CONSUMER'S ATTITUDE AND ECO-FRIENDLY PRODUCTS AMONG SELECTED VEGETABLE SUPPLIERS IN PANABO CITY SUPERMARKET

Hannah Joy C. Bedico¹, Alexander L. Oyao, Jr.¹, Raphael N. Pandilingan¹, & Amelie L. Chico²

- ¹ Department of Business Administration Education, UM Panabo College, Panabo City, Philippines
- ² Research Coordinator, Department of Business Administration Education, UM Panabo College, Panabo City, Philippines Email address: amelie_chico@umindanao.edu.ph

ABSTRACT

This study aimed to determine the relationship between consumer's attitude as independent variable and eco-friendly products as dependent variable among selected vegetable suppliers in Panabo City supermarket. This study used adapted questionnaire and universal sampling technique. The statistical tools used were weighted mean and Pearson-r, and a quantitative descriptive correlational design was employed. The researchers found out that the overall mean in consumer's attitude is 4.52, indicating a high level, while the eco-friendly products mean is 4.62, also indicates high level. The r-value is 0.569 and the p-value is 0.000, thus the null hypothesis (Ho) was rejected since the p-value is less than 0.05. It means that there is a significant relationship between consumer's attitude and eco-friendly products among selected vegetable suppliers in Panabo City supermarket.

Keywords: consumer's attitude, eco-friendly products and vegetable suppliers

INTRODUCTION

Nowadays, the status of living things has changed, especially the sustainability of human beings because of environmental issues such as climate change and global warming. These environmental issues are continuing to rise in these previous years, which has a negative effect to the environment. Hence, people who are more concerned to the environment, use and purchase eco-friendly products in the market to minimize ecological harm. Due to increased awareness of environmental harms, and increased consumer interest in eco-friendly products, environmental awareness has also increased the pressure on consumers to think about the environmental effects of activities in recent decades (Ogiemwonyi and Harun, 2020).

Furthermore, in international studies, sustainable development goals (SDGs) were introduced in 2015 in part because of the value of green products, which substantially impact human and environmental growth and development (Shittu, 2020). Purchasing eco-friendly products were popular nowadays for elevated consumers who want to protect the environment. The more people acquire green products, the more it helps to preserve the natural world (Lestari, Hanifa, and Hartawan, 2020: Itani, and Hollebeek, 2021). The customers also provoke the purchase intentions to consider buying environmental-friendly products even if it offers a higher price. When clients acquire environmental outcomes in the market, there is a direct or indirect effect on the environment. Significantly, if community cares for the environment can also be a matter of ethics it is cited in the study of (Choshaly and Mirabolghasemi, 2020).

Lezoraine (2021) reported in the Philippines Journal that 75 % of Filipino shoppers bought eco-friendly products to become more responsible for the environment. Plus, more than half of the Filipinos acquire environmental-friendly products due to expensive from its price and difficult to find. Hence, despite these circumstances, Filipinos change their purchase intentions after family and friends tried to acquire eco-friendly products.

In the theory of planned behavior developed by Ajzen (2019), human behavior were guided by three types of considerations. First, behavioral beliefs about the consequences of the behavior. Second, normative beliefs about others' expectations. And lastly, control beliefs talk about the presence of factors that may facilitate the performance of the behavior. Behavioral thoughts have a positive or negative attitude toward the conduct; normative beliefs have a perceived social pressure or subjective norm, and control beliefs evoke a sense of behavioral control or self-efficacy.

In the dependent variable, eco-friendly products perveeived as green item (natural item or eco-accommodating item or reasonable item), a reusable item designed to reduce their effects like an endless cycle and surprise, after it is no longer helpful by Sathyapria and Sekar (2020). As described by Pagliacci, Manolica, Roman, Boldureanu (2019), green marketing is a method of introducing environmentally friendly products to the market without endangering the environment. Hence, green marketing refers to a scenario in which items promoted in an eco-friendly way. Understandably, the two key determinants that affect consumers' desire to make green purchases are environmental concern and the product's usability.

METHOD

Participants. The study participants were the vegetable suppliers in Panabo City Supermarket who sell eco-friendly products. Moreover, Panabo City Supermarket was located at Quezon Street, Barangay Sto. Nino, Panabo City, Davao del Norte. The researchers have surveyed 251 vegetable suppliers to determine the consumer's attitudes and eco-friendly products among selected vegetable suppliers in Panabo City supermarket. Furthermore, researchers used universal sampling technique to select the study participants because it may provide a useful information to the study. The universal sampling technique is defined as random selection of participants where not all population members have an equal chance of being chosen. Thus, probability of being selected is unknown, originated by Richard and Margaret in 1990 and adopted by Avron, Kapralov, Musco, Velingker, and Zandieh (2019).

Materials and Instruments. The researchers utilized standardized questionnaire for gathering the data of vegetable suppliers in Panabo City supermarket. The adopted questionnaire was from the previous study of Magali Morel and Francis Kwakye (2012), entitled Green Marketing: Consumers' Attitudes towards Eco-friendly Products and Purchase Intention in the Fast-Moving Consumer Goods (FMCG) sector. The research questionnaire is designed to determine the consumer's attitude and eco-friendly products among selected vegetable suppliers in Panabo City supermarket.

The adapted questionnaire was used to measure the respondent's responses to the dependent and independent variables of the study. The research questionnaire was divided into three (3) portions. First, part one (1) which pertains to profile of respondents, listed the respondent's

entire name (optional), age, date, and gender. Second, part two (2) pertains to consumer's attitude with a corresponding of ten (10) questions. Finally, part three (3) eco-friendly products covered with eight (8) questions. The survey's three components require the respondents to check one single choice in the box next to each relevant number on a scale of five (5) to one (1) with the description of "Strongly Agree" to "Strongly Disagree". Five (5) for strongly agree, four (4) for agree, three (3) for moderately agree, two (2) for disagree, and one (1) for strongly disagree.

A scale was utilized to determine the level of consumer's attitude toward eco-friendly products are as follows: (1) The scale of 4.20-5.00 is considered very high, which means that the level of consumer's attitude is always practiced; (2) the scale of 3.40-4.19 is considered high and indicates that the level of consumer's attitude is often practiced; (3) the scale of 2.60-3.39 is considered, which means that the level of consumer's attitude is sometimes practiced; (4) the scale of 1.80-2.59 is considered low, which means that understanding the consumer's attitude is rarely practiced; (5) the scale of 1.00-1.79 is considered as very low, which means that the level of consumer's attitude is never practiced.

Meanwhile, the scales to determine the level of eco-friendly products among selected vegetable suppliers are as follows: (1) The scale of 4.20–5.00 is considered very high, which means that the level of eco-friendly products. (2) the scale of 3.40–4.19, which is described as high, which means that the level of eco-friendly products; (3) the scale of 2.60–3.39 is considered moderate, which means that they sometimes practice that the level of eco-friendly products; (4) a scale of 1.80–2.59 is considered low, which that the level of eco-friendly

products; (5) the scale of 1.00–1.79 is considered very low, which means that they never practice the level of eco-friendly products.

Design and Procedure. The researchers used quantitative descriptive correlational research design to determine the acquired quantitative data techniques. According to McCombes (2020), quantitative descriptive research design aims to describe the population, situation, or phenomena. It answers the questions what, where, when and how the events occur. Descriptive research design was an appropriate choice when the research aims to identify characteristics, frequencies, trends, and categories (Biney & Cheng, 2021). This means that the researchers follow the ethical consideration in conducting the study. The researchers used this design to identify the correlation between the two variables which are consumer's attitude and ecofriendly products. As a researcher, it is important to keep the respondent's identity confidential to protect the respondents from potential harm. The researchers conducted pilot testing to assess the reliability of the study. The independent variable showed 0.794 of Cronbach's Alpha with an acceptable reliability, while the dependent variable showed 0.708 of Cronbach's Alpha with an acceptable reliability.

The following steps were followed in conducting this study; (1) Asking for Permission to Conduct the Study. To conduct the survey to the selected respondents, the researchers should present a formal letter to the head of CEEMDO in Panabo City by requesting an authorization with an approval of the research adviser. (2) Asking Permission to the Respondents. After receiving the permission to conduct the study, the researchers asked permission to the chosen respondents to answer the corresponding questions on survey questionnaires, ensuring them that

the respondent's identity would be keep confidential. (3) Validation of the Test Instruments. The researchers had the instruments validated by professionals to assure the reliability of the data before utilizing it. (4) Data collection and scoring. The responses were collected, tallied, and submitted to the statistician for statistical interpretation. (5) Analysis and Interpretation of the Data. The statistician gave the researchers the raw score for computation and analysis of the data.

Finally, the researchers used the following statistical tool: *Mean*, it was used to determine the consumer's attitude and eco-friendly products in research questions, one and two. *Pearson r*, it was used to determine if there is a significant relationship between consumer's attitude and eco-friendly products among selected vegetable suppliers in Panabo City supermarket in research question number three (3).

RESULTS AND DISCUSSION

The Level of Consumer's Attitude

Table 1 shows the level of Consumer's Attitudes towards ecofriendly products among selected vegetable suppliers in Panabo City Supermarket, with overall mean of 4.52 which has a descriptive equivalent of very high which means the level of consumer's attitude towards eco-friendly products among selected vegetable suppliers in Panabo City supermarket is outstanding.

Moreover, the highest mean among the indicators of consumer's attitude is question no. 1, with a mean of 4.72, described as very high, and it is about appreciating the package/design of eco-friendly product. It implies that the vendors and consumers are satisfied when it comes to packaging/design of eco-friendly products. Meanwhile, the lowest mean no. 4 and 5, with the mean of 4.35, and described as very high, it is all

about "willing to pay a premium price for an eco-friendly product (e.g., +10%)" and "pay attention to eco-friendly advertising" indicates that some of vendors and consumers are not willing and paying attention towards eco-friendly products.

In addition, to support this study Singh and Mehra (2020), consumers are more focused on green marketing and buying green products, which has increased their awareness of environmental and health issues. Increasing numbers of people in society and consumers are buying green items. People of all ages know about green marketing strategies and environmentally friendly products. According to a study by Kumar, Phookan, Sarmah, and Sarah Devi (2020), environmental challenges have been challenging since the term ecological sustainability, raising customer awareness of the need to buy eco-friendly items. The manufacturing sector has made the necessary advancements in this area, but the food service sector, another significant environmental contributor, has yet followed suit. The market has been transformed for years by the green marketing industry. Commercial businesses are trying to adapt environmentally friendly items to draw customers (Kiradoo, 2020).

Table 1. The Level of Consumer's Attitude

Variable	Standard	Mean	Descriptive	
	Deviation		Equivalent	
Consumer's Attitude	0.68	4.52	Very High	

The Level of Eco-friendly Products

As shown in Table 2 is the level of eco-friendly products. The overall mean in this variable is 4.62, with a descriptive equivalent of very high which means the information of eco-friendly products among selected vegetable suppliers in Panabo City supermarket was highly informed. On the other hand, the highest item out of 8 questions is item no. 1, which is the products are good for the environment it has a mean of 4.84, with the descriptive equivalent of very high. While the lowest item is no. 7, which has mean of 4.45, with descriptive equivalent of very high, and it is about "The products are well promoted".

Moreover, table 2 consists of questions about how eco-friendly products help the environment, how products are suitable for health and more. Many businesses across numerous industries utilize green marketing to keep up with this trend. Studies have done on various topics, including environmental awareness, historical behavior, attitudes, social responsibility, social influence, and trust difficulties related to the intention to buy green items (Zhang et. al, 2018).

In Wandhe's (2018) study, as societies have learned more about the environment and grown more concerned with eco-friendly or green products for safety and welfare, they have also started to engage in green practices. It is because of these developments that the idea of "green marketing" has come to be recognized on a global scale.

In addition, anchored in the study of Tan (2021) predicts that green buildings will soon multiply in the Philippines but that it will be some time before the country's office sector is completely carbon neutral. It relates to environmentally friendly upgrades for the Philippine office market's decarbonization. The idea of green buildings is not only new but also timely. Pollution, particularly in modern times,

is progressively harming the environment. Based on Lezoraine (2021), 75% of Filipino consumers purchased environmentally friendly products to show their commitment to protecting the environment. Most Filipino consumers (92%) chose products with natural components, while 90% said they were more likely to buy products created locally. It was due to the perception that the products were healthier and better for their general well-being, supported the local economy, and gave fellow Filipinos jobs. This theory, explained consumers' attitudes toward ecofriendly products.

Also, its concerns for protecting natural resources from the perspective of human activity have recently brought attention to the difficulties in doing so. As a result, there is a higher demand for green products. Sustainable, eco-friendly, and environmentally friendly have been employed as synonyms in earlier research to draw customers to green marketing. Similarly, it was made from green product materials using more environmentally friendly procedures. Green products are thought to be less harmful and more long-lasting (Dropulic and Krupka, 2020: Benham, Hollebeek, Clark and Farabi, 2020: Rather, 2021).

Additionally, research has indicated that environmentally conscious consumers are more concerned about environmental harm than those purchasing environmentally unfriendly products (Singh and Vashist, 2020).

Table 2. The Level of Eco-friendly Products

Variable	Standard Deviation	Mean	Descriptive Equivalent
Eco-friendly Products	0.57	4.62	Very High

Significant Relationship between Consumer's Attitude and Ecofriendly Among Selected Vegetable Suppliers in Panabo City Supermarket

Presented in Table 3 is the result of the significant relationship between consumer's attitude and eco-friendly products among selected vegetable suppliers in Panabo City supermarket. The grand mean of consumer's attitude is 4.52. The grand mean of eco-friendly products is 4.62 with the exact descriptive equivalent of very high and the standard deviation of the two variables is 0.68 and 0.57. The r-value is 0.569 and the p-value is 0.000. Thus, this study's null hypothesis (Ho) was rejected since the p-value is less than 0.05. It means that the eco-friendly products among vegetable suppliers in Panabo City supermarket can cause impact to the consumer's attitude.

Table 3 Significant Relationship Between Consumer's Attitude and Eco-friendly Among Selected Vegetable Suppliers in Panabo City Supermarket

Variab <mark>le</mark>	Standard	Mean	Descriptive	R-value	P-value
	Deviation		equivalent		
Consumer's	0.68	4.52	Very High		
Attitude					
				0.569	0.000
Eco-	0.57	4.62	Very High		
Friendly					
Products					

Moreover, this study was supported by Green Marketing: Consumers' Attitudes towards Eco-friendly Products and Purchase Intention in the Fast-Moving Consumer Goods (FMCG) sectored by Morel and Kwakye (2012). Plus, the independent variable of this research study is the consumer's attitude which presented by the behavior of the consumers, which refers to an emotion of the consumers towards eco-friendly products among the selected vegetable suppliers in the market. Hence, the dependent variable is eco-friendly products.

CONCLUSIONS

As stated on the findings of the study, following conclusions are created: for the level of consumer's attitude which has a grand mean of 4.52, with very high descriptive equivalent. The level of eco-friendly products among selected vegetable supplier's in Panabo City supermarket has a grand mean of 4.62, which describe as very high. Therefore, there is a significant relationship between consumer's attitude towards eco-friendly products among selected vegetable supplier's in Panabo City supermarket. Hyun, Lee, and Kim (2020) explains that accommodating eco-friendly products firmly impacts consumers and their willingness to spend.

REFERENCES

- Ajzen, I., 2019. Theory of Planned Behavior Diagram. [online] People Umass.edu. Available at: https://people.umass.edu/aizen/pdf/tpb.me asurement.pdf> [Accessed 16 March 2023].
- Avron, H., Kapralov, M., Musco, C., Velingker, A, and Zandieh, A., 2019. A Universal Sampling Method for Reconstructing Signals

- with Simple Fourier Transforms. [online] Collaborate.princeton.edu. Available at: "[Accessed 16 March 2023)].">March 2023)].
- Behnam, M., Hollebeek, L.D., Clark, M.K., and Farabi, R., 2021.

 Exploring Customer Engagement in the Product vs. Service

 Context. J. Retail Consumers Services. [online] Proquest.

 Available at: https://www.proquest.com/openview/f44a9d0b15afa46e728b13cf57b96dd4/1?>[Accessed: 16 March 2023].
- Biney, P.A., Cheng, M.Y., 2021. International Students' Decision to Study in China: A Study of Some Selected International Students from Universities in China [online] Scirp.org Available at: https://www.scirp.org/pdf/jss_2021081214123599.pdf [Accessed 04 September 2023]
- Choshaly, S.H., and Mirabolghasemi, M., 2020. The Role of Viral Marketing Strategies in Predicting Purchasing Intention of Eco-Labelled Products. [online] MDPI. Available at: https://www.mdpi.com/2071-1050/13/8/4248 [Accessed 16 March 2023].
- Dropuli'c, B., and Krupka, Z., 2020. Are Consumers Always Greener on the Other Side of the Fence? Factors That Influence Green Purchase Intentions the Context of Croatian and Swedish

- Consumers. [online] MDPI pp. 99–113. Available at: https://www.mdpi.com/2071-1050/13/8/4248 [Accessed 16 March 2023].
- Itani, O.S., and Hollebeek, L.D., 2021. Light at the End of The Tunnel: Visitors' Virtual Reality (Versus In-Person) Attraction Site Tour-Related Behavioral Intentions During and Post-COVID-19. [online] MDPI. Available at: https://www.mdpi.com/2071-1050/13/8/4248 [Accessed 16 March 2023].
- Kiradoo, G., 2020. A Review of the Challenges of Green Marketing:
 The Current Scenario. [online] Proquest Available
 at:https://www.proquest.com/openview/f44a9d0b15afa46e728
 b13cf57b96dd4/1?> [Accessed 16 March 2023].
- Kumar, A., Phookan, N., Sarmah, B., and Sarika Devi, T., 2020.

 Exploring Determinants of Green Marketing Practices in Food Service Industry to Attain Environmental Sustainability: A Conceptual Analysis. [online] Proquest. Available at: https://www.proquest.com/openview/f44a9d

 Ob15afa46e728b13cf57b96dd4/1?pq-origsite=gscholar&cbl=203196 3> [Accessed 16 March 2023].
- Lestari, E.R., Hanifa, K., and Hartawan, S., 2020. Antecedents of Attitude Toward Green Products and Its Impact on Purchase Intention. IOP Conf. Ser. Earth Enron. Sci. [online] MDPI. Available at: https://www.mdpi.com/20 71-1050/13/8/4248. [Accessed 16 March 2023].

- Lezoraine, M.A., 2021. 75% of Filipino Consumers Seek Eco-friendly Brands. [online] Kantar World Panel. Available at: https://www.kantar worldpanel.com/ph/news/sustainability-matters> [Accessed 16 March 2023].
- Morel, M. and Kwakye, F., 2012. Green marketing: Consumers' Attitudes towards Eco-friendly Products and Purchase Intention in the Fast-Moving Consumer Goods (FMCG) sector. [online] Diva Portal.org Available at: < https://www.diva-portal.org/smash/get/diva2:553342/full text01.pdf > [Accessed 7 July 2023].
- McCombes, S., 2020. Descriptive Research. [online] Scribbr. Available at: https://www.scribbr.com/methodology/descriptive-research/> [Access Ed 7 July 2023].
- Ogiemwonyi, O., and Harun, A. B., 2020. Consumption of Green Product as A Means of Expressing Green Behaviour in an Emerging Economy: With the Case Study of Malaysia. Environment. [online] Sage Journals. Available at: https://journals.sagepub.com/doi/abs/10.1177/097542 5320938538> [Accessed 5 April 2023].
- Pagliacci, M., Manolica, A., Roman, T., and Boldureanu, G., 2019. The Consumers of Green Products. The Case of Romanian Moldavia Counties. [online] Springer Open. Available at: https://fbj.springer open.com/articles/10.1186/s43093-021-00094-5> [Accessed 26 July 2023]

- Sathyapriya P., and Sekar P., 2020. Green Product and Consumer Behavior: An Analytical Study. [online] MDPI. Available at https://www.mdpi.com/1660-4601/19/24/16568 [Accessed 5 April 2023].
- Shittu O., 2020. Emerging sustainability concerns and policy implications of urban household consumption: a systematic literature review. [online] Springer Open. Available at: https://fbj.springeropen.com/articles /10.1186/s43093-021-00094-5> [Accessed 26 July 7 2023].
- Singh, A., and Vashist, A., 2020. Green Marketing. [online] Proquest.

 Available at:

 https://www.proquest.com/openview/f44a9d0b15afa46

 e728b13cf57b96dd4/1?> [Accessed 16 March 2023].
- Singh, B. P., and Mehra, R., 2020. A Study on Consumer Awareness Towards Green Marketing with Special Reference to Indore Region. [online] Proquest Available at: https://www.proquest.com/openview/f4 4a9d0b15afa46e728b13cf57b96dd4/1?> [Accessed 16 March 2023].
- Tan, A., 2021. Green Retrofits for Decarbonizing the Philippine Office Market. Metro Manila. [online] Linkedin. Available at: https://www.linkedin. com/pulse/green-retrofits-decarbonizingphilippine-office-market-angelo -tan> [Accessed 16 March 2023].

Wandhe, P., 2018. Green Marketing A Boon for Sustainable Development. [online] Proquest. Available at: https://www.proquest.com/openvi ew/f44a9d0b15afa46e> [Accessed 16 March 2023].

Zhang, L., Chen, L., Wu, Z., Xue, H., and Dong, W., 2018. Key Factors Affecting Informed Consumers' Willingness to Pay for Green Housing: A Case Study of Jinan, China. [online] MDPI. Available at: https://www.mdpi.com/2071-1050/13/8/4248 [Accessed 16 March 2023].

