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From Green Identity to Green Intentions: Exploring Consumer Behavior among Undergraduates

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Abstract

College students are widely regarded as key agents of social transformation; thus, their environmental knowledge is critical in addressing the risks posed by solid waste and other ecological challenges within their communities. Furthermore, students play a vital role in fostering sustainability and promoting ecological awareness. This study aims to examine the influence of green product awareness, green perceived price, green perceived availability, green perceived value, and green perceived quality on green purchase intentions among university students. A quantitative research design was employed, involving a survey of 370 undergraduate students. Data were analyzed using descriptive statistics, reliability analysis, normality testing, and correlation analysis with SPSS software. The findings revealed that all five factors green product awareness, green perceived price, green perceived availability, green perceived value, and green perceived quality positively influence green purchase intentions. Among these, green product awareness emerged as the most influential predictor, followed by green perceived price, green perceived value, green perceived quality, and green perceived availability.

1. Introduction

Sustainability has emerged as a critical concern in contemporary society, reflecting the need to balance human development with environmental preservation. According to Chen *et al.* (2024), sustainability involves establishing and maintaining conditions that enable humans and nature to coexist productively. Within the global marketplace, consumer behavior and the adoption of environmentally friendly products are positioned at the forefront of the shift toward sustainable practices (Koktis & Kafka, 2023). As consumer behavior is often regarded as a primary driver of environmental challenges, both firms and individuals continue to face significant difficulties in conserving resources and protecting the environment (Naalchi Kashi, 2020). Despite the increasing availability of environmentally friendly products, many consumers persist with conventional purchasing habits and remain unconvinced about adopting green products as their preferred choice (Ibrahim *et al.*, 2021).

Rapid economic growth and technological advancement have enhanced human convenience, yet these developments are accompanied by serious environmental challenges such as air pollution and climate change (Zhuang *et al.*, 2021). Both economic and population growth have contributed to adverse ecological impacts (EU-Environment, 2019). In response, Malaysia has committed to the Sustainable Development Goals (SDGs), which aim to achieve 17 global targets by 2030 (Rehman *et al.*, 2023), with Goal 12 specifically emphasizing sustainable production and consumption patterns as essential for ensuring the quality of life for current and future generations (Ministry of Economy Malaysia, 2021). Despite increasing awareness of sustainability, a gap remains between consumer intentions and actual purchasing behaviors: for example, a White *et al.*, (2019)

found that although 65% of consumers expressed intent to buy environmentally friendly products, only 26% followed through, while a global study reported that 73% of consumers across 60 countries were willing to pay more for sustainable items (Green Industry Analysis, 2020). This discrepancy highlights the persistent attitude–behavior gap in green purchasing, often attributed to limited knowledge (Zahan *et al.*, 2020; Sharma, 2021).

Environmental knowledge, defined as consumers' understanding of ecological issues and their application of such knowledge to protect the environment (Ibrahim *et al.*, 2021), plays a crucial role in shaping green purchase intention, as consumers with greater knowledge are better able to appreciate the benefits of environmentally friendly products (Wang *et al.*, 2020). To date, research on green purchase intention (GPI) has been extensive, with 329 studies identified in the Scopus database, covering topics such as green hotel visitation (Ozkan *et al.*, 2023; Wang *et al.*, 2022; Yarimoglu & Gunay, 2020), cultural influences (Hussain & Huang, 2022; Quynh *et al.*, 2023), social media impacts (Xie & Madni, 2023; Jain *et al.*, 2020), and religiosity (Hassan *et al.*, 2025; Alotaibi & Abbas, 2023; Wang *et al.*, 2021). However, only 59 of these studies specifically examined factors such as green perceived price (GPP) and green perceived availability (GPA), with relatively few focusing on student populations (Ansu-Mensah, 2021). Although numerous studies on GPI have been conducted in Malaysia (e.g., Tanwir *et al.*, 2020; Chekima *et al.*, 2015; Hassan, 2014), little attention has been paid to the combined effects of green product awareness (GPAW), green perceived quality (GPQ), GPP, GPA, and green perceived value (GPV). For example, Ansu-Mensah (2021) investigated these factors in Ghana, but similar research remains limited in the Malaysian higher education context.

Given that students are regarded as key agents of social transformation and play a crucial role in shaping future sustainability practices (Owojori *et al.*, 2022; Yang *et al.*, 2021), universities are uniquely positioned to cultivate environmentally conscious behaviors and develop leaders committed to creating sustainable communities (Coronado *et al.*, 2020). Thus, this study seeks to assess the influence of GPAW, GPP, GPA, GPV, and GPQ on students' green purchase intentions and to examine the relationship between these factors and undergraduate students' willingness to adopt environmentally friendly consumption practices.

2. Literature Review

Sustainable consumption has emerged as a critical concern in contemporary society due to increasing environmental degradation and global resource scarcity. Green products have become a primary approach to mitigate these challenges, defined as goods that minimize ecological impacts by using recyclable materials, reducing waste and energy consumption, limiting harmful substances, and adopting environmentally conscious life cycles (Nguyen *et al.*, 2023). The production and promotion of green products reflect a broader societal and commercial shift toward sustainability, in which businesses integrate eco-friendly practices to achieve both economic and environmental objectives (Zhuang *et al.*, 2021; Lakatos *et al.*, 2021). Beyond ecological benefits, green products also offer competitive advantages, improving operational efficiency, reducing waste, and fostering healthy workplaces (Nguyen *et al.*, 2023). Consumers evaluate green products based on satisfaction, performance, perceived value, and environmental information presented on labels, emphasizing the importance of informed decision-making in promoting sustainable consumption (Nittala & Moturu, 2021). Consequently, the adoption of green products not only mitigates environmental impacts but also encourages responsible consumption behaviors.

Green consumers play a complementary role in the promotion of sustainable consumption. They are defined as individuals who incorporate environmental considerations into both purchasing and lifestyle decisions, engaging in behaviors that generate positive social and ecological outcomes while enhancing personal satisfaction (White *et al.*, 2019). Their behaviors extend beyond the selection of eco-friendly products to include broader pro-environmental practices, such as energy conservation, recycling, and resource reuse (Jaiswal *et al.*, 2022). In developed countries, the adoption of sustainable behaviors has been increasingly motivated by awareness of the environmental consequences of consumption (Martínez-Borreguero *et al.*, 2020). Green consumers prioritize goods and services that minimize resource depletion and hazardous material usage while limiting waste generation to satisfy present needs without compromising the needs of future generations (Nguyen *et al.*, 2023). They also avoid products that harm living beings, participate in unethical testing, or rely on non-renewable energy sources (Nekmahmud & Fekete-Farkas, 2020). Understanding green consumer behavior is therefore essential for businesses and policymakers to effectively promote sustainability.

The Theory of Planned Behavior (TPB) provides a robust framework for examining green consumer behavior and green purchase intention (GPI). TPB posits that attitudes, subjective norms, and perceived behavioral control shape behavioral intentions, which subsequently guide actual behavior (Ajzen, 1985; Ulker-Demirel & Ciftci, 2020). The integration of social and psychological determinants within TPB makes it particularly suitable for understanding environmentally responsible decision-making, particularly among university students who are regarded as agents of social transformation. GPI refers to consumers' willingness to purchase environmentally friendly products while avoiding products that harm the environment (Moslehpour *et al.*, 2022; Ramayah *et al.*, 2010). As such, GPI is considered a critical predictor of sustainable consumption behavior, reflecting the underlying motivations that drive pro-environmental purchasing decisions.

Previous research has identified several determinants of GPI, including green perceived value (GPV), green perceived quality (GPQ), green perceived price (GPP), green product awareness (GPAW), and green perceived availability (GPA). GPV represents the consumer's overall assessment of the benefits derived from a green product relative to their preferences, expectations, and ecological sustainability (Juliana *et al.*, 2020). Studies have consistently demonstrated that GPV positively influences GPI, as consumers who perceive greater value in green products are more willing to adopt sustainable consumption practices (Nguyen Tran Cam, 2023; Pan *et al.*, 2021; Cheung *et al.*, 2015). GPQ refers to consumers' evaluation of the environmental quality and effectiveness of a product or brand (Chen & Chang, 2013). High GPQ not only enhances satisfaction and trust in green products but also motivates repeated purchase intentions (Gomes *et al.*, 2023; Wang *et al.*, 2020). Research has shown that GPQ significantly affects GPI, although some studies report mixed findings, highlighting the influence of cultural and contextual factors (Wasaya *et al.*, 2021; Gil & Jacob, 2018).

GPP represents the perceived cost associated with green products, which are often higher due to specialized production processes, eco-friendly technologies, and limited economies of scale (Mabkhot, 2024). Consumers may be price-sensitive, which can act as a barrier to adopting green products, despite an awareness of their environmental benefits (Adrita, 2020; Rehman *et al.*, 2023). Understanding GPP is therefore critical in assessing the trade-offs that consumers are willing to make between price and environmental responsibility. GPAW refers to the level of consumer knowledge regarding green products, including their environmental attributes, advantages, and potential impacts (Divyapriyadharshini *et al.*, 2019). Research indicates that higher GPAW enhances consumer understanding and positively influences GPI, although environmental concern alone does not always translate into actual purchasing behavior (Wijekoon & Sabri, 2021). GPA, or green perceived availability, reflects consumers' perceptions of how easily green products can be accessed and purchased. Limited availability can restrict consumer adoption, while greater accessibility facilitates intention and actual purchase behavior (Ansu-Mensah, 2021; Barbu *et al.*, 2022).

Empirical evidence from prior studies highlights the importance of these variables across diverse contexts. For example, Ansu-Mensah (2021) found that GPQ, GPV, GPP, and GPAW significantly influenced university students' GPI in Ghana, whereas GPA had no significant effect. Similarly, De Jesus *et al.* (2024) reported that GPV significantly shaped Generation Z's intention to purchase sustainable clothing in the Philippines, while Walia *et al.* (2020) demonstrated that GPV, price sensitivity, and product availability significantly affected GPI in India. Despite the global interest in these determinants, research in Malaysia remains limited, particularly regarding GPP, GPA, and GPAW. This gap underscores the need for further investigation within the Malaysian context.

Accordingly, the present study examines the determinants of GPI among undergraduate students in Malaysia, guided by the TPB framework. By focusing on GPQ, GPV, GPP, GPA, and GPAW, the study seeks to provide context-specific insights into the environmentally conscious purchasing behavior of students. This research contributes to the broader understanding of sustainable consumption in Malaysia, while offering practical implications for businesses and policymakers seeking to encourage green consumer behavior.

2.1 Research Hypotheses and Framework

Based on the literature review, it is evident that several factors influence consumers' intentions to purchase green products. The proposed study focuses on five key constructs: green perceived quality (GPQ), green perceived price (GPP), green product awareness (GPAW), green perceived availability (GPA), and green perceived value (GPV).

These variables are expected to significantly influence green purchase intentions (GPI) among undergraduate students. The research hypotheses are developed to empirically examine the relationships between these independent variables and the dependent variable, GPI, in the context of students at UTHM. The conceptual framework for this study is illustrated in Fig. 1, highlighting the proposed relationships between the five independent variables and green purchase intention.

Several studies have examined the influence of green perceived quality on green purchase intentions. Wasaya *et al.* (2021) reported that green perceived quality positively affects consumers' green purchase intentions. Similarly, Zhuang *et al.* (2021) found that green perceived quality, along with environmental knowledge and environmental concern, significantly influenced customers' green purchase intentions. Wu and Chen (2014) also demonstrated a positive effect of green perceived quality on green purchase intentions. Based on these findings, the following hypothesis is proposed:

H1: Green perceived quality significantly influences UTHM students' green purchase intentions.

Price is another key factor influencing green purchase intentions. Sharaf and Isa (2017) reported a significant correlation between price and green product purchase intentions. Likewise, Lan *et al.* (2023) found that the intention to purchase products with environmentally friendly packaging was positively associated with product price. Supporting this evidence, Nia (2018) concluded that perceived price plays a critical role in shaping consumers' green purchase intentions. Therefore, the second hypothesis is formulated as follows:

H2: Green perceived price significantly influences UTHM students' green purchase intentions.

Green product awareness has also been shown to positively affect green purchase intentions. Ansu-Mensah (2021) conducted a study in Ghana and found a significant relationship between green product awareness and green purchase intentions. Similarly, Lestari *et al.* (2021) demonstrated that green awareness significantly affects consumers' green purchase intentions. Drawing from these studies, the third hypothesis is proposed:

H3: Green product awareness significantly influences UTHM students' green purchase intentions.

Product availability has been identified as a factor that facilitates green purchase intentions. Yadav *et al.* (2017) reported that the availability of products positively influenced green purchase intentions. Consistent with this, Walia *et al.* (2020) found that product availability strongly affects customers' intentions to purchase green products. Based on this evidence, the following hypothesis is formulated:

H4: Green perceived availability significantly influences UTHM students' green purchase intentions.

Finally, green perceived value has been demonstrated to positively impact green purchase intentions. Studies have shown that consumers' loyalty and intention to repurchase green products are largely influenced by their perception of the value of these products (Keni *et al.*, 2020). Therefore, the final hypothesis is proposed:

H5: Green perceived value significantly influences UTHM students' green purchase intentions.

This conceptual framework and the associated hypotheses provide a structured foundation for empirically testing the relationships between the independent variables (GPQ, GPP, GPAW, GPA, GPV) and the dependent variable (GPI). By examining these factors, the study aims to contribute to a better understanding of the drivers of green purchase intentions among university students, which can support the development of effective strategies to promote environmentally sustainable consumption behaviors.

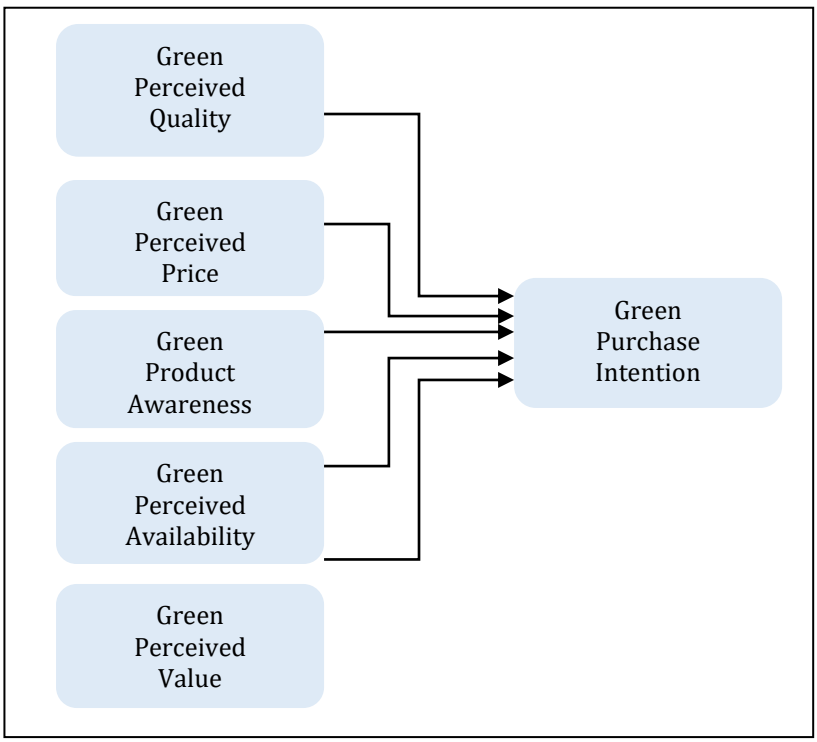

Fig.1. *Research Framework*

3. Research Methodology

This study employed a quantitative research design to investigate the factors influencing green purchase intention among undergraduate students. Research design provides a structured framework of methodologies and strategies that enables researchers to integrate various study components in a logical and systematic manner to effectively address the research objectives (Khanday & Khanam, 2023). Quantitative research focuses on the collection and analysis of numerical data, allowing researchers to test hypotheses and measure relationships between variables (Kothari, 2007; Asenahabi, 2019). This approach emphasizes the use of statistical techniques for data analysis, which can be extrapolated to a larger population.

The population for this study consisted of undergraduate students enrolled at a Malaysian university, totaling 12,661 students in 2024. In research terms, the population represents the entire group to which the study findings are intended to apply (Shukla, 2019). Given the large size of the population, it was not feasible to include all students in the study; therefore, a representative sample of 370 students was selected, based on Krejcie and Morgan's (1970) formula for sample size determination and the guidance of Sekaran and Bougie (2010). A probability sampling method, specifically simple random sampling, was employed to select participants. This technique ensures that every individual in the population has an equal chance of being selected, enhancing the representativeness of the sample and minimizing potential biases (Bhardwaj, 2019). By reducing selection and sampling biases, this approach strengthens both the internal and external validity of the research findings (Thomas, 2023).

Data was collected using a structured questionnaire, which is a widely recognized tool for gathering quantitative data (McLeod, 2023). The questionnaire comprised three sections: respondents' demographic information, green purchase intention as the dependent variable, and factors influencing green purchase intention as independent variables, namely green product awareness (GPAW), green perceived price (GPP), green perceived availability (GPA), green perceived value (GPV), and green perceived quality (GPQ). The items were adapted from validated scales in prior research (Mabkhot, 2024; Ansu-Mensah, 2021) and measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The full measurement items used in the study are summarised in Table 1, which outlines the constructs, measurement items and source for each variable.

The collected data were analyzed using SPSS software, which is widely employed for quantitative research analysis (Alem, 2020). The analysis included reliability testing, descriptive statistics, normality testing, and correlation analysis. Reliability analysis assessed the consistency of the measurement scales (Gajendrakar, 2024), while descriptive analysis summarized the characteristics of the data (Hayes, 2024). Normality tests, specifically the Kolmogorov-Smirnov test, were conducted to determine whether the data were normally distributed, given the sample size exceeded 50. Correlation analysis was employed to examine the relationships between the independent variables (GPAW, GPP, GPA, GPV, and GPQ) and the dependent variable (GPI), providing insights into the strength and direction of these associations (Senthilnathan, 2019). This methodology ensured a systematic and rigorous approach for investigating the factors influencing green purchase intention among undergraduate students, providing reliable insights that contribute to the broader understanding of sustainable consumer behavior.

Table 1 *Measurement items*

Construct	Measurement Items	Sources	Cronbach's alpha (α)
Green Purchase Intention	*I will likely purchase green products next month.* *I intend to switch to a green variety of a product.* *I am willing to purchase green products for personal use.* *I will make an effort to purchase green products for my own use.* *I plan to purchase green products for they do not pollute the environment*.	Ansu-Mensah (2021)	0.875
Green Perceived Quality	*Green product's quality is superior to conventional ones.* *Green product's quality is reliable compared to* *conventional ones.* *Green product's quality is effective and stable compared to conventional ones.* *Green product's quality is extraordinary*	Mabkhot (2024)	0.841

	compared to conventional ones. *Green product's quality is far better than conventional ones.*		
Green Perceived Price	*I am more eager to pay more for green products.* *I like green products but they are expensive.* *Price is a major concern for me to go for green* *products.* *Even though I like to buy green products but I cannot afford them* *I will switch to green products if it is available at the same price compared to my favourite brands.*	Ansu-Mensah (2021)	0.715
Green Product Awareness	*I have heard about green products.* *I have detailed knowledge and understanding about green products.* *I am aware of the difference between green products and conventional products.* *I buy green products instead of common/ conventional products.* *I am aware that buying green products contributes to a sustainable future.*	Ansu-Mensah (2021)	0.856
Green Perceived Availability	*Green products are seen very often in my community.* *Green products can easily be found in my community.* *I have no difficulty in finding green products in* *my community.* *I cannot find green products in places where I* *do shopping.* *I may purchase green products only if they are* *simply available*	Ansu-Mensah (2021)	0.843
Green Perceived Value	*Green products give me extra value.* *Green products have high value.* *Green products give me more benefits than other products.* *Green products' environmental functions provide good value to me.* *Green products have more environmental concern than non-green products*	Mabkhot (2024)	0.863

4. Results and Discussion

For this study, a total of 370 questionnaires were administered to undergraduate students at UTHM Parit Raja, both through online platforms and in printed format. All distributed questionnaires were returned completed, resulting in a 100% response rate, which enhances the reliability and representativeness of the data collected.

Of the 370 participants, 138 (37.3%) were male, while 232 (62.7%) were female. Regarding age, respondents aged 22 to 23 years constituted the largest group, with 182 participants (49.2%), followed by those aged 20 to 21 years (n = 135; 36.5%) and those aged 24 years and above (n = 47; 12.7%). The smallest age group comprised respondents aged 18 to 19 years, with only six participants (1.6%). Analysis of faculty affiliation revealed that the majority of respondents were enrolled in FPTP (n = 153; 41.4%), whereas the lowest representation was from FPTV (n = 27; 7.3%). Faculties FKEE and FKMP each contributed 50 respondents (13.5%), while FKAAB and FSKTM contributed 54 (14.6%) and 36 (9.7%) respondents, respectively. In terms of year of study, Year 4 students accounted for the largest proportion (n = 120; 32.4%), followed by Year 3 (n = 87; 23.5%), Year 2 (n = 85; 23.0%), and Year 1 (n = 78; 21.1%).

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Descriptive statistics for the study variables are presented in Table 2. Among the variables, green perceived value (GPV) achieved the highest mean score (M = 4.0286, SD = 0.73984), indicating that respondents recognized the benefits and utility of green products. In contrast, green perceived availability (GPA) recorded the lowest mean (M = 3.6978, SD = 0.80651), suggesting that students perceived the accessibility of green products as comparatively limited. Green perceived quality (GPQ) and green product awareness (GPAW) exhibited similar mean values (M = 3.9822, SD = 0.74514; M = 3.9827, SD = 0.74056, respectively), reflecting a consistent acknowledgment of product quality and environmental awareness. Green perceived price (GPP) produced a mean of 3.9119 (SD = 0.69790), indicating moderate agreement regarding the pricing of green products. Collectively, the mean scores across all variables suggest a generally positive perception among UTHM students regarding green product attributes and the factors influencing their purchase intentions.

Table 2 summarizes the descriptive statistics, highlighting both the relative differences among the variables and the overall positive disposition of respondents towards green product adoption. These findings provide a foundational understanding for subsequent correlational and inferential analyses examining the determinants of green purchase intentions among the student population.

Table 2 *Overall mean and standard deviation score of factors*

Item	Mean	Standard Deviation	Interpretation
Green Perceived Quality	3.9822	.74514	High
Green Perceived Price	3.9119	.69790	High
Green Product Awareness	3.9827	.74056	High
Green Perceived Availability	3.6978	.80651	High
Green Perceived Value	4.0286	.73984	High

Spearman's Rho correlation analysis was employed in this study due to the non-normal distribution of the data. Table 3 presents the results of the Spearman correlation analysis, examining the relationships between green purchase intention (GPI) and the key factors associated with green consumer behavior. The analysis indicates that green product awareness (GPAW) exhibits the strongest correlation with GPI, with a coefficient of 0.612 ($p < 0.01$), suggesting a substantial association between students' awareness of green products and their purchase intentions. Green perceived quality (GPQ), green perceived price (GPP), and green perceived value (GPV) demonstrated moderate correlations with GPI, with coefficients of 0.593 ($p < 0.01$), 0.599 ($p < 0.01$), and 0.595 ($p < 0.01$), respectively. Among all variables, green perceived availability (GPA) showed the weakest correlation with GPI at 0.486 ($p < 0.01$), although this still represents a moderate positive relationship.

Table 3 *Result for correlation analysis*

Hypothesis	Item	Correlation Coefficient	Sig. (2-tailed)	Hypotheses accepted / rejected	Interpretation
H1	Green Perceived Quality → Green Purchase Intention	0.593	<0.001	Hypothesis accepted	Moderate
H2	Green Perceived Price → Green Purchase Intention	0.599	<0.001	Hypothesis accepted	Moderate
H3	Green Product Awareness → Green Purchase Intention	0.612	<0.001	Hypothesis accepted	Strong
H4	Green Perceived Availability → Green Purchase Intention	0.486	<0.001	Hypothesis accepted	Weak
H5	Green Perceived Value → Green Purchase Intention	0.595	<0.001	Hypothesis accepted	Moderate

Specifically, green perceived quality was found to positively influence green purchase intention. Prior studies have established perceived quality as a key determinant of customer satisfaction, providing consumers with a rationale to prefer certain products over competitors' offerings (Gil & Jacob, 2018). High-quality green products, characterized by transparency in components, eco-labeling, product imagery, and convenience, have been shown to positively shape environmentally conscious purchasing behaviors (Shen *et al.*, 2019;

Setianingrum, 2024; Nekmahmud, 2020). Thus, the quality perception of green products significantly predicts the intention to purchase them among university students.

Green perceived price also exerted a significant positive effect on green purchase intention. While green products typically carry higher costs due to sustainable production practices and material investments, environmentally conscious consumers often display a willingness to pay a premium (Ibrahim, 2021; Awuni *et al.*, 2016). Perceived value associated with reasonable pricing further strengthens the intention to purchase, reflecting students' commitment to environmentally responsible consumption (Ansu-Mensah, 2021).

Similarly, green product awareness was identified as a critical predictor of green purchase intention. Awareness of a company's sustainable practices and product eco-friendliness enhances consumers' perception of corporate responsibility, motivating them to adopt sustainable consumption behaviors (Abrar *et al.*, 2021; Setianingrum, 2024; De Jesus *et al.*, 2024). Educating consumers about environmental benefits and promoting the advantages of green products through effective communication strategies increases the likelihood of transitioning from conventional to eco-friendly products (Walia *et al.*, 2020).

Green perceived availability was also positively correlated with green purchase intention. Product accessibility facilitates purchase decisions by enabling consumers to easily compare, select, and exchange items (Karatu & Nik Mat, 2015; Al-Mamun, 2020). Conversely, limited availability can impede purchase intentions due to scarcity, restricted seller options, and increased effort required to acquire sustainable products (Silintowe & Sukresna, 2023). Promotional efforts that enhance product visibility and communicate availability are therefore essential in promoting green consumption behaviors (Walia *et al.*, 2020).

Finally, green perceived value demonstrated a significant positive influence on green purchase intention. Consumers are more likely to purchase products they perceive as offering environmental, functional, and personal benefits, which enhance satisfaction and loyalty (Nekmahmud & Fekete-Farkas, 2020; Nguyen, 2023). Perceived value reinforces repeated purchasing behavior and strengthens green consumer commitment through positive experiences and word-of-mouth (Al-Amin & Dhewi, 2021; Nguyen, 2023).

Collectively, these findings highlight the multifaceted nature of green consumer behavior. Green perceived quality, green perceived price, green product awareness, green perceived availability, and green perceived value each play a pivotal role in shaping the green purchase intentions of undergraduate students. The results underscore the importance of addressing multiple dimensions quality, pricing, awareness, accessibility, and value in promoting sustainable consumption patterns among university students. These insights offer valuable implications for marketers and policymakers aiming to enhance green purchasing behaviors within the higher education context.

Overall, the results indicate that all independent variables are significantly and positively correlated with green purchase intention among UTHM students. Consequently, the hypotheses proposed in this study are supported, confirming that green product awareness, green perceived quality, green perceived price, green perceived value, and green perceived availability each play a meaningful role in influencing students' intention to purchase green products. These findings underscore the importance of enhancing environmental awareness and the perceived value, quality, availability, and pricing of green products to encourage sustainable consumer behavior in the university context.

5. Conclusion

This study has successfully achieved its objectives by examining the factors influencing green purchase intentions among undergraduate students at UTHM Parit Raja. The findings indicate that green product awareness emerged as the strongest factor affecting green purchase intention, followed by green perceived price, green perceived value, green perceived quality, and green perceived availability. The correlation analysis further revealed that all independent variables demonstrated a positive and significant relationship with green purchase intention, highlighting the integral role of these factors in shaping students' environmentally conscious purchasing behaviors. These results contribute to a deeper understanding of the connection between students' awareness, perceptions, and attitudes toward green consumerism and their intention to engage in sustainable consumption.

Despite these valuable insights, several limitations must be acknowledged. The study focused exclusively on UTHM Parit Raja students, which limits the generalizability of the findings to other university populations in Malaysia, as variations in institutional culture, values, academic programs, and accessibility of green products may influence student behavior differently. Additionally, the reliance on self-reported data through surveys introduces the potential for response bias, as participants may overstate their green purchasing intentions to align with socially desirable norms rather than reflecting actual behavior. The study's narrow scope, concentrating solely on green consumer factors, may have overlooked other influential variables such as financial capacity, cultural background, and peer influence, which could also significantly affect green purchase intentions. To address these limitations, future research should consider incorporating a more diverse sample from multiple Malaysian universities to enhance the generalizability of results. Employing mixed-methods approaches, such as combining surveys with interviews or focus groups, could mitigate response bias and

provide a richer understanding of students' genuine behaviors and motivations. Furthermore, exploring additional factors such as financial status, cultural influences, and peer effects could offer a more comprehensive understanding of the determinants of green purchase behavior.

In summary, this study provides empirical evidence that green product awareness, perceived price, perceived value, perceived quality, and perceived availability are significant predictors of green purchase intention among university students. The insights gained not only advance scholarly understanding of green consumer behavior but also offer practical implications for promoting sustainable consumption and enhancing awareness of environmentally friendly products. These findings can inform future research, policy development, and marketing strategies aimed at encouraging environmentally responsible purchasing decisions among students and the wider community.

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Conflict of Interest

Authors declare that there is no conflict of interests regarding the publication of the paper.

Author Contribution

The authors confirm contribution to the paper as follows: ***study conception and design:*** *Nur Aneesa Ghazali, Norhadilah Abdul Hamid;* ***data collection:*** *Nur Aneesa Ghazali;* ***analysis and interpretation of results:*** *Nur Aneesa Ghazali;* ***draft manuscript preparation:*** *Norhadilah Abdul Hamid. All authors reviewed the results and approved the final version of the manuscript.*

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