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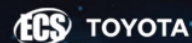
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The role of social message using norm abstraction level and ecological value orientation to achieve sustainable consumption

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Abstract. Pro-environmental behavior is one of human activities to achieve sustainability. In order to encourage people to do so, it needs contribution from marketing discipline using social message. The research aims to investigate the effect of social message framed by norm abstraction level and ecological value orientation on attitude and intention to act pro-environmental behavior in the context of littering. This study implemented a 3 (message framing: biospheric/altruistic/egoistic) x 2 (norm abstraction level : abstract/concrete) between subject experimental design to collect the data. An independent sample t test was used to analyze the data. The results indicate that a social message using concrete norm combined with the three ecological value orientation gains more positive response than the use of abstract norm with the same ecological value orientations. Findings of the research are expected to help government or other institutions to create an appropriate social message in anti littering campaign and motivates people to change their behavior in practicing sustainable consumption.

Keywords: ecological value orientation, norm abstraction level, pro-environmental behavior, sustainable consumption, social message

1. Introduction

During these past decades, there has been an enormously increasing in economic development as well as consumption that contributes to environmental degradation caused by natural resources exploitation [1]. This leads to increased awareness of people, government and environmentalists to produce, consume and live in sustainable ways. The concept of sustainability has been adopted by many countries and big corporations as national policy to alter consumption pattern since the Rio Earth Summit in 1992 with the publication of Brundtland Report "Our Common Future" created by World Commission on Environment and Development [2], [3]. The report proposed that it requires interdependence and balance between nature, well-being and economic activity [2], [4].

The publication of Brundtland Report brought up the debate about the role of marketing as a contributor to environmental problem by introducing sustainable consumption or a trigger for the development of global consumption [5]. The term sustainable consumption defined by The United Nations Environment Programme [6] is "the use of services and related products that responds to basic needs and bring a better quality of life while minimizing the use of natural resources and toxic materials as well as the emissions of waste and pollutants over the life cycle so as not to jeopardize the needs of future generations". Meanwhile, marketing is often referred to as the main trigger of consumption while sustainability is a concept that encourages people to satisfy their needs without sacrificing future generations' quality of life, both are in conflict with each other [7].



Social marketing is a form of marketing that has been widely used and considered to support campaigns of consumption reduction, one type of sustainable consumption [5]. From its first emergence in the early seventies and the debate about its identity crisis, the term social marketing finally reached its position as [8] defined social marketing as “the use of marketing principles and techniques to influence a target audience to voluntarily accept, reject, modify or abandon a behavior for the benefit for individuals, groups and society as a whole”.

Researchers [5] were amongst the first to mention the use of social marketing to promote sustainability through health and environmental issue campaign that focused on delivering quality of life and well-being that are the main objectives in the concept of sustainability. One aspect of scholarly studies about sustainable consumption found that in order to change people’s behavior, it needs psychological understanding of consumers which are their thinking, feeling, attitude and belief about sustainable consumption [4]. Therefore, sustainable consumption starts from an individual through the value he or she holds about the environment that will be implemented in his or her day-to-day lives, such as consuming organic foods, recycling and not littering. The three ecological value orientations introduced by [9] are egoistic, altruistic and biospheric.

Previous research indicated that three ecological value orientations, namely egoistic, altruistic and biospheric contribute to pro-environmental behavior although the results varied. People with egoistic orientation that protect the environment for their own sake and those who have highly altruistic orientation focusing on others tend to practicing pro-environmental behavior, but to some extent they do not do it [10], [11], [12], [13], [14], [15], [16]. However, people with biospheric orientation believe that bad environmental condition can bring adverse consequences for ecological systems and they show consistent attitude and predisposition to protect the environment by behaving in pro environmental ways [11], [12], [18], [19], [20].

Based on the facts above, it is important to analyze the use of social message as one of the social marketing concepts consists of information to encourage people especially with egoistic orientation to behave pro environmentally as well as to highlight biospheric and altruistic orientation in the message. Researchers [20], [21] proposed goal-framing theory derived from sociology to guide pro-environmental behavior that out of the three overarching goals (hedonic, gain and normative), the normative goal-frame condition is the best to encourage pro-environmental behavior. According to the two authors, when a goal is activated or become focal, it is a combination of motives and activated knowledge structure. A goal-frame is a focal goal with its framing effects, that is the effect of focal goals on cognitive processes. Then the focal goal will guide people’s behavior. The main goal in a normative goal-frame is ‘to act appropriately’ [20].

In their earlier papers, researchers [20], [22] as well as [23] mentioned that in the context of sociology there are social norms held by any society that once it is getting larger, the social norms become more abstract because they have to cover diversity of people that need to be translated to a given situation. The problem is the more abstract social norms are, the more difficult for people to know what behaviors are or are not appropriate.

It is argued that to understand how social norms guide behavior, people can be put in a ‘frame’ that combines cognitive and motivational processes. Thus, motivational processes (goals) will guide cognitive processes that leads to behavior. As it is discussed in sociology literature, concrete norms are presumed more effectively in conveying social message to guide people to behave in a specific situation because they are more assertive and clear rather than abstract norms [20], [21], [22].

Related to the use of goal-framing theory to encourage people to behave pro-environmentally, researchers [20] stated that the normative goal-frame aims to boost people’s willingness to act appropriately by protecting the environment and it can be activated using advertisement consists of social message [20]. On the other hand, few studies found that social message framed by ecological value orientation are effective in gaining people’s response and intention to act in pro-environment ways [15], [16].

This study is pioneer in examining the effectiveness of social message framed by three ecological value orientations and norm abstraction level in pro-environmental behavior campaign as well as testing the concept of normative goal-frame condition introduced by [20], [21] to foster pro-environmental behavior.

2. Research Method

The design of this study was a 3 (message framing: biospheric/altruistic/egoistic) x 2 (norm abstraction level: abstract/concrete) between subject experimental design to examine the effect of social advertisement on attitude towards the social message and intention to do pro-environmental behavior.

A pilot study was conducted to determine the messages that represent the norm abstraction level combined with three ecological value orientations and the design of the advertisement in the context of anti-littering campaign. The abstract norm message was: 'Preserve your environment' and the concrete norm message was: 'Dispose your waste by type'. The biospheric message framing was: "Soil fertility and ecosystem life will be preserved". The altruistic message framing was: "People will feel the freshness, cleanliness and become healthier". The egoistic message framing was: "You will feel the freshness, cleanliness and become healthier". The six social advertisements were manipulated using three levels of ecological value orientation message framing: biospheric, altruistic, egoistic and two levels of norm abstraction level: abstract and concrete.

There were 260 students from Universitas Trisakti participated in the experiment and they were placed in each of the six experiment cells using random assignment method. Next they were presented with a description of the new local regulation related with waste management. Subjects were then given the social advertisements and instructed to answer each question using seven-point Likert scale about their attitude towards the advertisement and their intention to act pro-environment behavior. Attitude towards the advertisement was measured using the same items from [24], while intention to behave pro-environmentally was measured using items adopted from [25], and [26].

Manipulation check was done to test whether the constructs manipulated, message framing and norm abstraction level, were well understood by the participants. There were 214 participants that passed the manipulation test and the hypotheses testing were then performed.

3. Results and Discussion

The main effect of norm abstraction level on attitude towards social advertisement is statistically significant ($F: 449.02$, sig: 0.000) as well as its effect on intention to behave pro-environmentally ($F: 338.933$, sig: 0.000). The message framing statistically influences attitude towards social advertisement ($F: 44.691$, sig: 0.000) and intention to behave pro-environmentally ($F: 28.300$, sig: 0.000).

The interaction effect of norm abstraction level and message framing on attitude towards social advertisement ($F: 26.752$, sig : 0.000) and intention to behave pro-environmentally ($F: 38.188$, sig : 0.000) are significant.

An independent sample t test was used to test the hypotheses proposed and the results can be seen on Figure 1 and 2. Hypotheses 1a and 1b are supported since participants in concrete-biospheric condition respond more positively on attitude towards social advertisement and intention to behave pro-environmentally compared to those that were shown a abstract-biospheric message. The mean difference is significant ($p: 0.000$). Hypotheses 2a dan 2b are also supported, because the mean difference between participants in concrete-egoistic condition and abstract-egoistic condition is statistically significant ($p: 0.000$). The mean difference is statistically significant ($p: 0.000$) for attitude towards social advertisement and intention to act pro-environmental behavior both in groups in concrete-altruistic and concrete-biospheric conditions compared to participants that were shown an abstract-altruistic and abstract-biospheric advertisements. Thus, hypotheses 3a, 3b, 4a and 4b are supported.

Hypotheses 5a is not supported because there is no significant difference ($p: 0.121$) between participants in concrete-altruistic condition with those who are in concrete-egoistic condition. This finding confirms the results found by [16] that social advertisement framed by egoistic and altruistic value orientation in the context of pro-environmental product did not produce different response from the participants. However, hypothesis 5b is supported ($p: 0.000$) because participants in concrete-altruistic condition respond differently compared to participants in the concrete-egoistic condition.

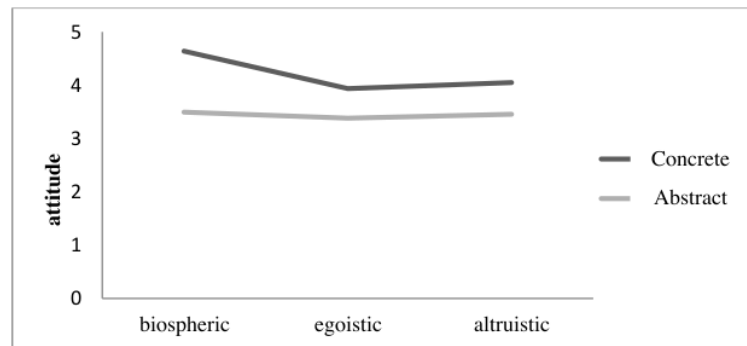


Figure 1. Mean plot attitude concrete vs abstract on message framing (biospheric, egoistic, altruistic).

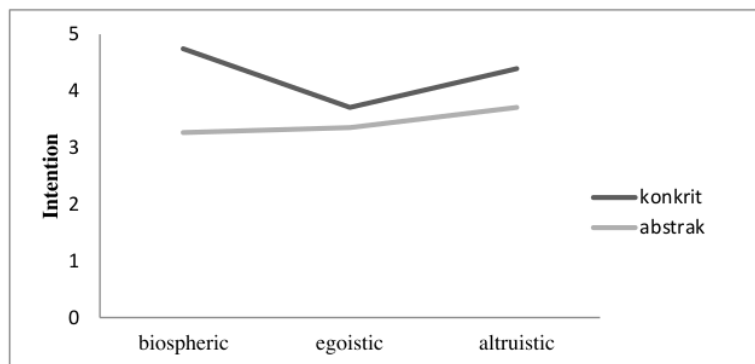


Figure 2. Mean plot attitude concrete vs abstract on message framing (biospheric, egoistic, altruistic).

Overall, results show that people will respond more positively to social advertisement using concrete norm ('disposed your waste by type') framed by the three ecological value orientations. This finding proves Lindenberg and Steg's goal-framing theory that normative goal-frame is the appropriate goal that can be placed as a focal goal in social advertisement to encourage people to engage in pro-environmental behavior [20]. Moreover, the study also found that the use of concrete or smart norm rather than the abstract norm is more easy to be triggered and specific environmental behavior, because it represents the main goal in normative goal-frame : to act appropriately, in this case to behave pro-environmentally.

4. Conclusion

Social marketing campaign in pro-environmental behavior requires good social advertisement and this study found that message framing using concrete norm and three ecological orientations (biospheric, egoistic and altruistic) can trigger people to behave pro-environmentally. Theoretically, this study enriches the social marketing domain within the context of sustainable consumption. This finding also strengthen the role of the fourth P in marketing mix, which is promotion or marketing communication especially in conveying information about the importance of pro-environmental behavior. This study helps social marketer/government to design social marketing campaign consists of a very clear information and instruction about what people have to do. The social advertisement used could also be framed by three ecological value orientations (biospheric, altruistic and biospheric) because naturally

each individual holds an ecological value that can be highlighted through an appropriate social message.

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