

The Effect of Green Program by Constructivism Concept (GProCC) Relative to Willingness to Purchase Green Products for Non-Green Consumers at Huachiew Chalermprakiet University

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Abstract

We The Effect of Green Program by Constructivism Concept (GProCC) Relative to Willingness to Purchase Green Products for Non-Green Consumers. This study is an experimental research which is one-group pretest-posttest design. Our intervention to be used for treating participants GProCC which consisted of perception of the effect of environmental issues toward advertisements, perception of the solution of environmental issues toward advertisements, and observe the green advertisements. We used the questionnaire adapted from the Perceived Stress Scale Program (PSS) to measure 30 participant's willingness to purchase green products before (pretest) and after (posttest). Furthermore, we observed the real action of purchasing green products at Seven-Eleven at Huachiew Chalermprakiet University branch. Our findings showed that after the participant joined the GProCC program, the participants change their behavior to purchasing green products. These research results will be useful for marketers who want to change their customer attitudes toward green product buying decision making process

Keywords: Green program by constructivism concept (GProCC), Willingness to purchase green products, non-green consumers

1. Introduction

Globally, environmental issues are hot topics for discussion in the academic and industrial sectors for more than 30 years. A set of environmental problems, including rising sea level, air pollution, water pollution, global warming, deforestation, acid rain and climate change are occurring worldwide. Consumers are thereby becoming more concerned with environmental issues and are applying more practices to reduce environmental degradation (Mahalingam, 2011). As a result, the green movement and environmental protection practices have found place among businesses and markets (Kassaye, 2001). Willingness to purchase is defined as willingness to pay (WTP). It encompasses individuals' maximum willingness to pay for availing a particular service or for the consumption of a particular product (Li, Ting & Unger, T., 2013). The most excellent predictors of the willingness to purchase green products are attitudes toward the behavior perceived value. The study by Vazifehdoust (2013) indicated that the willingness of customers to buy green products is defined by having a positive attitude and green perceived value toward green products.

Besides this, consumers propose that environmental advertisements are more effective in enhancing their knowledge about green products and help make informed decisions (Akehurst et al, 2012). Therefore, environmental advertisement can help enhance motivation towards buying green products. Moreover, according to Hartmann and Ibanez (2006) consumers will more likely buy a green product having ecological packaging provided they meet cost benefit analysis. Sustainability is also demanded from industrial suppliers, and exporters are under pressure for supplying eco-packed products (Saxena and Khandelwal, 2012). Ecologically conscious consumers are willing to pay high prices for such products (Laroche et al, 2001).

Various studies have indicated that green advertisement and green product marketing affected to willingness to purchase green products. (Rahbar & Wahid, 2011; Zhu, 2013; Ansar, 2013; Chen & Chang, 2012; Doszhanov and Ahmad, 2015; Ariffin et al., 2016; Mei *et al.*, 2012; Cheah and Phau (2011). Rahbar & Wahid (2011) investigated the effects of green marketing tools (eco labels, eco brand, environmental advertisement and trust in eco label and eco brand) on actual consumer purchase behavior. Their results showed that trust in eco label and eco brand are significantly related. Zhu (2013) found that the credibility of claim in green advertising plays the most important role in influencing consumers' purchase intention of green products. Ansar (2013) found that besides environmental advertisements, price and ecological packaging were found to be positively related with the green purchase intention. According to Chen & Chang (2012) these green marketing efforts enhance consumer' purchase intentions. Furthermore, there were significant relationships between green brand awareness, green brand trust, green perceived value, and customer's intention to use green products (Doszhanov and Ahmad, 2015). Green value has a significant relationship with both perceived quality and repurchase intention (Ariffin et al., 2016). Attitude towards the environment and peer pressure are influential factors to green purchase intention in Malaysia (Mei *et al.*, 2012). Moreover, Cheah and Phau (2011) found a strong correlation between eco-literacy, interpersonal influence and value orientation with attitude towards environmentally friendly products.

This study created green program by constructivism concept (GProCC) which helped participants (non-green consumer) be concerned about environment. Green program by constructivism concept (GProCC) which helps consumers be concerned about environment. It is the teaching style that emphasizes the consumers to build up new knowledge from their old knowledge. For example, nowadays there is much news about global warming and consumers might see it already but they try to ignore it. However, the researchers will remind these participants about it again and make them learn more things on "How to Prevent Global Warming" that they can do even when they are at home. These are the steps for receiving knowledge included the following: tell participants what our project is about, let participants provide their suggestions, provide new knowledge to participants, test the participants individually, and achieve the results. On the other hand, we adapted Constructivism's model in order to match with our purpose.

The GProCC was used as the research intervention which consisted of three parts: perception of the effects of environmental issues toward advertisements, perception of the solutions to environmental issues toward advertisements, and observe the green advertisements. The new model of Constructivism that we adapted will lead participants to perceive the situations about the environment nowadays via News. It will also provide solutions and some knowledge toward advertisements and experiments as well. Thus, the advertisements are the tools that play in the middle role between green products and the willingness to purchase. These advertisements show the advantages of green products that prevent the environment from any harm. It also encourages participants' awareness about the environment. The participants may buy green products in order to save the environment.

We conducted this study by one-group pretest-posttest design to explore the effects of green program by GProCC with regard the willingness to purchase green products for non-green consumer. Therefore, we propose that GProCC influences non-green consumers' willingness to purchase green product.

2. Objectives

This study aimed to explore the effects of green program by GProCC with regard the willingness to purchase green products for non-green consumer.

3. Materials and methods

3.1 Participants

30 undergraduate students at Huachiew Chalermprakiet University are our participants. Purposive sampling method was used to select the samples. The participants in this study are non-green consumers. Self-report questionnaire which has twenty-one items to screen the participants in order to ask their opinions regarding environmental issues. If the participant has the score lower than fifty points, this participant is considered as a non-green consumer. They had normal or corrected-to-normal vision, and no history of neurological or psychiatric disorders. Each signed written informed consent forms prior to their participation.

In this study, we focused on non-green consumers only because green consumers are getting behind the idea of being greener. In almost every opinion poll, consumers say that they are very concerned about climate change. They worry about rising seas, declining air quality, shrinking animal habitats, lengthening droughts, and newly brewing diseases. They connect the dots back to their own purchases. In contrast, a non-green consumer is a person who is against the indoctrination of environmentalism; a person who refuses to buy green products, and is even irritated upon hearing about them. There are also people who reject, or are suspicious of environmentalism, and making society green. They believe it is over-done and over-enforced and intrusive upon society. Thus, we did not select green consumers. Rather, we focused on non-green consumers to know if they will buy green products after our experiment or they will continue their behavior to buy non-green products.

3.2 Task and procedure

The GProCC was used as an intervention. The Intervention consists of three parts: 1) perception of the effect of environmental issues toward advertisements for three days; 2) perception of the solution of environmental issues toward advertisements for two days; and 3) Observe the green advertisements for two days. The total days of data collection are ten days.

We asked the participants to buy drinking water at Seven-Eleven. There were many brands in the Seven-Eleven. Then, a paper questionnaire was provided to our participant to write the feedback as to why they bought this brand. Whether they bought green products such as Namtip (drinking water brand), instant noodle (paper cup), dishwashing liquid, etc. which are green products. We evaluated the results concerning environmental impacts equal to 1 and not concerning environment impacts equal to 0. In addition, the participants wrote their opinions in a paper questionnaire.

3.2 Research instrument

This study used the questionnaire adapted from the Perceived Stress Scale Program (PSS) (Paul L. Hewitt Gordon L. Flett Shawn W. Mosher, 1992) to measure participants' willingness to purchase green products before (pretest) and after (posttest). Furthermore, we observed the real action of purchasing green products at Seven-Eleven at Huachiew Chalermprakiet University branch.

3.4 Research Design and Data analysis

This study is an experimental research. Its design is one-group pretest-posttest design which is a design in which a treatment condition is interjected between a pretest and posttest of the dependent variable (Christensen et al., 2011). Paired-samples t-test was applied to investigating the effects of green program by GProCC with regard the willingness to purchase green products for non-green consumer. Furthermore, we used a single-blind experimental design which is used where the experimenters either must know the full facts to observe the real action of purchasing green products. Repeated-Measures T-test was used for data analysis by SPSS Program (Frederick J. Gravetter, Lori-Ann B. Forzano, 2012)

4. Result Analysis

Table 1 Pretest and posttest (Paired t-test)

Item	Mean	SD	t	p
Pretest-Posttest	-17.36667	7.16545	-13.275	0.000
Perception of the effect of environmental issues toward advertisements	-5.3000	3.19644	-8.869	0.000
Perception of the solution of environmental issues toward advertisements	-3.4667	2.06336	-7.489	0.000
Observe the green advertisements	-8.9000	5.13507	-8.622	0.000

Table 1 presented paired-samples t-test analysis that there were significant differed between pretest and posttest for willingness to purchase green products ($t = -13.275$, $p = 0.000$). To consider each dimension, we found that all of the three dimensions of GProCC were significant. The perception of the effect of environmental issues toward advertisements was significant most ($t = -8.869$, $p = 0.000$). Furthermore, the result from the one-way ANOVA test as determined by the relationship between gender from pretest and posttest. There was no significant difference between pretest and posttest of male and female (pretest, $F_{(1,28)} = .024$, $p = .878$ and posttest, $F_{(1,28)} = .224$, $p = .640$). Thus, gender has no impact to the willingness to purchase green products. Whether male or female they have an equal tendency in the willingness to purchase green products.

After the Post-Test were collected, the researchers started to begin the double check test. The researcher will observe participants that had to purchase drinking water in order to get the purpose of their purchasing. The green products of drinking water can be seen in stores like Nestle' and Namthip. There are some participants that purchase continuously what they use to drink before because of their habit. Another reason is because of the location that is nearby to where they are staying.

Participant #4

Brand: Singha.

Reason: There is Singha Drinking Water below my dormitory, so I just grab it.

Participant #16

Brand: Nestle

Reason: This brand is convenient to buy because it is in every store.

However, there are some participants that change to buy green products because the GProCC changed their purchasing behavior.

Participant #2

Brand: Namthip

Reason: I want to save the environment and this is the easiest way to save it, so why shouldn't I buy it?

Participant #18

Brand: Namthip

Reason: I heard that this brand is safe for the environment.

Participant #25

Brand: Nestle

Reason: I saw in the News that the Nestle Company got the award about being environmentally friendly, so I decided to buy this brand.

Our findings provide insights about the perceptions that consumers have about the effect of environmental issues toward advertisement, perceptions of the solution of environmental issues toward advertisement and observation of the green advertisement that are warranted. The generalization of the findings is limited because the group of participants is only students from the Huachiew Chalermprakiet University. By considering further evaluations, researchers should expand the group of participants.

5. Discussion

Through an extensive literature review, numerous factors affecting consumers green purchase behavior were identified. All these factors were found to be either willing or not willing to purchase green products. As reported by most studies, consumers' high concern for environmental and social issues, and the functional and green attributes of products are the two major sets of motives that drive their willingness to purchase green products. Consumers' concern and sense of responsibility towards environmental and social issues were found to have a positive impact on green purchase behavior (Makatouni, 2002). Particularly, environmental concerns were found to motivate the purchase of organic food products (Padel & Foster, 2005). In addition, Advertisements are thus created with this theory in mind, and are designed to change not only behaviors themselves, but also the beliefs that will in turn, change behavior and drive a desired action or purchase (Coleman, Bahnan, Kelkar& Curry, 2011).

Of the three factors that the researchers had examined through GProCC, perception of the effect of environmental issue toward advertisement was the most significant because it was after the participants or the non-green consumers joined the GProCC. The non-green consumers know about the effects of environmental issues by watching advertisements such as how to stop global warming, how does the world become sick as caused by earthquakes, climate change, ozone layer depletion, pollution, flooding, tsunami and how to decrease behaviors that can be the cause of global warming as well as other factors. All these advertisements help the non-green consumers realize and think about the effect of environmental issues. It helped them to change their behavior to purchase green products instead of purchasing normal products. In addition, the researchers tested the gender with three factors and did not arrive at anything significant because the ratios of changing in behavior between male and female are similar.

6. Conclusion

The main purpose of this paper is to find the effect of green advertising program with regard the willingness to purchase green products for non-green consumers at Hachiew Chalermprakiet University. The researchers invited students of the university as sample size because previous research supports that business students are more concerned about the environment (Haytko, Matulich, 2010). Likewise, the perception of poor product quality is an important barrier identified in many studies that affects green purchase decisions (Gleim et al., 2013).

The researchers identified non-green customers to be the participants in the Green Program with Constructivism Concept (GProCC). The researchers provided three factors that will change participants' behavior to purchase green products. These factors are perception of the effect of environmental issues toward advertisement, perception of the solution of environmental issues toward advertisement and observation of the green advertisement. These three factors were sent to the participant via the media that the researchers got from the news, advertisements, documentary, and cartoons. This program spent ten days to achieve the result. The result is from the measurement by using dependent T-test analysis.

The findings of the study show that the hypothesis is significant to all the factors. Due to limitations on the proportion of the sample size, it is best to draw tentative conclusions from this study. A sample including a larger number of low involved consumers will seem worthwhile and may provide more definitive results. In future research studies, intentions to buy green brands should be further considered as the ultimate aim of advertising, that is to persuade consumers to buy.

7. References

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