring instruments in this study were declared valid and reliable for further research. To determine the effectiveness of each warning label, the researcher conducted a T test, with the following results shown in Table 1. From the results of SPSS data processing, it can be seen that the mean value of the warning label at the front location towards Attention is $M = 5.04$ and the mean value of the warning label at the rear location is $M = 4.82$. This means that the effect of the warning label on the front location on Attention is greater than the effect of the warning label on the rear location.

Table 1. One-Sample Test- location output

Table1. One-Sample Test- location output						
	Test Value = 0					
	T	df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
FRONT_ILOCAT ION	43,135	29	,000	5,04167	4,8026	5,2807
Back_ILOCATIO N	34,002	29	,000	4,82500	4,5348	5,1152

☒

Source: Data processing 2018.

Then, to see the significance of the effect, through the T test seen in the one sample Test table, it can be seen that the sig.000 value ($p < 0.5$), and the calculated T value is greater than the T table, $T\text{-value} = 34.00 > T\text{ table df } (29) = 1.69$, therefore H_0 is rejected. This means that there is a significant effect between the two mean variables compared. Thus H_1 is accepted so:

Warning labels on the front of the product packaging have a significant effect on Attention when compared to the Warning label on the back of the product packaging.

Table 2. One-Sample Test-behavior

Table 2. One-Sample Test-behavior						
	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Behav_Front	42,663	29	,000	5,04444	4,8026	5,2863
Behav_back	43,480	29	,000	3,70000	3,5260	3,8740

☒

Source: Data processing 2018.

Furthermore, the mean value of the warning label at the front location against the Behavior is $M = 5.04$ and the mean value of the warning label at the back location is $M = 3.7$. This means that the effect of the warning label on the front location on Behavior is greater than the effect of the warning label on the rear location. Then, to see the significance of this effect, through the T test seen in the one sample Test table, it can be seen that sig.000 ($p < 0.5$), and the calculated T value is greater than T table, that is $T\text{ value} = 43.48 > T\text{ table df } (29) = 1.69$, H_0 is rejected. That means there is a significant effect between the two mean variables compared. Thus H_2 is accepted so:

Warning labels on the front of the product packaging have a significant effect on behavior when compared to the Warning label on the back of the product packaging.

Table 3. One-Sample Test- Judgement

	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Judg_Sourc e	35,644	29	,000	3,68889	3,4772	3,9006
Judg_Nosou rce	41,886	29	,000	3,52222	3,3502	3,6942

□

Source: Data processing 2018.

From the results of SPSS data processing, it can be seen that the mean value of the warning label at the front location towards Attention is $M = 5.04$ and the mean value of the warning label at the rear location is $M = 4.82$. This means that the effect of the warning label on the front location on Attention is greater than the effect of the warning label on the rear location. Then, to see the significance of the effect, m From the results of data processing, it can be seen that the average warning label value included in the product packaging message judgment is $M = 3.68$ and the warning label average value without the message source on the product packaging is $M = 3, 52$. That is, there is little difference in the effect of the warning label.

Then, to see the significance of this effect, through the T test seen in the one sample Test, it is seen that the sig.000 value ($p < 0.5$), and the calculated T value is greater than the T table i.e., T count = 41.8 > T table df (29) = 1.69, so H_0 is rejected. This means that there is a significant effect between the two mean variables compared. Thus, H_3 , through the T test seen in the one sample Test table, shows that the sig.000 value ($p < 0.5$), and the calculated T value is greater than T table, that is T count = 34.00 > T table df (29) = 1.69, so H_0 is rejected. This means that there is a significant effect between the two mean variables compared. Thus H_1 is accepted:

Warning labels that are included in the message source on product packaging have a significant influence on judgment when compared with warning labels without message sources on product packaging.

From Table 4, it can be seen the results of data processing also found that the average value of the warning label that uses idol images decrease purchase intention as $M = 4.89$, and ordinary people's image warning labels against a decrease in purchase intention because of $M = 4.16$. That is, the effect of visual warning labels is greater than textual. Then, to see the significance of this effect, through the T test seen in the one sample Test table, it can be seen that the sig.000 value ($p < 0.5$), and

the calculated T value is greater than T table, that is $T \text{ count} = 50 > T \text{ table } df (29) = 1.69$, so H_0 is rejected. This means that there is a significant effect between the two mean variables compared. Thus H_4 is accepted so:

Warning labels that use images of idol figures are more effective in influencing purchase intention compared to pictures of ordinary people on product packaging warning labels.

Table 4. *One-Sample Test-idol*

	Test Value = 0					
	T	Df	Sig. (2-tailed)	Mean Difference	95% Confidence Interval of the Difference	
					Lower	Upper
PurchaseIN_IDO L	43,832	29	,000	4,89167	4,6634	5,1199
PurchaseIN_NOI DOL	50,000	29	,000	4,16667	3,9962	4,3371

□

Source: *Data processing 2018.*

7. Discussion

Characteristics of content that effectively warns about hazards, is able to explain the consequences, and provides instructions to avoid that danger. The results of this study add to the list of warning label effectiveness literature. The results show that the strategy used to increase the effectiveness of labels has improved the sharpness of label details by manipulating the characteristics of the design. There are three characteristic elements of a manipulated warning label, namely the message label warning content, label text or writing and pictorial format, as well as the location of the product / packaging warning label placement. First label content refers to the choice of easy-to-digest vocabulary, for example health hazards that arise when consuming junk food products. This result is in line with the explanation in the previous section that things that need to be considered in writing text warning label covers all the characteristics of text format such as font color, font size, text direction, space ratio, instructions, text written in bold type, etc., so as to make text messages easier to read or look in line with the findings of Adams Dan Edworthy's (1995) study, Barlow and Wogalter (1993), Hammond *et al.* (2011) and Malouff *et al.* (1993).

In addition, the research findings also reinforce the statement that label forms are important parameters for the effectiveness of labels themselves such as label configuration, label form, border, package design, label color, and so on, as in the findings of Adams and Edworthy (1995), Barlow and Wogalter (1993), and Bhalla

and Lastovicka (1984). Second, choosing the right image to illustrate the warning label both health hazards and social consequences that arise when consuming products. Third, the location of the warning label placement in this study is placed in front of the packaging and next to the main image of the product packaging. This result is in line with previous research that the location of warning labels on a product, or in relation to other packaging design elements, for example included in the instructions for use, can also influence whether the warning label can be seen and whether or not the recipient is aware. Labels can be placed on locations more striking than others, for example, located in front rather than behind or side of packaging. Thus, the location of labels positioned under the labeling of product category characteristics in this study is in line with the findings in Barlow and Wogalter's (1993) study and Halim (2015).

In this result, warning labels are used using striking design elements designed to give rise to emotional responses, for example fear, this finding supports Kees *et al* (2010) 's statement that warning labels designed bright red on products cause fearful arousal. This helps cognitive processes by increasing readability of messages and overcoming language barriers and problems of illiteracy, and has an additional impact on consumers by inducing negative emotions towards consumption (Kees *et al.*, 2010). The results also showed that there was a significant influence on the use of children's idol images in warning labels regarding the effectiveness of warning labels compared to ordinary people's labels. This finding is an additional literature in the study of warning labels on products mainly intended for kid and tween consumers.

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