

Factors Affecting Green Purchase Behavior Among Undergraduate Students: A Conceptual Analysis

Nor Shahrul Nizam Muhamad Nor*, Azhan Rashid Senawi, Mohammad Zulfakhairi Mokhtar, Shariff Harun
Circular Economy of Logistics and Operations (CELO), Faculty of Business and Management,
Universiti Teknologi MARA Selangor, Malaysia

*shahrul@uitm.edu.my, azhanrashid@uitm.edu.my, zulfakhairi@uitm.edu.my, shariffharun@uitm.edu.my
Corresponding Author: Nor Shahrul Nizam Muhamad Nor

Abstract: This study focuses on a literature review examining the factors affecting green purchase behavior among undergraduate students. In the modern world the latest technology adaptation, allows consumers to be exposed to such information about product quality and benefits to them and society before going to purchase and consume it. Therefore, many governments and manufacturers take proactive actions by producing more green and environmentally friendly products. With aggressive marketing strategies in targeting pro-environmental consumers, especially the younger generation. However, it could be one opportunity to study among undergraduate students as part of the younger generation who are commonly educated, this group could be a significant group for pro-environmental consumers. There are several factors could be studied such as environmental concern, perceived consumer effectiveness, environmental knowledge, attitude toward green products, willingness to pay, and green purchase intention. This conceptual analysis study can pave the way for developing a framework and further research analysis.

Keywords: *Green Purchase Behavior, Green Products, Consumers, Undergraduate Students*

1. Introduction and Background

In today's rapidly advancing technological era and age of digitalization, the proliferation of the internet and digital tools has revolutionized the way consumers access and process information (Naz et al., 2020). Therefore, consumers can easily find reviews, expert opinions, and even scientific studies on the product's effectiveness, safety, quality and benefits to them. Additionally, consumers can access data about a product's environmental footprint, such as how its production contributes to pollution, deforestation, or carbon emissions (Higuera-Castillo et al., 2019). Consumers can also learn about the ethical practices of the companies in producing products, including whether they engage in exploitative behaviors that severe damage to the environment (Sharma et al., 2019).

Due to easy access to information, consumers are increasingly aware of and acknowledge the broader implications of their purchasing decisions (Quoquab et al., 2020; Kautish et al., 2019). This awareness and acknowledgment has led to a shift in consumer behavior, with more people prioritizing green products that align with their values and ethical standards. Therefore, many consumers now prefer to buy from companies that are environmentally friendly, socially responsible, and transparent about their business practices (Kautish et al., 2019).

As awareness of environmental and social issues grows among the public, therefore, governments and manufacturers are responding by taking significant steps to integrate social ethics, responsibility, and environmental protection into their policies and practices (Indriani et al. 2019). Recognizing the increasing demand for sustainable products, these entities are actively shifting their focus towards creating and promoting goods that are not only high-quality but also environmentally friendly. To promote these green products, both governments and manufacturers (Cheung & To, 2019) are deploying aggressive marketing strategies. These campaigns often highlight the environmental benefits of their products, appealing to consumers who are concerned about issues such as climate change, pollution, and resource depletion. The marketing efforts are typically geared towards pro-environmental consumers—individuals who are not only aware of environmental issues but are also motivated to make purchasing decisions that align with their values. In purchasing green or eco-friendly products, consumer behavior is influenced by a range of factors that can either encourage or discourage such decisions. These factors can include consumers' concerns, having certain knowledge (Indriani et al., 2019), perceived green product effectiveness, attitude towards green products, willingness to pay and intention to purchase (Indriani, et al. 2019). Generally, younger generations, particularly those who are well-educated, tend to be more receptive to making lifestyle changes that contribute to a better

and more sustainable future. This group seems to be more aware of the environmental and social impacts of their consumption choices and is therefore more likely to prioritize sustainability in their purchasing decisions (Cheung & To, 2019; Chaudhary & Bisai, 2018).

Chaudhary and Bisai (2018) noted that societies in Western countries realized and started to focus natural environment in the early 1960s and 1970s. Since then, there has been growing awareness of environmental issues globally, however, the adoption of green products in developing countries can be hindered by various challenges (Chaudhary & Bisai, 2018). These may include limited access to green products, higher costs associated with eco-friendly alternatives, lower levels of environmental awareness, and economic constraints that make price a more significant factor in purchasing decisions. Cultural norms and societal values also play a role in shaping consumer behavior, and in some contexts, there may be less emphasis on sustainability compared to more immediate concerns like economic stability and affordability.

Problem Statement

Global warming, a widespread concern discussed globally by the United Nations and numerous countries, is largely driven by overpopulation and the resulting increase in demand for goods (Kautish et al., 2019). This surge in demand has led to heightened manufacturing and production, which, in turn, pollutes and damages the ecosystem in the global environment (Indriani et al., 2019). The demand for these manufactured products primarily comes from rapidly growing suburban areas, which have seen significant population growth since the 1950s (Kautish et al., 2019). These challenges are having a profound impact on the environment, society, and human health and need to cater intensively (Chaudhary & Bisai, 2018). Thus, the awareness began in Western societies in the early 1960s and 1970s and spread globally (Chaudhary & Bisai, 2018).

Since then, green consumerism emerged and increased among younger generations (Cheung & To, 2019; Chaudhary & Bisai, 2018). The younger generation especially from Generation Z (1996- 2012) and Generation Alpha (2023-2025) is typically recognized as a group with greater access to education and exposure to progressive developments. As a result, this group tends to be more aware and knowledgeable about green products (Lai & Cheng, 2016). Beyond focusing on this demographic, it is also valuable to explore the context of different countries. Research by Witek and Kuzniar (2020) and Ali et al., (2011) noted that many studies on green products have been concentrated in Europe and North America. This highlights the importance of extending research to other regions, particularly developing countries like Malaysia. Furthermore, the number of publications on green products has been growing, with 106 publications recorded in 2020 alone (Sharma et al., 2022). This indicates that discussions about green products remain highly relevant.

The fundamental idea behind purchasing green products is to raise consumer awareness about the harmful effects of using conventional products or services. Han (2020) emphasized the importance of consumers valuing their environment, while Cheung and To (2019) found that consumers with strong environmental consciousness are more likely to prioritize eco-social benefits. Therefore, without consumer awareness and consciousness, green products are difficult to effectively distribute and reach their intended market. Moreover, this awareness and consciousness stem from knowledge. As consumers gain more knowledge, their environmental concerns, understanding of sustainability challenges, and awareness of environmental deterioration increase, leading to a greater inclination toward green products (Witek & Kuzniar, 2020; Kautish et al., 2019).

In addition to knowledge, consumer perception of green products is a significant factor influencing green purchasing behavior. Witek and Kuzniar (2020) and Ali et al. (2011) observed that much of the research on green products has focused on developed regions, particularly North America and Europe, largely due to the positive perceptions in these areas. Similarly, Cheung and To (2019) noted that organizations have targeted their marketing efforts for green products more heavily in Europe and China because of the favorable attitudes of consumers there. Consequently, positive attitudes and perceptions can significantly encourage people to adopt a more favorable view of green products.

The price of green products is another significant issue. Eco-friendly products and services are often considered expensive, which can impact green purchasing behavior. Consumers may struggle with the decision of whether to pay a higher price for the sake of long-term environmental protection and a healthier society. Witek and

Kuzniar (2020) found that a consumer's financial situation can influence their willingness to purchase and own green products. Therefore, financial stability and the willingness to pay a premium for green products become critical factors in consumer access to these products.

The most critical factor in consumers' green purchasing behavior is their intention to buy these products. Consumer awareness, knowledge, and attitude must align with a strong intention to act. Without this intention, consumers are unlikely to purchase green products, which are essential for minimizing environmental harm and achieving long-term societal benefits. Cheung and To (2019) observed that many organizations focus their green product marketing efforts in China and Europe because consumers in these regions show a higher intention to buy. Therefore, this study is necessary to address the issues and challenges related to green purchasing behavior.

2. Literature Review

Green Purchase Behavior (GHB): Green purchasing involves consumers making responsible choices by buying eco-friendly products and services to minimize their negative impact on the environment and society (Han, 2020). The core concept of green products offered in the market is to reduce their harmful effects on the environment, society, and health. Witek and Kuzniar (2020) support this, noting that green consumers consciously avoid products that may harm the environment during the manufacturing, consumption, and disposal stages.

Furthermore, consumer green purchasing behavior is a crucial element for the success of eco-friendly organizations and developed based on a theory of Green Purchase Behavior (TGPB) (Han, 2020). Cheung and To (2019) noted that many studies have explored the factors influencing green purchase behavior. However, this study will focus on the key factors that may impact green purchase behavior, including environmental concern, perceived consumer effectiveness, environmental knowledge, attitudes toward green products, willingness to pay, and green purchase intention.

Environment Concern (EC): Consumers began to develop environmental awareness in the mid-1980s (Lee, 2008). Since then, more individuals have become increasingly conscious of environmental and social issues. Environmental concern can be defined as an individual's awareness of environmental problems and their willingness to contribute to environmental protection (Naz et al., 2020; Kim & Choi, 2005). In general, environmental concern suggests that people are both aware of and engaged in addressing environmental challenges within society. Some researchers refer to environmental concern as environmental value (Han, 2020) or environmental consciousness (Cheung & To, 2019), emphasizing the same concept of awareness regarding the need to protect the environment.

Several studies have found that consumers who are genuinely concerned about the environment and adopt eco-friendly habits, such as becoming green consumers, can enhance environmental quality through green purchasing behavior (Naz et al., 2020). Cheung and To (2019) also discovered that consumers with strong environmental consciousness tend to prioritize eco-social benefits. Moreover, Kautish et al. (2019) noted a growing trend of environmental concern among consumers, suggesting that green purchasing could establish itself more prominently in society.

Perceived Consumer Effectiveness (PCE): Perceived consumer effectiveness was first introduced in the literature by Kinnear et al. (1974). They described it as the belief that individuals can positively impact the environment by reducing negative effects. Naz et al. (2020) and Kautish et al. (2019) further defined it as an internal sense of control that motivates individuals to protect the environment. Research on perceived consumer effectiveness has been emphasized for years to better understand consumer behavior. Unlike environmental concern and attitude, Kinnear et al. (1974) and Naz et al. (2020) noted that it centers on the belief that one's actions can produce meaningful and effective results. Thus, this feeling serves as an important factor influencing consumer behavior.

Environmental Knowledge (EK): Knowledge is essential for human survival and daily life. It can be defined as a collection of ideas, rules, procedures, and information that serves as a valuable asset for enhancing human

capabilities and performance (Lee, 2016). In the context of consumer behavior, knowledge plays a key role in influencing decision-making processes (Higuera-Castillo et al., 2019). Environmental knowledge, specifically, refers to an individual's ability to understand and comprehend issues related to the environment (Naz et al., 2020).

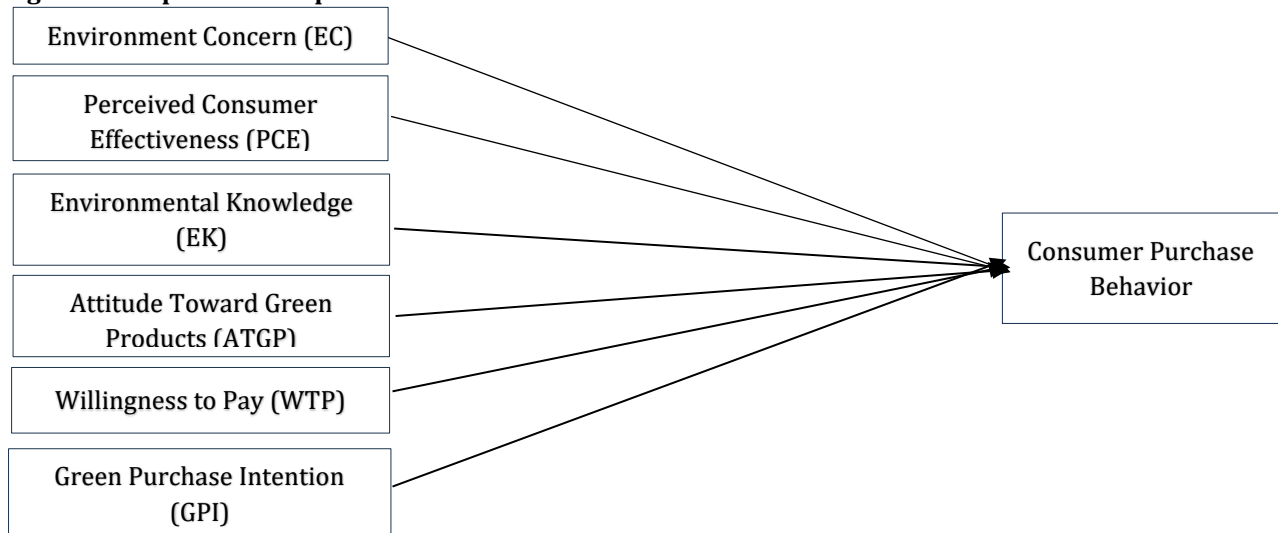
The concept of environmental knowledge was introduced by Laroche et al. (1996) to assess and analyze respondents' ability to understand and interpret environmental signs, behaviors, and concepts. Since then, research in this area has steadily progressed. For instance, Cheung and To (2019); and Indriani et al. (2019) found that individuals who possess knowledge about green products, including their quality and other relevant details, are more confident in purchasing them. Additionally, Witek and Kuzniar (2020) discovered that individuals with higher levels of education are more likely to buy green products compared to those with lower levels of education.

Attitude toward Green Products (ATGP): Attitude refers to a combination of emotions, beliefs, and behaviors directed toward a specific person, object, event, or idea. It can manifest cognitively, behaviorally, or effectively in a person's psychological response, including as a consumer. Consumer attitude is defined as an individual's positive or negative evaluation of a particular behavior (Indriani et al., 2019; Ajzen & Fishbein, 1980). Numerous studies have explored consumer behavior by examining their attitudes toward various factors. Several studies have examined consumers' attitudes toward green products to explore the relationship between their attitudes and their purchasing behavior for such products. Cheung and To (2019) explained that this attitude forms when consumers become aware of environmental issues and the benefits to society. Witek and Kuzniar (2020) also emphasized that attitude plays a critical role in consumers' selection and choice, particularly when it comes to green and eco-friendly products.

Willingness to Pay (WTP): Willingness to pay refers to a consumer's maximum level of readiness to spend more on green products or services (Naz et al., 2020). This level of readiness can vary among consumers, especially when it comes to the additional cost associated with green products. Consequently, several studies have been conducted to examine and analyze consumers' willingness to pay a premium for green products or services as a way of mitigating negative impacts on society and the environment. Witek and Kuzniar (2020) found that a consumer's financial situation can influence their willingness to purchase green products.

Green Purchase Intention (GPI): Intention commonly refers to the aim or determination to take a specific action. In the context of purchasing green products, intention could be defined as a reflection of an individual's readiness to engage in the behavior of buying these products (Indriani et al., 2019). Numerous studies have investigated the relationship between intention and green purchasing behavior. Cheung and To (2019) emphasized that when consumers are motivated and have the intention to contribute something positively to society, they are more likely to purchase green products. Therefore, intention must precede the decision to buy these products.

Figure 1: Proposed Conceptual Framework



3. Conclusion

In the context of green consumer behavior, numerous studies have examined various factors that given their significant impact on consumer behavior in purchasing green products. Additionally, this conceptual paper is a vital part of an internal research grant from the faculty of Business and Management, UiTM Cawangan Selangor. Specifically, the study aims to investigate the relationship between six factors as independent variables in green consumer behavior. To ensure the study is relevant, the younger generation specifically undergraduate students will be randomly selected to participate and represent their generation towards green products in developing countries such as Malaysia.

The anticipated results of this study are expected to have significant implications for governments and manufacturers in improvising the policies as well as producing green products. By exploring these factors, the study seeks to offer valuable insights to understand consumer behavior in purchasing green products. Thus, in turn, can improve many parties to be involved and nurture a green environment as part of human life.

4. Contribution

The framework utilized in this research has been extensively applied by many scholars in previous studies to assess its relevance and applicability in various organizational contexts. However, this conceptual study aims to make a unique and significant contribution specifically to green products. It seeks to enhance the existing body of knowledge on consumer behavior and, ultimately purchasing green products among young generations in developing countries such as Malaysia.

The dimensions of the variables under consumer behavior—green products and services orientation—have the potential to offer a broader perspective on understanding these concepts. This research specifically aims to explain the elements of consumer behavior, including environmental concern, knowledge, consumer perceived effectiveness, attitude toward green products, willingness to pay and consumer purchase intention that is expected to significantly influence consumer purchasing. By exploring these dimensions, the study seeks to provide valuable insights and practical implications for industry professionals and academics alike.

Acknowledgement: The authors extend their appreciation to the Faculty of Business and Management, Universiti Teknologi MARA (UiTM). This research draws from the 'Geran RIG UiTM Cawangan Selangor Tahun 2024' (600-TNCPI 5/3/DDF (FPP) (011/2024)).

References

- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. New Jersey: Prentice-Hall. Englewood Cliffs, 5(4).
- Ali, A., Khan, A.A., Ahmed, I. & Shahzad, W. (2011). Determinants of Pakistani Consumers' Green Purchase Behavior: Some Insights from a Developing Country. *International Journal of Business and Social Science*, 2(3), 217 – 226.
- Chaudhary, R. & Bisai, S. (2018). Factors Influencing Green Purchase Behavior of Millennials in India. *Management of Environmental Quality: An International Journal*, <https://doi.org/10.1108/MEQ-02-2018-0023>
- Cheung, M.F.Y. & To, W.M. (2019). An Extended Model of Value-Attitude-Behavior to Explain Chinese Consumers' Green Purchase Behavior. *Journal of Retailing and Consumer Services*, 50, 145 – 153.
- Han, H. (2020). Theory of Green Purchase Behavior (TGPB): A New Theory for Sustainable Consumption of Green Hotel and Green Restaurant Products. *Business Strategy and the Environment*, 1-14.
- Higueras- Castillo, E. Liebana-Cabanillas, F., Munoz-Leiva, F. Garcia-Maroto, I. (2019). Evaluating Consumer Attitudes Toward Electromobility and the Moderating Effect of Perceived Consumer Effectiveness. *Journal of Retailing and Consumer Services*, 51, 387 – 398.
- Indriani, I.A.D., Rahayu, M. & Hadiwidjojo, D. (2019). The Influence of Environmental Knowledge on Green Purchase Intention the Role of Attitude as Mediating Variable. *International Journal of Multicultural and Multireligious Understanding*, 6(2), 627-635.
- Kautish, P., Paul, J. & Sharma, J. (2019). The Moderating Influence of Environmental Consciousness and

- Recycling Intentions on Green Purchase Behavior. *Journal of Cleaner Production*, 228, 1425-1436.
- Kim, Y. & Choi, S.M. (2005). Antecedents of Green Purchase Behavior: An Examination of Collectivism, Environmental Concern, and PCE: NA- *Advance in Consumer Research*, Association for Consumer Research, 32, 592 -599.
- Kinnear, T.C., Taylor, J.R., Ahmed, S.A. (1974). Ecologically Concerned Consumers: Who Are They? Ecologically Concerned Consumers can be Identified. *Journal of Marketing*. 38, 20n- 24.
- Laroche, M., Kim, C. & Zhou, L. (1996). Brand Familiar and Confidence as Determinants of Purchase Intention: Am Empirical Test in a Multiple Brand Context. *Journal Business Research*, 38, 115 – 120.
- Lai, C.K.M. & Cheng, E.W.L (2016). Green Purchase Behavior of Undergraduate Students in Hong Kong. *The Social Science Journal*, 53, 67 – 76.
- Lee, K. (2008). Opportunities for Green Marketing: Young Consumer. *Mark-Intel-Plan*, 26, 573-586.
- Lee, M.C. (2016). Knowledge Management and Innovation Management: Best Practice in Knowledge Sharing and Knowledge Value Chain. *International Journal Innovation and Learning*, 19(2), 206-226.
- Naz, F., Olah, J., Vasile, D. & Magda, R. (2020). Green Purchase Behavior of University Students in Hungary: An Empirical Study. *Sustainability*, 12, doi:10.3390/su122310077.
- Quoquab, F., Jaini, A. & Mohammad, J. (2020). Does it Matter Who Exhibits More Green Purchase behavior of Cosmetic Products in Asian Culture? A Multi-Group Analysis Approach. *International Journal of Environmental Research and Public Health*, 17, doi:10.3390/ijerph17145258.
- Sharma, K., Aswal, K. & Paul, J. (2022). Factors Affecting Green Purchase Behavior: A Systematic Literature Review. *Business Strategy and the Environment*, 32, 2078 – 2092.
- Sinnappan, P. & Abd Rahman, S. (2011). Antecedents of Green Purchasing Behavior Among Malaysian Consumers. *International Business Management*, 5(3), 129 – 139.
- Witek, L. & Kuzniar, W. (2021). Green Purchase Behavior: The Effectiveness of Sociodemographic Variables for Explaining Green Purchases in Emerging Market. *Sustainability*, 13, 209, <https://doi.org/10.3390/su13010209>