# Factors Influencing Consumers' Purchase Behaviour towards Green Packaged Products

#### Goh Mei Ling<sup>1</sup>, Ho Sew Tiep<sup>2</sup>, Yeo Sook Fern<sup>3</sup>, Teh Wei Lun<sup>4</sup>

<sup>1,3</sup> Faculty of Business, Multimedia University, Malaysia;
<sup>2</sup> Faculty of Information Science and Technology, Multimedia University, Malaysia;
<sup>4</sup> Marketing, Bigbigplace, Malaysia.

#### Abstract

The disposal of plastic packaging has caused the amount of waste generation, which have a negative impact on the environment. Green packaging, which is more eco-friendly packaging, is harmless to human health and biodegradable. Many businesses have turned to the movement of going green by providing green products and services. Hence, the objective of this study is to investigate the factors that influence the purchase behaviour of consumers towards green packaged products. A total of 200 respondents was recruited using convenience sampling. Data were collected with a set of self-administered questionnaires that covered respondents' profiles and all the variables in the research model. Partial Least Square Structural Equation Modeling was used to assess the measurement model and structural model. Both convergent validity and discriminant validity were deemed satisfactory. The findings have revealed 0.444 of R2 means that the model explains 44.4% of the total variation of purchase behaviour. Environmental concern and environmental attitude were found to affect consumers' purchase behaviour positively towards green packaged products. Environmental knowledge and social influence, however, were found to be non-significant. This study will be able to provide valuable information to the marketers to focus not only on their products but the packaging of their products as well. This study also provides an insight into the consumers' purchase behaviour towards green packaged products. It is recommended for future research to recruit more respondents with a more diversified background.

**Keywords**: Consumers'Purchase Behaviour; Environmental Knowledge; Environmental Concern, Environmental Attituded; Social Influence



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#### INTRODUCTION

Huge quantities of waste are generated rapidly every day. The majority of waste is plastic. Plastic is one of the most common packagings that we can see in our daily life. The disposal of plastic packaging has caused the amount of waste generated and have a negative impact on the ecosystem. According to Goh (2019), Malaysia is one of the worst countries of plastic waste pollution in the top 10 in the world. This shows that people in Malaysia are still having a huge usage of plastic packaging. This means environmental awareness is still not lacking among Malaysians. Society should learn about the principles of 3R (reuse, reduce, recycle) to solve this waste pollution together. Consumer Association of Penang acting president Mohideen Abdul Kader (New Straits Times, 2019) highlighted that the alternative to solve plastic pollution is to redesign products, packaging and shipment systems in order to avoid using single-use plastic products and packaging. Other than that, waste management is the most important thing that every

country should focus on. There is a need for government to allocate vast funding and hire more experts to handle the plastic pollution caused by humans' activities.

Green packaging is one of the methods to reduce the waste of plastic packaging to end up in the landfill. Green packaging can also be called eco-friendly and sustainable packaging. It is harmless to human health and biodegradable. Green packaging can be achieved by using less packaging for products or use recyclable and biodegradable materials when producing the packaging. Many businesses have now turned to the movement of going green. It shows that going green is not only important in protecting the environment but also one of the marketing strategies to gain more shares in the market. Going green in marketing not only helping the business owners but also providing eco-friendly products and services to customers. Therefore, it is vital to understand the purchase behaviour of consumers towards green packaged products.

There are very limited studies focus on green packaging (Prakash & Pathak, 2017; Rajendarn & Wahab, 2017). Rajendran and Wahab (2017) had examined how the price, knowledge, design and quality affect the consumers' purchase intention towards green packaged products. Prakash and Pathak (2017) applied Theory of Reasoned Action (TRA) in their study to investigate young consumers' green purchase intention in India.

## LITERATURE REVIEW

According to Kamath & Saurav (2016), green packaging or sustainable packaging utilizes environmentally friendly processes of manufacture, recyclables and biodegradables for product packaging to make it environmentally friendly and minimal energy consumption through the packaging method. Besides that, green packaging is defined as packaging that causes low damage to the environment and less pollution to the living creature, normally manufactured by using environmentally friendly materials (Aleenajitpong, 2013). Green purchase means the consumption of environmentally-friendly, recyclable, conservative or ecologically responsive goods (Lee, 2008). Consumers buy green products to reduce adverse environmental effects through natural resources protection, power consumption and waste reduction and health and security improvement (Elham & Nabsiah, 2010).

Chan and Lau (2000) have revealed that environmental knowledge has positively associated with consumers' green purchase behaviour. They have highlighted that consumers with more knowledge of the environment are willing to buy more green products. Elham and Nabsiah (2010) opined that knowledge of the environment could encourage a positive approach to green products.

Seyrek and Gül (2017) have found that environmental concern has the most influential power on green purchase behaviour, and it will impact green purchase behaviour effectively. Other studies (Aman et al., 2012; Albayrak et al., 2013) have also shown that environmental concern affects consumer's green purchase behaviour positively.

Millissa and To (2019) stated that consumers who have a positive environmental attitude are more concerned about the environment and will focus on products that have less harm to the environment. Other studies (Mostafa, 2009; Lee, 2008) also revealed that environmental attitude plays an important role in determining the consumer's green purchase behaviour. The study by Prakash and Pathak (2017) have provided evidence that consumers take a positive view of green packaged product and prepare to pay extra on it.

The study conducted by Pickett-Baker and Ozaki (2008) has confirmed that social influence affects green purchase behaviour positively. Lee (2008), in his study, also revealed that social influence was the main indicator of consumers' purchase behaviour among teenagers in Hong Kong.

#### **RESEARCH METHOD**

Two hundred respondents were recruited using convenience sampling in this study. The survey was done with a set of self-administered questionnaires which covered demographic information and all the variables, namely purchase behaviour, environmental knowledge, environmental concern, environmental attitude and social influence. All the measurements of the variables were adapted from previous studies (Liebenberg, 2015; Mohhiuddin et al., 2018; Ooi et al., 2012; Pickett-Baker & Ozaki, 2011; Sinnappan & Rahman, 2011; Seyrek & Gul, 2017). All the variables were measured using a 5-point Likert scale ranging from 1 represents strongly disagree to 5 represents strongly agree to accept purchase behaviour. Purchase behaviour was measured using a 7-point Likert scale. The data was collected between December 2019 to January 2020 in Melaka. Partial Least Square Structural Equation Modeling (PLS-SEM) was performed to assess the measurement model and structural model.

## FINDINGS AND DISCUSSION

The convergent validity and discriminant validity were assessed via a measurement model in this study. All the factor loadings for all the items were greater than 0.5 (Byrne, 2016), composite reliability greater than 0.7 and average variance extracted greater than 0.5 (Hair et al., 2017). This means the convergent validity of all the constructs is satisfactory. Heterotrait-monotrait Ratio (HTMT) (Henseler et al., 2015) was used to assess discriminant validity in this study. The HTMT value obtained for all the constructs were below the suggested threshold value of HTMT0.85 (Franke & Sarsterd, 2019), meaning that the discriminant validity is deemed to be adequate.

The structural model was then performed using bootstrapping to examine the relationship between all the variables. The R2 value obtained is 0.444, implying the model explains 44.4% of the total variation in consumers purchase behaviour towards green packaged products. Environmental attitude and environmental concern were found to have a positive influence on the purchase behaviour of consumers towards green packaged products. Environmental knowledge and social influence, however, were found to have no impact on the purchase behaviour of consumers.

The findings of this study have indicated that environmental attitude and environmental concern play a vital role in influencing consumers' purchase behaviour towards green packaged products. Consumers who have a positive attitude and are more concerned about the environment are more likely to purchase products with green packaging that are harmless to the environment. Respondents in this study perceived environmental knowledge and social influence as not an important factor for them to purchase green packaged products.

## CONCLUSION AND FURTHER RESEARCH

The results of this study have confirmed that environmental attitude and environmental concern are the predictors of consumers' purchase behaviour towards green packaged products. Environmental knowledge and social influence were perceived as not important by the respondents of this study.

Understanding the factors influencing the purchase behaviour of consumers towards green packaged products will provide useful information to the marketers to focus not only on their products but the packaging of their products as well. Marketers need to ensure the packaging is more eco-friendly in order to increase sales and attract more consumers, especially those consumers who are an environmental concern. This study also provides an insight into the purchase behaviour of consumers towards green packaged products in the Malaysian context.

The limitations of this study are mainly on the diversification background of the respondents. The majority of them are Chinese and Indian, which did not follow the ethnicity distribution in Malaysia. Second, this study only recruited respondents from Melaka. These may lead to issues of generalization and representativeness to the entire population. It has thus been recommended to recruit more Malay respondents and respondents from other states in future research.

## REFERENCES

Albayrak, T., Aksoy, Ş., & Caber, M. (2013). The effect of environmental concern and scepticism on green purchase behaviour. Marketing Intelligence & Planning, 31(1), 27-39.

Aleenajitpong, N. (2013). Attitude Towards Green Packaging and Its Impact on Purchase Intention of Green Packaged Consumer Products among Undergraduates in Bangkok Metropolitan, Thailand. SSRN Electronic Journal.

Aman, A. L., Harun, A., & Hussein, Z. (2012). The Influence of Environmental Knowledge and Concern on Green Purchase Intention the Role of Attitude as a Mediating Variable. British Journal of Arts and Social Sciences, 7(II), 145-167.

Byrne, B. M. (2016). Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming. Routledge.

Chan, R. Y., & Lau, L. B. (2000). Antecedents of Green Purchases: A Survey in China. Journal of Consumer Marketing, 17(4), 338-357.

Elham, R., & Nabsiah, W. A. (2010). The Malaysian Consumer and the Environment: Purchase Behavior. Global Business and Management Research: An International Journal, October (1).

Franke, G. & Sarsterd, M. (2019). Heuristics versus Statistics in Discriminant Validity Testing: A Comparison of Four Procedures. Internet Research, 29(3), 430-447.

Goh, B. L. (2019, April 22). The Sun Daily. Retrieved from Alarm over plastic usage: https://www.thesundaily.my/opinion/alarm-over-plastic-usage-JG811029.

Hair Jr, J. F., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM), 2nd edition. Sage publications.

Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A New Criterion for Assessing Discriminant Validity in variance-based Structural Equation Modeling. Journal of the Academy of Marketing Science 43(1): 115-135.

Kamath, N., & Saurav, S. (2016). Handbook of Research on Strategic Supply Chain Management in the Retail Industry. IGI Global. Retrieved from https://www.igi-global.com/chapter/green-retailing/145956.

Lee, K. (2008). Opportunities for Green Marketing: Young Consumers. Marketing Intelligence & Planning, 26(1), 573-586.

Liebenberg, P. (2015). Identifying Factors that Influence Green Purchase Behaviour. Minidissertation, Master of Business Administration, Potchefstroom Campus, NorthWest University.

Millissa, F. Y. Cheung, & To. W. M. (2019). An Extended Model of Value-Attitude-Behavior to Explain Chinese Consumers' Green Purchase Behaviour. Journal of Retailing and Consumer Services, 50, 145-153.

Mohhiuddin, M., Mamun, A. A., & al., F. S. (2018). Environmental Knowledge, Awareness, and Business School Students' Intentions to Purchase Green Vehicles in Emerging Countries. Sustainability, 10(5), 1- 18.

Mostafa, M. M. (2009). Shades of Green: A Psychographic Segmentation of the Green Consumer in Kuwait using Self-organizing Maps. Expert Systems with Applications, 36(8), 11030-11038.

New Straits Time (2019). Reduce Plastic Packaging. Retrieved from https://www.nst.com.my/news/nation/2019/06/495091/reduce-plastic-packaging.

Ooi, J. M., Kwek, C. L., & Keoy, K. H. (2012). The Antecedents of Green Purchase Intention among Malaysian. 2012 International Conference on Economics, Business Innovation, 39-43.

Pickett-Baker, J., & Ozaki, R. (2008) Pro-Environmental Products: Marketing Influence on Consumer Purchase Decision. Journal of Consumer Marketing, 25, 281-293.

Prakash, G., & Pathak, P. (2017). Intention to buy eco-friendly packaged products among young consumers of India: A study on developing nation. Journal of Cleaner Production, 141, 385-393.

Rajendran, S. D., & Wahab, S. N. (2017). Purchase Intention towards Green Packaged Products: An Exploratory Study among Malaysian Consumers. 3rd International Conference on Advanced Research in Business and Social Sciences 2017, 347-355.

Seyrek, I. H., & Gül, M. (2017). Factors Affecting Green Purchasing Behavior: A Study of Turkish Consumers. International Journal of Academic Research in Business and Social Sciences, 7(1), 306-319.

Sinnappan, P., & Rahman, A. A. (2011). Antecedents of Green Purchasing Behavior among Malaysian Consumers. International Business Management, 5(3), 129-139.