Advertising Attitude, Green Purchase Intention and Environmental Concern: Promoting Functional Versus Emotional Appeals

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Abstract: The inadequacy of information related to green purchase intention makes it essential for marketers to understand consumer behaviour towards green advertising especially in Indonesia, where the trend is still new. Acknowledging this research gap, this study aimed to investigate the influence of different green ads by testing on whether the ads generate green purchase intention by shaping advertising attitudes. In addition, the moderating role of high or low levels of the participants’ environmental concern is also taken into account. This research compares the effects of four types of advertisements: a functional green ad promoting the environmental benefits of a product, an emotional green ad employing a visual representation of pleasant natural scenery, a combined-type green ad that unites both functional and emotional attributes, and a control ad. Data collection through online questionnaires was obtained from 143 Indonesian youth and this was done by way of convenience sampling approach. Using separate univariate regression analysis, the findings of the experimental study suggest that functional, emotional and combined-type green ads all significantly enhance green purchase intention by shaping ad attitudes, where the functional ad displays itself as the most effective appeal out of the rest. These effects do depend on the participants’ level of environmental concern, shown by the significant moderating role of high environmental concern towards functional ads and the significant moderating role of low environmental concern towards emotional ads. The reason behind this research outcome is proposed to be due to the participants’ avoidance of greenwashing which the future scope can explore more about; especially for the Indonesian sample as research on green marketing in Indonesia is relatively scant compared to other Asian and Western works.

Keywords: Advertising attitude, green purchase intention, environmental concern, advertising appeals, Indonesian youth

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INTRODUCTION

Rationale for Research

Climate change is inevitable. However, the rate at which it is rising in recent years has been unnatural. Because of the growing concern of global warming, consumers are more aware of environmental consideration (Chen, 2008; Chang, Liou, & Chen, 2012). Thus, they are more willing to purchase green products which are environmentally-friendly (Chen & Chang, 2012, 2013). Parallel to this trend, the use of environmental appeals in green advertising has been extremely popular among practitioners and marketers (Easterling, Kenworthy, & Nemzoff, 1996). Thus research on this topic would be very useful for green marketers who are based in Indonesia, especially since Indonesian based green marketing studies are relatively scant when compared to works from other Asian countries as well as other

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Western works. In terms of current research, there are many Indonesian-based green studies that adheres mainly to green energy, green hospitality and sustainability within organizations. However, there are only a few that analyses the Indonesian customer preference towards green products and how green marketing should be applied: a study based on the Indonesian market analysed that the consumer attitude towards the green product influences their purchase intention significantly (Boris & Sergey, 2018; Handayani, 2017). In addition, a research finding from a frequency analysis indicates that Indonesian women (from age 19-37) considers these three factors to be most important in enhancing their willingness to buy green products: honest environmental claims in promotion, natural ingredients in the product and the company’s awareness/behaviour towards environmental protection (Ayuningrat, Noermijati, & Hadiwidjojo, 2016; Larashati, Hudrasyah, & Chandra, 2012; Luckverawattana, 2016).

From the two studies mentioned above, the research gap that was found was whether different appeals from different green ads have an influence to advertising attitude and green purchase intention. In addition, whether their level of environmental concern have any in determining it too. The results of this study would allow marketers to create a strategy for their green campaigns to ensure that they can generate a positive attitude and behaviour towards their target audiences.

One last research gap found is that among those scant Indonesian-based green marketing studies (Handayani, 2017; Larashati et al., 2012), the youth have rarely been examined. In this study, the youth are examined which the United Nations determine as those who are 15 to 24 years of age. However, the target audience for this research is limited to Indonesians who are 18 to 23 years as the majority of this age group is heading towards tertiary education or have just finished it, making it reachable to the author. Furthermore, the youth are targeted as they can be regarded as the future generation of the country and are part of a growing group of consumers. This is especially as the country is predicted to become the 7th largest economy in the world by 2030 (Oberman, Dobbs, Budiman, Thompson, & Rosse, 2012). Thus, understanding this group at an early stage would be valuable.

**Problem Identification**

Stimulating green citizenship in this day and age is highly important and to an extent, very urgent, especially in Indonesia. This is because Indonesia is a country that became urbanized in less than two generations and as urbanization rapidly accelerated, many environmental issues accumulated. This fast rate has exponentially increased the amount of garbage in large cities which results to a poor environmental quality of life (Dethier, 2017); especially since there’s high consumption of non-biodegradable products such as plastics.

Since the 1980s, the government has tried to tackle the urban environmental issues faced by the country, however the implementation of policies has been poor because of corruption, weak commitment by public agencies as well as low awareness of the environmental problems by the government authorities. An example of an environmental initiative that was not successful was charging US$0.20 tax on single-use plastics, such as plastic bags. This movement was stopped within the same year of initiation due to weak legal grounds and also failure to deter consumers. Now, Indonesia has a major plastic waste problem. The country is second worldwide when it comes to dumping plastic waste into the world’s oceans; Indonesia churns out 3.2 million tonnes each year with nearly half ending up in the sea (Jambeck et al., 2015). In addition, data from Nature Communications revealed that four of Indonesia’s rivers - Brantas, Solo, Serayu and Progo - rank among the 20 most polluted rivers in the world. Not only plastic waste clogs oceans and rivers which can be damaging to the surrounding communities as it can lead to floods and other harm, but the enormous quantities of plastic waste endangers marine life. In 2017, the Indonesian government set a target to reduce plastic waste up to 70 percent by 2025 where US$1 billion will be devoted annually to the effort. However, if the government creates accommodating environmental conditions but the consumer buying habit stays the same, it will be difficult for Indonesia to meet their target. Thus, in order to stimulate positive attitudes towards green consumerism, businesses need to play their part and market their green products accordingly in order to make consumers understand the influence of their purchasing power.

While intention is found to be a good predictor of behaviour (Schiffman & Kanuk, 1997), it would not offer a thorough picture of the consumer’ mind in relation to their purchase decision without examining the values affecting attitudes (Ramayah, Lee, & Mohamad, 2010). Therefore, in this research, appeals which will be presented through different ads will be tested in order to improve the ‘message delivery’ and the effectiveness of green advertising to Indonesian youth. Furthermore, the study aims to assess the level of environmental concern of the target sample and investigate on whether the extent of concern enhances their purchase intentions, by shaping ad attitudes.
LITERATURE REVIEW & HYPOTHESES DEVELOPMENT

Introduction

This chapter is crucial as it provides guidance into how the hypotheses are formulated. In terms of structure, the author will first review the current literature according to several topics which are: Emotional vs. Functional Appeals, Green Purchase Intention and Environmental Concern and Advertising Attitude. The literature review on the separate topics are linked between each other which would allow the reader to arrive to the hypotheses formulated by the author. Lastly, there will be a section that covers the conceptual framework that visually depicts where the hypotheses lie in the framework, which is found towards the end of the chapter.

Emotional vs. Functional Appeals

Among the benefits consumers perceive from advertising, functional and emotional benefits are identified as the two most important appeals (Andrews & Shimp, 2017). Appeals are generated because firms constantly have to plan and manage a positioning strategy for their brand. A brand positioning strategy in itself comprises of many different elements and according to classification schemes of generic positioning strategies, brand positioning uses functional attributes and/or emotional benefits (Aaker, 1996; Tomczak, Esch, & Roosdorp, 1997). This theory also applies when positioning for green products (Hartmann, Ibáñez, & Sainz, 2005).

A green positioning strategy that is developed by functional attributes will promote its relevant environmental advantages compared to competing conventional products by stating at least one of these three statements: the product’s green production processes, product use or product elimination. The aim of this positioning strategy is to deliver information on relevant utilitarian attributes of the green product in order to build brand associations.

In contrast, emotional positioning aims to transfer affective responses to the brand (Edell & Burke, 1987) which can be achieved either by verbal or nonverbal cues. Searles (2010) finds that verbal cues that are developed on enthusiasm appeals strengthen positive attitudes towards environmental protection and positively influence eco-friendly views. In contrast, nonverbal cues such as displaying a single dominant positive image in green ads is sufficient in stimulating positive affective responses (Chowdhury, Olsen, & Pracejus, 2008; Intan, 2016; Srisangkaew, 2017). For example, Kaplan and Kaplan (1989) show that visual representation of pleasant natural scenery generate positive emotions.

Within the research of emotional and functional appeals applied in advertising, Hartmann et al. (2005) has become notable in studying whether functional attributes or emotional appeals are most effective in building positive brand attitudes for green products. In their first experiment, the researchers designed three positioning strategies (with functional, emotional and combined appeals) for a hypothetical car brand and display it in a form of three separate ads to survey 160 university students. Their study shows that “a combined strategy, which appeals to both environmental consciousness and emotional benefits, will yield stronger attitudinal effect than either functional or emotional positioning strategies on their own” (page 21).

Later Hartmann and Apaolaza-Ibáñez (2009) designed three experimental ads which includes a non-environmental ad, an environmental ad providing information on the environmental features of the brand and a nature ad which combines the environmental features of the brand with a natural image. These ads were included in a national survey which included 360 participants. The authors find that natural imagery generates a positive brand attitude for informational appeals. In addition, they stated that pleasant natural imagery leads to the connection of specific emotions with the brand that are, to an extent, comparable to an individual’s contact and experience with nature.

From these studies by Hartmann and Apaolaza-Ibáñez (2009), the evidence suggests that all three positioning strategies (functional, emotional and combined) exert positive overall influences on brand attitude. However, since Hartmann and Apaolaza-Ibáñez (2009) was not consistent with presenting three separate ads, and Hartmann et al. (2005) did not design the combined-ad as the sum of the functional and emotional ad, (Matthes, Wonneberger, & Schmuck, 2014) was the first to compare the three ads (functional, emotional and combined) simultaneously in a consistent manner. Matthes et al. (2014) also discovered whether the moderating role of environmental involvement can predict one’s attitude towards the ad and brand, where environmental involvement was comprised of green purchase behaviour, green product attitudes and environmental concern.

From the study by Matthes et al. (2014), we now understand that both the emotional and combined-type ads has a significant, positive influence on brand attitude, mediated by attitude toward the ad and not moderated by the consumers’ green involvement. On the other hand, functional ads only positively impact brand attitudes when green involvement is high-specifically measured by the moderation effect of green purchase behaviour and/or green product attitudes, but not
environmental concern.

Thus, in this study, the author will focus on re-creating stimuli that is similar to the designs made by Hartmann et al. (2005) and Matthes et al. (2014). Instead of using a real brand name and a real product like the two studies did, the author decided to design ads that have no brand associations meaning that the brand name, logo and product is non-existent in the real world. The reason behind this decision will be discussed later in this chapter.

Hence, in this paper, the author decided to design ads for a brand/product that replaces the use of plastic water bottles by creating ads that promote eco-friendly vacuum flasks. Just like Matthes et al. (2014), the author also decided to design four different ads which includes a control ad, functional ad, emotional ad and a combined ad. The four ads itself will be designed accordingly by the guidelines from the literature stated previously to ensure that the ads encompass the characteristics of the appeals used for stimuli.

**Green Purchase Intention & Environmental Concern**

Rashid, Jusoff, and Kassim (2009) refers green purchase intention as the probability and willingness of an individual to give preference to eco-friendly products over conventional products in their purchase considerations. According to Ajzen and Fishbein (1975), purchase intention is a critical factor to predict consumer behaviour especially as it has been used as a proxy for actual behaviour (Follows & Jobber, 2000). This was why Aman, Harun, and Hussein (2012) studied the antecedents of green purchase behaviour that is specific to the Malaysian consumer market. The authors find that environmental knowledge and environmental concern significantly influences green purchase intention - where attitude has a partial mediation effect.

Moving on, a wealth of research defines involved green consumers as those who are highly concerned about the environment (D’souza & Taghian, 2005; Mohr, Erglu, & Ellen, 1998). Environmental concern refers to an individual’s degree of emotionality to environmental issues (Maloney, Ward, & Braucht, 1975; Maslikhan, 2019; Onegi, Esen, & Korkmaz, 2019). According to Schwartz and Miller (1991), environmental concern has an important role in green buying decisions hence why Matthes et al. (2014) regards an individual’s environmental concern as an element of their environmental involvement.

As mentioned before, Matthes et al. (2014) breaks down environmental involvement into three elements which are: green purchase behaviour, attitudes toward green products and environmental concern. In this study, only environmental concern is taken into account (as a moderating variable) even though it’s proven that it does not have a moderation effect towards brand attitudes by shaping ad attitudes (Matthes et al., 2014). The reason why environmental concern is still used in this study is because the result from Matthes et al. (2014) focused on the relationship of the appeals towards brand attitude, whereas in this research, the author regards green purchase intention as the dependent variable, not brand attitude. This will generate different results especially since research already finds that environmental concern is significant in determining green purchase intentions (Aman et al., 2012; Visser, 2016) and it also has a moderation effect towards green purchase intentions (Grimmer & Woolley, 2014; Oetomo & Budiyanto, 2017).

Moreover, the reason why this paper mainly focuses on environmental concern as the moderating variable and not consider the other two elements of environmental involvement is because: (1) green purchase behaviour cannot moderate green purchase intention and (2) attitudes toward green products has a dimension that states “I feel proud when I buy/use green products” which may not be applicable for those who haven’t had any experience with a green product. This second point may lead to missing data or respondents to potentially unable to submit the uncompleted survey. Overall, this study will characterize green purchase intention as the dependent variable, in order to investigate what type of advertising appeal is most effective in enhancing green purchase intention. Added to that, the participants’ level of environmental concern will also be examined in order to investigate on whether it can predict green purchase intention from the different green ads - thus environmental concern will have a role as a moderating variable. This is because Bonniface and Henley (2008) finds that consumers’ environmental affect/concern is key to changing behaviour. In addition, as stated before, Grimmer and Woolley (2014) discovered that environmental affect or ‘concern’ moderated the effect of the advertisements on green purchase intention. The study by Grimmer and Woolley (2014) also show that respondents with high environmental concern show greater purchase intention when exposed to a pure environmental appeal whereas those with lower levels of concern have greater purchase intention when exposed to a personal environmental appeal. Later in this paper, hypotheses of this type will be generated by the author, as pure environmental appeal suggests a rational/functional ‘message delivery’ and a personal environmental appeal aims to enhance one’s emotions with the natural environment.
Advertising Attitude

According to Kotler et al. (2000), attitude is an individual’s consistently favourable or unfavourable evaluations, feelings and tendencies towards an idea or object. A study by Follows and Jobber (2000) show that relationships exist between attitude to purchase intentions and to purchase behaviour, hence why green purchase intention is used in this research as an outcome variable to the different ads displayed.

As stated before, in a study by Matthes et al. (2014), advertising attitude has a highly significant mediation effect on the attitude towards the brand. Since Matthes et al. (2014) used a real brand, Ecover, for their four ads and displayed the brand’s real green product, it is suitable that they measure the consumers’ attitude towards the brand. In the case of this paper, the author decided to compare the effects of a green product that is non-existent in the market, as mentioned before. This is because the four ads will only serve as a visual construct of the green appeal, hence why the product’s name, logo and other attributes will all be designed by the author in order to fulfill the research focus. This ensures that the stimuli only measures the advertising attitude of the appeal towards green purchase intention and not measure the advertising attitude of the appeal towards brand attitude. This would allow the author to understand what type of appeal has the greatest strength in generating green purchase intentions, with no brand affiliations involved.

Moving on, Matthes et al. (2014) also found that green ads with functional appeal, emotional appeal and combined appeal all generate a positive advertising attitude toward the green ads, after using the control ad as reference, which resulted to positive brand attitudes. Added to that, it is also discovered that combined-type ads are significantly the most effective in generating positive advertising attitudes (Hartmann et al., 2005; Matthes et al., 2014). This will now be tested with the Indonesian youth sample for the purpose of inference, which leads to the following hypotheses:

**H1:** Functional ads have a positive impact on green purchase intention by shaping ad. attitudes.

**H2:** Emotional ads have a positive impact on green purchase intention by shaping ad. attitudes.

**H3:** Combined ads have a positive impact on green purchase intention by shaping ad. attitudes.

**H4:** Combined ads generate greater green purchase intention by shaping ad attitudes compared to functional and emotional ads.

Moreover, as mentioned before, since environmental concern is proved by Aman et al. (2012) as an significant predictor of green purchase intention and it also has a significant moderating role (Grimmer & Woolley, 2014), the author will also investigate on whether it has a moderation effect, i.e., whether it strengthens the relationship between advertising attitude to green purchase intention, which leads to the following hypotheses:

**H5:** The effects of emotional ad towards green purchase intention is stronger with those with low environmental concern.

**H6:** The effects of functional ad towards green purchase intention is stronger with those with high environmental concern.

Conceptual Framework

Below is the framework that visualizes the relationships between each variables, shown by the placement of H1, H2, H3, H5 and H6. The reason why H4 is not visible in this framework is because it does not necessarily have a relationship as it tests H3 > H1 and H3 > H2.
RESEARCH METHODOLOGY

Introduction

As mentioned earlier, based on current literature, it is clear that there is a gap in the research field about the influence of green appeals (functional, emotional and combined) towards green purchase intention for the promotion of green products. This is because previous research only compared the effect of personal and environmental appeals towards purchase intention (Grimmer & Woolley, 2014) and only brand attitude was measured from the functional, emotional and combined appeals, not purchase intention (Hartmann et al., 2005; Matthes et al., 2014). By using the Indonesian youth as a case study, the author hopes to fill this research gap through the use of parametric statistical tests, analysing within 95% confidence interval.

Research Context

It was also previously stated that the reason why Indonesians are chosen to be the participants of this research is because of the relatively scant studies on this sample compared to other Asian and Western works. In addition, the reason why the youth, which the author limited it to those of 18-23 years of age, is chosen is because this provides a convenience sampling approach for the author. However, it is also important to mention that the youth are a big part of a growing group of consumers, especially as Indonesia will be the 7th largest economy in 2030 (Oberman et al., 2012). Thus, it is important to contribute to studies that examines this group, in order to fill the research gap.

Research Philosophy

Moreover, since Sapsford (2006) refers a methodology as “a philosophical stance of worldview that underlies and informs a style of research”, a philosophical standing needs to be addressed in this research, in order to shape how the author understands their research questions, the methods they use and how they interpret their findings (Crotty, 1998). In the case of this study, the author decided to follow an ontological philosophy with a paradigm of positivism, hence why certain hypotheses are tested and a relatively large sample is surveyed for quantitative analysis. The reason behind this is because the author would like to undertake confirmatory studies that is developed from current literature in order to infer on the results.

Research Questions and Design

The aim of this study is to understand what advertising appeal is most effective when promoting green products which is measured by the level of green purchase intention generated from viewing the different ads. In addition, the author would also like to explore on whether an individual’s level of environmental concern has any moderation effect in this relationship measured. In order to answer these questions, there are two particular research questions formed:

1. What green appeal (functional, emotional or combined) has the most positive effect to green purchase intention by shaping advertising attitudes?
2. Does environmental concern have a role in strengthening the relationship between advertising attitude and green purchase intention for the specific green ads displayed?

The six hypotheses stated in the literature review will be tested by first presenting four different green ads that serves as stimuli to the targeted participants. Just like in the research by Matthes et al. (2014), the four ads as stated before will include a control, functional, emotional and combined ad, where the control ad serves as reference to measure the green purchase intention when subtle changes are made. The control ad itself will depict a picture of the product, brand name and slogan in front of a neutral background. The functional ad will display the product, brand and slogan along with four environmental advantages in front of a neutral background, where the arguments (of four environmental advantages) are obtained from real ads. The emotional ad shows the product, brand name, slogan in front of a scenic nature image in the background. Lastly, the combined ad unites both the features displayed in the functional and emotional condition.

For the ad content itself, one brand will be advertised from one product category which in this case are reusable vacuum flasks. Unfamiliar brand names were used to eliminate the influence of prior brand knowledge, preferences and usage experience. In this case, the author named the product Eco-Daily. In addition, in order to avoid product familiarity and enhance generalizability, the product selected was one that had no brand associations hence why the author created its own specific utilitarian features, logo and slogan. This is again, to ensure that the author fulfills their research focus as they don’t want to measure brand attitude like in the research by Matthes et al. (2014), but instead
measure green purchase intention from the different green ads presented. Appendix I will display the green ads, which serves as stimuli, used in testing the hypotheses.

Other than measuring the advertising attitude and green purchase intention generated from viewing the different ads, the respondents’ level of environmental concern was also measured in order to test the moderation effect at different levels for the functional and emotional ad, as stated before in H5 and 6.

All of the variables used in this research will be measured with 5-point Likert scale questions. The advertising attitude and green purchase intention will be measured four times as there are four ads to be assessed. In contrast, the participants’ level of environmental concern will only be asked once. The questions/measurements for each variable will be displayed, along with the references, in Table 1:

Table 1 MEASUREMENTS FOR VARIABLES

<table>
<thead>
<tr>
<th>Variables</th>
<th>Measurements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising Attitude</td>
<td>Semantic differential scale diagram:</td>
</tr>
<tr>
<td></td>
<td>1. Bad – Good;</td>
</tr>
<tr>
<td></td>
<td>2. Unpleasant – Pleasant;</td>
</tr>
<tr>
<td></td>
<td>3. Unfavorable – Favorable;</td>
</tr>
<tr>
<td></td>
<td>4. Unconvincing – Convincing;</td>
</tr>
<tr>
<td></td>
<td>5. Not Credible – Credible;</td>
</tr>
<tr>
<td></td>
<td>6. Interesting – Boring. (Madden, Allen, &amp; Twible, 1988; Matthes et al., 2014)</td>
</tr>
<tr>
<td>Green Purchase Intention</td>
<td>1. Definitely Will Not Buy;</td>
</tr>
<tr>
<td></td>
<td>Probably Will Not Buy;</td>
</tr>
<tr>
<td></td>
<td>Might/Might Not Buy;</td>
</tr>
<tr>
<td></td>
<td>Probably Will Buy;</td>
</tr>
<tr>
<td></td>
<td>Definitely Will Buy. (Jamieson &amp; Bass, 1989; Kalwani &amp; Silk, 1982)</td>
</tr>
<tr>
<td>Environmental Concern</td>
<td>1. I am extremely worried about the state of the world’s environment and what it will mean for my future;</td>
</tr>
<tr>
<td></td>
<td>2. Mankind is severely abusing the environment;</td>
</tr>
<tr>
<td></td>
<td>3. When humans interfere with nature it often produces disastrous consequences. (Kim &amp; Choi, 2005)</td>
</tr>
<tr>
<td></td>
<td>4. The condition of the environment affects the quality of my life;</td>
</tr>
<tr>
<td></td>
<td>5. I am willing to make sacrifices to protect the environment;</td>
</tr>
<tr>
<td></td>
<td>6. My actions impact the environment. (Schuhwerk &amp; Lefkoff-Hagius, 1995)</td>
</tr>
</tbody>
</table>

The reason why semantic differential scales are used in measuring the advertising attitude of the different green ads is because it appears to be among the best available instruments for measuring multi-component concepts (Agheyisi & Fishman, 1970) and has been employed very successfully in attitude studies. This is because this type of method is clear on what is negative or positive as it includes polarizing adjectives which allows for a rapid assessment. This is crucial because rapid assessments are thought to reflect a ‘truer’ evaluation of judgement as it provides a better sense of a person’s underlying beliefs and attitudes (Al-Hindawe et al., 1996). In addition, this type of evaluation is simpler and thus less tedious.

On the other hand, the other variables being measured will also be a ranking-type question in Likert-style. For green purchase intention, the respondent will just rate their intention according to the five scales; thus only one question is being answered for this variable. In contrast, measuring environmental concern will need six questions to be answered in likert-style with the option to state strongly agree, agree, neither agree nor disagree, disagree and strongly disagree.

Data Collection

As mentioned in the introduction for research methods, the author will use a quantitative method in answering the research questions in order to obtain primary data. This is by creating an online questionnaire that is then distributed
to the target sample. An online platform is used since it provides convenience sampling considering the proximity between the UK and the target sample, which are Indonesian youth.

Online questionnaires were distributed to the youth via social media platforms, whether it’s in a group-chat or by personal messages. This is because as Buchanan et al. in Saunders, Lewis, and Thornhill (2012), researcher are more likely to gain access to data when using their own existing contacts. In this case, the author has many contacts from their home university, Bandung Institute of Technology, which made it easier to collect data as there is only one survey to distribute. In order to ensure that the respondents are those between 18-23 years of age, a question on age is asked that only provides a selection of answers: 18, 19, 20, 21, 22 and 23. In addition, there was a disclaimer in the front page of the survey that states “The respondents for this survey are aimed at Indonesians who are 18-23 years of age”. In total, data from 143 respondents were collected through the online survey platform.

**Data Analysis**

Since Table 1 shows that each variable has more than one dimension to be measured, such as how advertising attitude is measured by answering six different semantic differential scales, composite variables are created in SPSS in order to deduce the mean generated from the answers per variable. This means that composite variables are created for each respondent’s environmental concern and advertising attitude.

The analysis employs four separate univariate regressions to test the correlation and significance of each relationship between the advertising attitude and the green purchase intention generated for each ad. As stated before, the control ad is used as reference to understand the impact of when advertising appeals such as functional, emotional and combined appeals are applied. Overall, this implies that the advertising attitude serves as the predictor variable (independent variable) and green purchase intention is the outcome variable (dependent variable).

The reason why four separate univariate regressions are implemented instead of using multiple regression as the method for analysis is because the predictor variable, which is the advertising attitude from green ad, has singularity involved as the combined appeal unites both features from the functional and emotional condition. The presence of singularity can affect the interpretation of the predictor variables effect on the outcome variables (Pallant, 2013). Even though the results of the correlation may not be significantly different, the author will still be able to understand what appeal is most effective as there is a control ad used as reference.

**Ethical Consideration**

When creating the research design and structure for the online surveys, the importance of ethics is considered. The research itself is ethically approved and the author has ensured to follow and conduct the research according to the ethical guidelines that was agreed upon, as shown in Appendix II. In addition, before each respondent answers the questions, they first need to click on the checkbox that states their willingness to give consent in participating in the survey. Moreover, no personal or commercially sensitive questions or information were asked that would cause conflict or harm to the respondents who took part in the survey, in order to protect their privacy and peace. The researchers’ email address as well as their contact details were distributed too when inviting potential respondents to fill the survey. This is to ensure that any respondent can contact the researcher if they have any concerns with the ethical statements in the ‘Declaration of Consent’ page or if they have any concerns with the survey in general. Fortunately, there were no respondents that personally contacted the researcher, implying that there were no issues in regards to data collection.

**RESULTS**

**Respondents’ Demographic Profile**

Based on the online survey, the female respondents represented 51.7% (74 female respondents) of the total respondents while the male respondents represented 48.3% (69 male respondents) of the total respondents. In addition, the age distribution of the respondents was: 18 years old (7%); 19 years old (14%); 20 years old (39.2%); 21 years old (26.6%); 22 years old (10.5%) and 23 years old (2.8%). Lastly, in terms of their occupation, 2.7% are students in secondary education, 89.2% are students in higher education, 0 are full-time employees, 2% are full-time entrepreneurs, 2.7% are unemployed and 3.4% selected ‘other’. This is all visually displayed in Appendix IV.
Reliability & Validity Test

The measurement of reliability indicated the degree to which measures are free from random error and therefore yield consistent results. All of the three variables were tested for the reliability of the dimensions within the variable by using Cronbach’s alpha in order to ensure the consistency of the adopted instruments. Cronbach’s alpha for the three variables were obtained and summarized in Table 2. In terms of the results, the Cronbach’s alpha ranged from the lowest of 0.644 (Environmental Concern) to 0.946 (Advertising Attitude). In contrast, green purchase intention has an alpha of 0.867. To conclude, two out of three results (Advertising Attitude and Green Purchase Intention) used in this research exceeded the preferable scores of 0.70 which indicates a stable and consistent use of measurement scales for this research (Nunnally, 1978). Meanwhile, the score for Environmental Concern falls just below 0.70 which according to (Hair, Sarstedt, Ringle, & Mena, 2012), is “acceptable”. This guideline is followed by the author as they did not want to delete relevant questions to increase the Cronbach’s alpha as is it can lead to a risk of losing content validity.

Table 2 RESULTS OF CRONBACH’S ALPHA

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Before Delete</th>
<th>After Delete</th>
<th>Final Composite Reliability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Advertising Attitude</td>
<td>.946</td>
<td>Not Applicable</td>
<td>.946</td>
</tr>
<tr>
<td>2 Green Purchase Intention</td>
<td>.867</td>
<td>Not Applicable</td>
<td>.867</td>
</tr>
<tr>
<td>3 Environmental Concern</td>
<td>.644</td>
<td>Not Applicable</td>
<td>.644</td>
</tr>
</tbody>
</table>

A validity test was also conducted because even though the test is reliable, it may not provide a valid measure of the variables. As suggested by Cavana, Delahaye, and Sekaran (2001), construct validity was adopted in this research as validity measurement, while factor analysis was used to measure the construct validity itself. Based on the results of the factor analysis shown in Table 3, the constructs were suitable for factor analysis because the value of Kaisder-Meyer-Olkin (KMO) was 0.887; between 0.8 to 0.9 (Wei, 2006) and the Barlett’s Test of Sphericity was significant ($p < 0.0001$; d.f. = 561) for all correlations.

Table 3 KMO AND BARTLETT’S TEST

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | .887 |
| Bartlett’s Test of Sphericity Approx. Chi-Square | 3529.512 |
| df                                          | 561  |
| Sig.                                        | .000 |

Other ways to ensure that the regression model is valid for analytics is to look at the $r$-squared value of the regressions which is displayed in Table 5. According to Cohen (1992), all of the values are valid as the value lies above 0.26 which indicate high effect size. A normality test and a test for heteroscedasticity is also implemented to ensure validity of the parametric test which will be discussed after this section.

Normality Test

To test that all variables are normal, a histogram and P-P-Plot is created for all of the regressions. Based on the results of the test for normality shown in Appendix III, all of the variables are approximately normally distributed as the results create a bell-shaped curve and the plots are relatively close to the line on the P-P-Plot. This then confirms that the data retrieved from the survey in considered normal.

Test for Heteroscedasticity

Homoscedasticity is also a key assumption when doing a linear regression analysis to ensure that residuals are equal across the regression line. The scatter plot in Appendix IV suggest that all data are homoscedastic as it all is
approximately within the range of -3 and 3.

**Univariate Regression Analysis**

As mentioned earlier, univariate regression analysis was used in this research to evaluate and determine the strength of the relationships between the attitude of the different green ads and green purchase intention. In addition, the reason of applying this method instead of a multiple regression analysis is to avoid singularity between the independent variables. From the four separate univariate regression analysis, the author was able to test the hypotheses, before adding the moderating role of environmental concern in the picture. The results for this is presented below in Tables 4 and 5.

Table 4 *RESULTS OF SEPARATE UNIVARIATE REGRESSION ANALYSIS*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
<th>95.0% Confidence Interval for B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
<td>Lower Bound</td>
</tr>
<tr>
<td>1 Control Ad</td>
<td>.608</td>
<td>.080</td>
<td>.541</td>
<td>7.629</td>
<td>.000</td>
</tr>
<tr>
<td>2 Functional Ad</td>
<td>.808</td>
<td>.076</td>
<td>.667</td>
<td>10.632</td>
<td>.000</td>
</tr>
<tr>
<td>3 Emotional Ad</td>
<td>.750</td>
<td>.082</td>
<td>.612</td>
<td>9.187</td>
<td>.000</td>
</tr>
<tr>
<td>4 Combined Ad</td>
<td>.788</td>
<td>.076</td>
<td>.658</td>
<td>10.382</td>
<td>.000</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Green Purchase Intention

Table 5 *REGRESSION VALUES FOR EACH MODEL*

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Control Ad</td>
<td>.541*</td>
<td>.292</td>
<td>.287</td>
</tr>
<tr>
<td>2 Functional Ad</td>
<td>.667*</td>
<td>.445</td>
<td>.441</td>
</tr>
<tr>
<td>3 Emotional Ad</td>
<td>.612*</td>
<td>.374</td>
<td>.370</td>
</tr>
<tr>
<td>4 Combined Ad</td>
<td>.658*</td>
<td>.433</td>
<td>.429</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant) & Control Ad, Functional Ad, Emotional Ad and Combined Ad
b. Dependent Variable: Green Purchase Intention

The first three hypotheses aim at the main effects of functional, emotional and combined appeals. Following expectations, the functional ad ($b = .808; p < .001$), emotional ad ($b = .750; p < .001$) and combined ad ($b = .788; p < .001$) all significantly have a positive influence towards green purchase intentions by shaping advertising attitudes. This is shown in Table 4. In addition, all of the regression values ($r$) are between .50 and 1.0, this implies that there is a large correlation between these relationships (Cohen, 2013). Therefore, this analysis suggests that H1, 2 and 3 are supported. This finding suggests that all of the ads, separately compared to the control/reference ad, have a positive influence on green purchase intentions through their effects on ad evaluations.

Even though the descriptive statistics (from a comparison of means) of this study suggests that combined ads have a more positive result compared to functional and emotional ads (shown in Appendix IV), combined ads do not generate a greater influence to green purchase intention. Therefore, contrary to expectations, H4 is not supported even though the values have the slightest difference.

**Moderator Analysis**

Using univariate regression again, the moderating role of environmental concern is measured in order to understand whether environmental concern has a role in strengthening the relationship between advertising attitude and green purchase intention. From the two separate univariate regression analysis, the author was able to test the rest of the
hypotheses. The result for this is presented in Table 6 and 7.

Table 6 **RESULTS FOR MODERATION EFFECT OF LOW ENVIRONMENTAL CONCERN ON EMOTIONAL ADS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>3.200</td>
<td>.083</td>
<td></td>
<td>38.494</td>
</tr>
<tr>
<td>Zscore: Emotional Ad</td>
<td>.453</td>
<td>.087</td>
<td>.524</td>
<td>5.210</td>
</tr>
<tr>
<td>ZEC_Low</td>
<td>.141</td>
<td>.059</td>
<td>.163</td>
<td>2.415</td>
</tr>
<tr>
<td>zEC_Low_x_zAA_EA</td>
<td>.040</td>
<td>.055</td>
<td>.072</td>
<td>.733</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Green Purchase Intention

Table 7 **RESULTS FOR MODERATION EFFECT OF HIGH ENVIRONMENTAL CONCERN ON FUNCTIONAL ADS**

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>3.549</td>
<td>.080</td>
<td></td>
<td>44.287</td>
</tr>
<tr>
<td>Zscore: Functional Ad</td>
<td>.681</td>
<td>.082</td>
<td>.762</td>
<td>8.271</td>
</tr>
<tr>
<td>ZEC_High</td>
<td>.035</td>
<td>.057</td>
<td>.039</td>
<td>.610</td>
</tr>
<tr>
<td>zEC_High_x_zAA_FA</td>
<td>.098</td>
<td>.065</td>
<td>.139</td>
<td>1.510</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Green Purchase Intention

The last two hypotheses aim at the moderation effects of environmental concern towards the relationships between advertising attitude and green purchase intention, specifically for functional and emotional ads. This test is conducted by creating a new variable as shown in Table 6 and 7 in order to create the interaction term between advertising attitude (from the green ad) and low/high environmental concern. Following expectations, the results indicate that there is a statistically significant moderating effect of environmental concern on the functional ad (beta = .762; t > 1; p > .001) and emotional ad (beta = .524; t > 1; p > .001). Therefore, this result implies that H5 and 6 are supported. The finding suggests that there’s stronger effect on emotional ads for those low in environmental concern and there’s a stronger effect on functional ads for those high in environmental concern.

**DISCUSSION**

**Research Findings**

The study advances the literature by focusing on the level of green purchase intention generated from three types of green ads with a dimension of environmental concern considered. Findings suggest that functional, emotional and combined appeals play a key role in shaping advertising attitudes which can generate green purchase intention. Functional appeals reveal significant main effects to purchase intention compared to the other two and according to the different levels of environmental concern, functional ads generate higher purchase intention when environmental concern is high. Combined appeal, on the other hand, rank second-best in generating green purchase intentions by shaping advertising attitudes. Lastly, emotional appeals generate the least impact to green purchase intentions, however it is still effective in generating higher purchase intentions when environmental concern is low.

Even though research suggests that combined ads has the greatest impact to brand attitudes (Hartmann et al., 2005; Matthes et al., 2014) and that positive attitudes has a great impact to purchase intention (Follows & Jobber, 2000), this study surprisingly finds that combined appeals are not as superior compared to the functional appeals. This could be because combined green appeals do not equally affect all consumers to the extent of stimulating green purchase intention. This conveys that Indonesian youth may consider the utilitarian benefits the most important factor in their purchase decision for green products.
However, this research confirms the research by Handayani (2017) that suggests consumer attitude towards the green product influences their purchase intention significantly, in the context of Indonesia, which is why the hypotheses generated are supported and are statistically significant.

**Contextualization**

Several marketing implications from the attitudes of green consumerism of Indonesian youth can be taken from these findings. By now putting the findings into the wider context of academia, the results show a bigger picture which can be used for further research. For instance, Andrews and Shimp (2017) finds that one of the major functional benefits that a consumer seeks from advertising is information. Since enough information about the green product is mentioned in the functional ad, this generated greater purchase intention, even compared to the combined-type ads which include both features/attributes from the functional and emotional ad. However, it needs to be taken to account that difference in effect between functional and emotional ads is very minimal which implies that uniting functional attributes with emotional appeals is still useful, especially when it comes to building a strong brand position (Matthes et al., 2014).

The most prevalent argument behind why functional ads generate greater purchase intention than any other type of ad-exposure is because there is of the popularity of greenwashing between companies in order to enhance consumer trust (Laufer, 2003). The term greenwashing itself is referred as the act of misleading consumers regarding the environmental practices of a company or the being dishonest about the environmental benefits of a product or service (Parguel, Benoît-Moreau, & Larceneux, 2011). This consequently results to consumers’ growing skepticism toward firms that take opportunistic advantage of environmental trends (Pomering & Johnson, 2009). This finding is crucial for green marketers, especially since Peattie, Peattie, and Ponting (2009) reveals that perceptions of greenwash can damage consumers’ attitude towards a company that communicates about its environmental engagements.

In order to tackle this greenwashing challenge that may increase skepticism towards green products, green marketers need to reduce consumer confusion and perceived risk by allowing consumers to obtain enough information that enables them to compare the green products with other products, specifically on the basis of the product’s environmental consideration (Hoedeman, 2002). Thus, instead of just claiming or providing a feeling of “greenness” in products, marketers need to disclose more information about their products. This is especially since Chen (2008) reveals that it would be hard for green marketers to convince customers of the excellence of their products if there’s no trustworthy information provided to them about the green claims.

**Research Questions Answered & Conclusion**

The aim of the research was to identify what green appeals are most effective in generating green purchase intention by shaping advertising attitudes and understand the consideration of environmental concern. This is by specifically surveying Indonesian youth. In order to do this, two research questions were created to provide a clear focus for the analysis:

1. What green appeal (functional, emotional or combined) has the most positive effect to green purchase intention by shaping advertising attitudes?
2. Does environmental concern have a role in strengthening the relationship between advertising attitude and green purchase intention for the specific green ads displayed?

Firstly, the most effective advertising appeal that generates the greatest purchase intention when promoting green products is the functional appeal. This is specifically for the sample of Indonesian youth who are aged between 18 to 23 years old. In terms of answering the second research question, environmental concern does have a role in strengthening the relationship between advertising attitude and green purchase intention for the specific green ads displayed. What was discovered is that those who have high environmental concern are more influenced by the functional ad and those who have low environmental concern are more influenced by emotional ads, all in terms of generating green purchase intention.

Overall, the study provides a clear and focused analysis of the performance of different advertising appeals, specifically in generating green purchase intention. This research has great marketing implications as there were many inferences that have been made from the gaps and overlaps from previous literature. Even though Hartmann et al. (2005) and Matthes et al. (2014) discovered that functional appeals generate the lowest brand attitude shaped by advertising attitudes, this study suggests that functional appeals generate the highest purchase intention compared to the other ads. The possible explanation for this is because the use of greenwashing has made consumers sceptic about green claims.
made on products, thus rational information about how the green products are eco-friendly builds greater consumer trust thus generates greater purchase intentions compared to emotional appeals and even combined-type appeals.

LIMITATIONS & FUTURE RESEARCH

Several notable research limitations qualify these practical implications. The first limitation is that this study compares the effects of functional and emotional claims by comparing a visual representation of nature (imagery) and the presentation of elaborated product attributes/features. Since these are very general methods to test the hypotheses, future research can create a pilot study towards a separate group in order to test whether the ads are convincing and whether they are ‘actually’ considered rational or emotional. This is because the author has completely designed new green ads from the inference of previous literature so a pilot study will make the research designs proven more reliable and valid as it can determine the suitability of the ad(s). This research method of conducting a pilot study was conducted by previous scholars such as Matthes et al. (2014) however, due to time constraints, this was not achievable by the author. Hence why this study does not measure the observed effects of emotional reactions but only infer them.

Moving on, unlike previous scholars Hartmann et al. (2005), Hartmann and Apaolaza-Ibáñez (2009), Hartmann and Apaolaza-Ibáñez (2012), Matthes et al. (2014), this research creates four separate univariate regression analysis rather than using Structural Equation Modelling (SEM) for data analysis which may not contribute to a more comparable finding as technically, the author for this research did not test the conceptual framework within the same model. This means that the results from the four appeals are not significantly different for this study, which can be seen from the results table(s) in Chapter 4. The reason why SEM was not used within this study is again, because of the time constraint as well as not having enough respondents to meet the requirements in conducting a SEM analysis, which reduces the reliability of the research if this was done.

In addition, regarding the methodology, this research did not separate the respondents into four separate groups according to the ads being exposed to the certain group (control, functional, emotional and combined) unlike other studies (Hartmann et al., 2005; Hartmann & Apaolaza-Ibáñez, 2009; Matthes et al., 2014). Thus, to enhance reliability and to create a more unbiased result (this research displays four separate ads simultaneously in the survey which can may affect the grading of the ads by respondents), further research can separate the tests into four groups and follow the same hypotheses test, however this would require more time as more respondents are needed.

Other limitations which is regarding the research design is that even though many scholars have used and advised in using a five-point Likert scale attitude scores, they do not finely grade one’s attitude compared to a six- or seven-point scale (Al-Hindawe et al., 1996). Therefore, it is not the best indicator of a subject’s opinion because essentially, there are only three choices: strongly (feature), don’t know and something somewhere in between. Thus, further research should provide a finer scale, with the according number of respondents, in order to yield a more accurate picture about a subject’s attitude. Al-Hindawe et al. (1996) also provide other findings on how to create an effective semantic differential scale for attitude scores, which can also be followed.

Lastly, since this research understands that functional appeals are most effective and that is because it builds consumer trust and greenwashing has become a trend, future research can examine more closely on what type of functional or emotional attributes in a green ad that may trigger or prevent skepticism, as this is crucial in formulating a green marketing strategy. In addition, a study to compare the attitudes between those outside of the targeted age group (the youth) would also be recommended for future research in order to understand the differences between the behaviour of those who are different in age. As mentioned before by the author, this was not done due to adopting a convenience sampling approach.

CONCLUSION

Follows and Jobber (2000) propose that the decision to purchase rests on the consumers’ perceived tangible individual benefits, such as cost and convenience. However, the results of this current research point to the green purchase intention being affected by an intangible affective association with the green communication message. Whether it being a ‘message deliver’ that adopts a functional, emotional or combined-type condition. Studies on this is crucial especially since Bonniface and Henley (2008) propose that consumers’ environmental affect (or concern) is key to changing behaviour.

The research findings have provided some insights and feedback for green marketers in formulating their marketing strategies on how to attract customers to purchase green products. Based on the results from this current research,
marketers should prioritize addressing and educating their (potential) customers of the functional attributes of the green product in order to build consumer trust as advertising attitude is a great determinant in generating green purchase intention, especially to Indonesian youth. In addition, green marketers can also narrow their segmenting and/or positioning of their brand/product by considering the level on environmental affect/concern of their target market or consumer base. This would allow them to craft specific marketing strategies in order to enhance their business performance.

REFERENCES


Luekveerawattana, R. (2016). Relationship between personal factors and marketing mix satisfaction of the tourists at Don Hoi Lot in Samutsongkham province, Thailand. *Journal of Administrative and Business Studies, 2*(3),


APPENDIX I
Control, Functional and Emotional and Combined Ads (respectively)
APPENDIX II

2. Histograms and P-P-Plots for Normality Test:
(A = Control Ad, B = Functional Ad, C = Emotional Ad, D = Combined Ad)
B.

Histogram
Dependent Variable: Green Purchase Intention

Normal P-P Plot of Regression Standardized Residual
Dependent Variable: Green Purchase Intention
C.
D.
APPENDIX III
3. Scatterplots for Test for Heteroscedasticity
(A = Control Ad, B = Functional Ad, C = Emotional Ad, D = Combined Ad)
C.

D.
APPENDIX IV
4. Comparison of Means and Descriptive Statistics for Demography

<table>
<thead>
<tr>
<th>Type of Ad</th>
<th>Mean of Advertising Attitude</th>
<th>Green Purchase Intention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>3.32</td>
<td>3.08</td>
</tr>
<tr>
<td>Functional</td>
<td>3.86</td>
<td>3.53</td>
</tr>
<tr>
<td>Emotional</td>
<td>3.77</td>
<td>3.35</td>
</tr>
<tr>
<td>Combined</td>
<td>4.31</td>
<td>3.96</td>
</tr>
</tbody>
</table>

*Calculation: Composite Variable / 6 (questions)*

Gender:

Age:

Occupation: