

THE ROLE OF KNOWLEDGE, INFLUENCE, ATTITUDE, AND DEPTH OF SEARCH ON STUDENTS' PURCHASE INTENTIONS FOR ECO-FRIENDLY PRODUCTS

Noorizati Nasuha binti Nazri¹
Amira Natasya binti Mohd Rusdi²
Muhammad Afif Zafri bin Syafie³
Maryam Karimah binti Ruslimi⁴
Nur Farhatul Aina binti Roslan⁵
Fahmi Zaidi bin Abdul Razak⁶
Nurulhuda binti Othman^{7*}

^{1, 2, 3, 4, 5, 6, 7} Faculty of Management and Informatics, Sultan Ahmad Shah Pahang Islamic University (UnIPSAS),
KM. 8, Jalan Gambang, 25150 Kuantan, Pahang, Malaysia

*Corresponding author: nurulhuda@unipsas.edu.my

Article history

Received date : 19-10-2024
Revised date : 20-10-2024
Accepted date : 25-12-2024
Published date : 31-12-2024

To cite this document:

Nazri, N. N., Mohd Rusdi, A. N., Syafie, M. A. Z.,
Ruslimi, M. K., Roslan, N. F. A., Abdul Razak, F.
Z., & Othman, N. (2024). The role of knowledge,
influence, attitude, and depth of search on students'
purchase intentions for eco-friendly products.
*Journal of Islamic, Social, Economics and
Development (JISED)*, 9 (68), 204-212.

Abstract: *Environmental care is crucial for the sustainability of both individual countries and the global community. Despite this, Malaysia has experienced a phenomenon of decreased purchases of eco-friendly products, which poses a threat to environmental stability. This study aims to identify the factors influencing the purchase of eco-friendly products in Malaysia by utilizing the model proposed by (Olasiuk & Bhardwaj, 2019). A cross-sectional survey methodology was employed, utilizing a questionnaire to collect quantitative data. Multiple linear regression analysis was conducted to address the research question. Several hypotheses were tested, with four being supported. The findings indicate that knowledge, attitude, and depth of search are positively and significantly associated with the intention to purchase eco-friendly products. The study also discusses the implications of these findings.*

Keywords *Intention to Purchase, Multiple Linear Regression, Knowledge, Attitude, Depth of Search.*

Introduction

Rising environmental concerns have led to an increased demand for eco-friendly products, particularly as traditional alternatives often have a negative impact on the environment. The Malaysian government has implemented several initiatives to promote sustainability, including significant investments in the development of eco-friendly products and tax breaks for environmentally friendly vehicles. However, despite these efforts, the adoption of eco-friendly products has not reached its full potential. A study by Rehman et al. (2023) conducted in Malaysia found that respondents acknowledged the significance of eco-friendly products but exhibited a low purchase intention. This suggests that while some interest in acquiring eco-friendly products may exist, it is not a strong motivating factor in their purchasing decisions.

This limited acceptance poses a risk of exacerbating existing pollution problems and potentially jeopardizing the future health of the Malaysian population. To address this gap, this study aims to identify the factors influencing the acceptance of eco-friendly products among university students in Malaysia.

Literature Review

Green Consumerism and Purchase Intention

Green consumerism, driven by factors such as green consciousness, health consciousness, environmental responsibility, and access to green finance, has a significant impact on purchase intention (Duong, 2024; Lee et al., 2023; Yanyan et al., 2023). Studies show that attitudes towards eco-friendly products, social media influence, and environmental corporate social responsibility initiatives all have a positive impact on consumer behaviour, emphasising the importance of promoting environmentally friendly practices. Furthermore, environmental responsibility plays an important mediating role in the relationship between green advertising attitudes and purchase intentions, particularly among the millennial generation. Overall, incorporating consciousness perspectives, social media marketing, and green finance into consumer behaviour models can significantly increase eco-friendly purchase intentions, thereby contributing to sustainable consumption practices.

Factors Influencing Students' Purchase Intention for Eco-Friendly Products

The research conducted in Malaysia highlights various factors influencing students' purchase intentions for eco-friendly products (Hashim et al., 2023; Jusoh, 2023; Moorthy et al., 2023). Factors such as awareness, emotional value, knowledge, attitude, distribution, and packaging play significant roles in shaping students' decisions to buy eco-friendly products. Interestingly, the quality of eco-friendly products emerges as a key driver influencing purchase decisions, while perceived value seems to have a lesser impact. This indicates that students prioritize quality and emotional value when considering eco-friendly purchases. Understanding these factors is crucial for businesses and policymakers aiming to promote sustainable practices among students, a demographic with increasing purchasing power. By recognizing these influences, strategies can be developed to effectively encourage eco-friendly consumption habits among students in Malaysia.

Students' purchase intention for eco-friendly products is influenced by a multitude of factors. Environmental knowledge, self-transcendence, quality, emotional value, attitude, and consumer effectiveness perception are significant determinants of students' decisions to buy eco-friendly products (Lavuri et al., 2023; Qotrunnada et al., 2023). While environmental knowledge may not always align with purchase intentions, self-transcendence positively

impacts students' willingness to buy eco-friendly products (Durmaz, 2023). Emotional value, knowledge, and attitude are identified as key influencers of eco-friendly product purchase behaviour among students. Moreover, ease of purchase and eco label credibility moderate the relationship between purchase intention and behaviour, underscoring their role in stimulating eco-friendly consumption among students. These findings emphasize the intricate interplay of factors that drive students towards purchasing eco-friendly products.

Theoretical foundation

Building upon the existing literature on eco-friendly product usage intention, several theoretical frameworks have been proposed, including the Theory of Reasoned Action (TRA) and the Theory of Planned Behaviour (TPB). As can be seen in Srivastava & Gupta (2023) who explore the impact of price sensitivity, governments green interventions and green product availability on green buying intention through the lenses of the theory of planned behaviour and the theory of consumption values. However, this study adopts the framework introduced by Hanna Olasiu & Udit Bhardwaj (2019) due to the alignment of its variables with the research objectives.

Hypothesis development

Knowledge

Knowledge, from the viewpoint of consumers, refers to their capacity to understand and assess the ramifications of human consumption behaviours on the environment, whether those impacts are beneficial or detrimental (Hamzah & Tanwir, 2021; Haron et al., 2005). Previous studies have demonstrated a significant positive relationship between knowledge and the intention to use eco-friendly products (Fabiola & Mayangsari, 2020; Hanna Olasiu & Udit Bhardwaj, 2019). Building upon these findings, we propose the following hypothesis:

H₁: There is positive relationship between knowledge and purchase intention for eco-friendly products.

Social Influence

Social influence encompasses the processes by which individuals' internal states (attitudes, beliefs, behaviours) are modified through interactions with others (Chen et al., 2022). Previous studies have proven that there is a positive and significant relationship between social influence and the intention to buy eco-friendly products (Firmansyah & Artanti, 2022). Therefore, this study concludes that:

H₂: There is positive relationship between social influence and purchase intention for eco-friendly products.

Attitude

Environmental attitude is defined as the set of beliefs, emotions, and behavioural intentions that an individual possesses concerning activities or issues related to the environment (Liao et al., 2020). Findings of many study have proven that there is a positive and significant relationship between attitude and intention to buy eco-friendly goods as can be found in (Costa et al., 2021; Dhir et al., 2021). Therefore, this study concludes that:

H₃: There is positive relationship between attitude and purchase intention for eco-friendly products.

Depth of Search

According to Maity & Arnold (2013), the depth of search as the duration a consumer spends examining information on a single web page. Building on prior research by Hanna Olasiu & Udit Bhardwaj (2019), which demonstrated a positive and significant relationship between depth of research and purchase intention for eco-friendly goods, this study proposes:

H4: There is a positive relationship between depth of search and purchase intention for eco-friendly products.

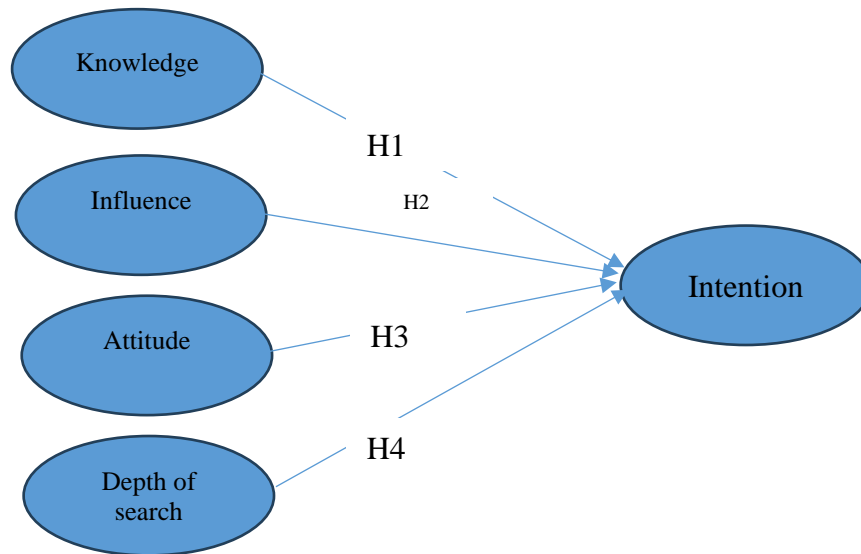


Figure 1: Conceptual Framework

Methodology

Participant and Procedure

To improve accessibility, the study used online questionnaire distribution to recruit Malaysian university students from January 27, 2024 to April 4, 2024. The survey questionnaires did not have a set return period, but a four-month window was provided in order to guarantee a sufficient response rate. Even with these efforts, only 72 questionnaires were returned completely. Participants received guarantees about the privacy of their answers and were made aware that the information would only be used for scholarly research. It was essential to stress these principles in order to promote open communication and reduce any potential common method bias.

Instrumentation

The research instrument employed in this study is a questionnaire. To uphold content validity, all measurement items for the constructs investigated in this study were drawn from the work of Hanna Olasiu & Udit Bhardwaj, (2019). The study encompasses five constructs, comprising four independent variables, namely knowledge, influence, attitude, and depth of search, alongside one dependent variable, intention. Each construct is assessed utilizing a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

Data Collection Method

This study utilizes a non-probability sampling method, specifically convenience sampling, owing to the absence of a sampling frame. The researcher employed an online platform to

disseminate the questionnaire, aiming to garner responses from a wide array of universities. Distribution of the questionnaire commenced on January 27, 2024, and concluded on April 4, 2024.

Data Analysis

This quantitative study employs statistical analyses to address the research question. Descriptive statistics are used to summarize the data, while inferential statistics, specifically multiple linear regression, are employed to test hypotheses and draw conclusions about relationships between variables. IBM SPSS version 25 was used for all statistical analyses. Due to limitations in sample size, a comprehensive statistical assessment of the construct validity was not feasible. Therefore, the research focused on establishing content validity by employing instruments with demonstrated validity in prior studies. Cronbach's alpha coefficient was utilized to measure internal consistency (reliability) of the instrument.

Results

Descriptive Statistic

When formulating the results section, it's important to remember that the results of a study do not prove anything. Findings can only confirm or reject the hypothesis underpinning your study. However, the act of articulating the results helps you to understand the problem from within, to break it into pieces, and to view the research problem from various perspectives.

Table 1: Descriptives Statistics

Demographic information		Frequency	Percent
Gender	Male	37	49.3
	Female	38	50.7
Age	20 and below	25	33.3
	21 - 30	47	62.7
	31 - 40	2	2.7
	41 - 50	1	1.3
Education	Foundation	8	10.7
	Diploma	35	46.7
	Degree	26	34.7
	Master	3	4.0
	PhD	3	4.0

Data from Table 1 reveal a gender distribution of 37 (49.3%) males and 38 (50.7%) females. Regarding age, 25 (33.3%) respondents were 20 years old or younger, while 47 (62.7%) were aged 21-30 years. Only 2 (2.7%) respondents were aged 31-40 years, and 1 (1.3%) was aged 41-50 years. Educational attainment demonstrated that 35 (46.7%) respondents held a diploma, 26 (34.7%) had a degree, 3 (4.0%) possessed a master's degree, and 3 (4.0%) held a PhD.

Validity and Reliability

As previously stated, this study does not assess construct validity through statistical means due to the insufficient sample size. Therefore, only content validity is examined. All constructs have fulfilled the criterion of content validity as all items within each construct are derived from

prior studies. Reliability, on the other hand, is evaluated using the Cronbach alpha coefficient. The findings indicate that all constructs demonstrate satisfactory reliability values, exceeding the threshold of 0.7 (see Table 2).

Table 2: Reliability Assessment

Variable	No of items	Reliability coefficient	remark
Knowledge	4	0.81	nil
Influence	4	0.60	Two items deleted
Attitude	4	0.73	nil
Intention	3	0.77	nil
Depth of search	2	0.76	nil

Hypothesis Testing

Table 3: Hypothesis Testing

Hypothesis	Beta	Std. Error	t-value	p-value	LL	UL	remark
Knowledge	.374	.099	4.113	.000	.211	.608	supported
Brand influence	-.060	.073	-.843	.402	-.207	.084	Not supported
Attitude	.347	.119	3.233	.002	.148	.625	supported
Depth of search	.287	.070	3.451	.001	.102	.382	supported

Based on table 3, results revealed a positive and significant relationship between knowledge and the intention to use eco-friendly products $\beta = 0.37$, $t(70) = 4.11$, $p = .001$. However, brand influence did not exert a significant effect on this intention $\beta = -0.06$, $t(70) = -.84$, $p = .402$. Additionally, attitude factors demonstrated a positive and significant association with the intention to purchase eco-friendly products $\beta = 0.34$, $t(70) = 3.23$, $p = .002$. Finally, depth of search was also found to positively and significantly influence the intention to buy eco-friendly products $\beta = 0.28$, $t(70) = 3.45$, $p = .001$.

Discussion

The objective of this study is to identify the factors contributing to the purchase of eco-friendly products. The research findings have confirmed the support of three hypotheses out of a total of four. This finding elucidates that individual with greater awareness of the importance of environmental stewardship are more inclined to utilize eco-friendly products.

A positive and significant correlation between knowledge and the intention to purchase eco-friendly products demonstrates that such purchases are more likely to occur when buyers possess sufficient understanding of environmental conservation. Findings such as these are in line with prior research, as evidenced by Rusyani et al. (2021). These findings hold positive implications for local authorities in their efforts to enhance campaigns promoting the use of eco-friendly products. It is imperative for the government to intensify dissemination of information regarding environmental significance and how conscientious environmental

practices contribute to a nation's sustainability. Furthermore, the government must articulate to the populace that failure to adopt eco-friendly products could jeopardize the nation's well-being.

The influence of brand was found to have no relationship with the intention to purchase eco-friendly products. This finding is inconsistent with previous studies, such as those conducted by Alamsyah et al. (2020) and Samsudin & Hotimah (2024), which emphasized the significance of brand influence in shaping the intention to buy eco-friendly products. This disparity in findings could potentially be attributed to the absence of a specific brand context within this study. Without a defined brand reference, respondents may have been unable to formulate opinions regarding brand influence on their purchasing decisions. Consequently, it is imperative for future research endeavours to incorporate specific product brands, thereby enabling respondents to articulate their perceptions regarding brand influence more effectively. This methodological adjustment will likely yield more nuanced insights into the relationship between brand influence and consumer intentions towards eco-friendly products.

Attitude was also found to play a positive and significant role in influencing the intention to buy eco-friendly products. This finding suggests that the more positive an individual's attitude towards eco-friendly products is, the higher the individual's tendency to purchase such items. Moreover, this discovery elucidates that a person's attitude is pivotal in determining their propensity to buy eco-friendly products. This outcome is consistent with the results of a study conducted by Barbosa et al. (2024), which demonstrated that attitude significantly influences a person's inclination to purchase eco-friendly products. This finding underscores the importance of relevant stakeholders, particularly governmental bodies, in developing programs aimed at fostering a more positive attitude among the public towards eco-friendly products.

The depth of search also plays a positive and significant role in the intention to buy eco-friendly products. This finding suggests that individuals who conduct comprehensive searches for information related to eco-friendly products are more inclined to purchase them. The initiative of individuals to seek information about eco-friendly products is a specific personal characteristic. While some individuals possess such initiative, others may not prioritize information related to eco-friendly products. This finding underscores the importance for the government to formulate strategies to foster community interest in obtaining information about eco-friendly products. One approach could involve disseminating comprehensive information detailing the benefits of utilizing eco-friendly products. This would raise public awareness regarding the significance of adopting eco-friendly practices for the preservation of human life.

Conclusion and Implications

In summary, this study highlights key factors influencing the purchase of eco-friendly products. It confirms that knowledge, positive attitudes, and active information-seeking behaviours positively impact consumers' intentions to buy such products. This study has several limitations. Firstly, the small sample size prevented the use of factor analysis to test construct validity. Future research should aim to include a larger number of respondents to address this issue. Secondly, as a cross-sectional study, this research does not capture potential changes in consumer attitudes over time. To provide a more comprehensive understanding, future studies should adopt a longitudinal design. These findings carry significant implications for policymakers and marketers, emphasizing the importance of tailored strategies to promote eco-friendly practices and advance environmental stewardship.

References

- Duong, C. D. (2024). Environmental corporate social responsibility initiatives and the attitude-intention-behavior gap in green consumption. *Social Responsibility Journal*, 20(2), 305–325.
- Alamsyah, D., Othman, N., & Mohammed, H. (2020). The awareness of environmentally friendly products: The impact of green advertising and green brand image. *Management Science Letters*, 10(9), 1961–1968.
- Barbosa, B., Oliveira, Z., & Coelho, A. M. R. (2024). Perceived greenwashing and its impact on eco-friendly product purchase. *Tourism & Management Studies*, 20(2), 1–12.
- Chen, A. N., Kim, D., Nadler, S., Yang, H., & Jin, K. (2022). Social Influence and Trial Willingness of Pecan in China. *Journal of Business Diversity*, 22(1).
- Costa, C. S. R., da Costa, M. F., Maciel, R. G., Aguiar, E. C., & Wanderley, L. O. (2021). Consumer antecedents towards green product purchase intentions. *Journal of Cleaner Production*, 313, 127964.
- Dhir, A., Sadiq, M., Talwar, S., Sakashita, M., & Kaur, P. (2021). Why do retail consumers buy green apparel? A knowledge-attitude-behaviour-context perspective. *Journal of Retailing and Consumer Services*, 59, 102398.
- Fabiola, K., & Mayangsari, L. (2020). The Influence of Green Skepticism, Environmental Knowledge and Environmental Concern on Generation Z's Green Purchase Intentions in Indonesia. *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 5(8), 96–105.
- Firmansyah, M. A., & Artanti, Y. (2022). The Driver of Green Purchase Intention: Environmental Responsibility, Spirituality, and Social Influence. *Journal of Business and Management Review*, 3(6), 386–398.
- Hamzah, M. I., & Tanwir, N. S. (2021). Do pro-environmental factors lead to purchase intention of hybrid vehicles? The moderating effects of environmental knowledge. *Journal of Cleaner Production*, 279, 123643.
- Hanna Olasiu, & Udit Bhardwaj. (2019). N EXPLORATION OF ISSUES AFFECTING CONSUMER PURCHASE DECISIONS TOWARDS ECO-FRIENDLY BRANDS. *Marketing and Management of Innovations*, 2, 173–184.
- Haron, S. A., Paim, L., & Yahaya, N. (2005). Towards sustainable consumption: an examination of environmental knowledge among Malaysians. *International Journal of Consumer Studies*, 29(5), 426–436.
- Liao, X., Shen, S. V., & Shi, X. (2020). The effects of behavioral intention on the choice to purchase energy-saving appliances in China: the role of environmental attitude, concern, and perceived psychological benefits in shaping intention. *Energy Efficiency*, 13(1), 33–49.
- Maity, D., & Arnold, T. J. (2013). Search: An expense or an experience? Exploring the influence of search on product return intentions. *Psychology & Marketing*, 30(7), 576–587.
- Olasiuk, H., & Bhardwaj, U. (2019). An exploration of issues affecting consumer purchase decisions towards eco-friendly brands. *Marketing and Management of Innovations*, 2, 173–184.
- Rehman, Z. U., Aslinda, N., Seman, A., & Harun, A. (2023). Exploring the Significance of Malaysian Consumers' Intentions to Purchase Green Products. *Journal of International Business, Economics and Entrepreneurship*, 8(2), 2550–1429. <https://doi.org/10.24191/jibe.v8i2.23562>
- Rusyani, E., Lavuri, R., & Gunardi, A. (2021). Purchasing eco-sustainable products: Interrelationship between environmental knowledge, environmental concern, green

- attitude, and perceived behavior. *Sustainability*, 13(9), 4601.
- Samsudin, A., & Hotimah, R. A. D. N. H. (2024). The Influence of Green Product, Green Marketing, and Green Brand Image Towards Green Purchase Intention on Sensatia Botanicals Products in Surabaya. *Formosa Journal of Multidisciplinary Research*, 3(2), 241–260.
- Srivastava, V., & Gupta, A. K. (2023). Price sensitivity, government green interventions, and green product availability triggers intention toward buying green products. *Business Strategy and the Environment*, 32(1), 802–819.
- Durmaz, Y. (2023). Exploring the Impact of Consumers' Attitudes towards Green Advertisements on the Intention to Purchase Green Products: The Mediating Role of Environmental Responsibility. *Electronic Green Journal*, 1(48).
- Hanna Olasiu, & Udit Bhardwaj. (2019). N EXPLORATION OF ISSUES AFFECTING CONSUMER PURCHASE DECISIONS TOWARDS ECO-FRIENDLY BRANDS. *Marketing and Management of Innovations*, 2, 173–184.
- Hashim, H. F., Rahman, H. A., & Zain, I. N. M. (2023). Knowledge and practice on green purchasing of personal care products among undergraduate students in Universiti Putra Malaysia. *Geografia-Malaysian Journal of Society and Space*, 19(1), 165–178.
- Jusoh, Z. M. (2023). Factors Influencing Green Product Purchase Behavior among University Putra Malaysia Students. *Information Management and Business Review*, 15(2 (I) SI), 81–90.
- Lavuri, R., Parida, R., & Singh, S. (2023). Unveiling ways to examine the purchase intension of green products in emerging markets. *Benchmarking: An International Journal*.
- Lee, J. L.-M., Liu, V., & Cheng, C. (2023). Effect of green advertising attitude on collectivist consumer behavior: An integrative approach. *Asia Pacific Journal of Marketing and Logistics*, 35(12), 3008–3031.
- Moorthy, V. G., Moorthy, A. G., Ungku, U. N. A. H. Bin, Al Rashid, H., Heang, T. P., & Kanapathipillai, K. (2023). A STUDY ON THE INFLUENCE OF ECO-FRIENDLY FACTORS THAT INSPIRE CONSUMERS'PURCHASING INTENTION IN KLANG VALLEY, MALAYSIA. *European Journal of Social Sciences Studies*, 8(5).
- Qotrunnada, N., Toiba, H., Laili, F., Andriani, D. R., & Setiawan, B. (2023). THE IMPACT OF ENVIRONMENTAL KNOWLEDGE AND SELF-TRANSCENDENCE TOWARD GREEN PURCHASE INTENTION ON STUDENTS. *Agricultural Socio-Economics Journal*, 23(2), 159–166.
- Yanyan, Z., Pek, C.-K., & Cham, T.-H. (2023). The effect of social media exposure, environmental concern and consumer habits in green consumption intention. *Journal of Strategy and Management*, 16(4), 747–766.