# What Shapes Green Purchase Intention in Malaysia

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## ABSTRACT

In recent years, environmental sustainability has become a key concern for both consumers and businesses. While many studies have examined sustainable product purchasing, limited research has focused on green purchase intention in relation to green brand positioning and environmental concern in Malaysia. This study explores the main factors influencing green purchasing intention by analysing green brand positioning, attitudes toward green products, subjective norms, perceived behavioural control, and environmental concern. Data were collected through an online questionnaire using purposive sampling, targeting at least 101 respondents aged 20 or younger or 51 and older. Participants were selected based on their interest in eco-friendly products, past usage, and purchase intention. Data analysis was conducted using SPSS and SmartPLS. The findings reveal that perceived behavioural control, attitude toward green products, and subjective norms significantly influence green purchasing intention. However, green brand positioning and environmental concern were not found to have a significant effect. This research provides valuable insights for eco-friendly brands by highlighting the key drivers of consumer intention, offering guidance for converting intention into actual purchasing behaviour. The study also contributes to the growing body of knowledge on sustainable consumption, particularly within the Malaysian market context.

**Keywords**
Attitude towards green products; Environmental concern; Green brand positioning; Green purchase intention; Sustainable consumption; Subjective norms

## Introduction

The problem of environmental degradation has taken a new twist especially in Malaysia where there is increased consumption pattern, plastic waste and the lack of recycling infrastructure. In 2024, the Malaysians produced 39,078 tons of solid waste each day, with 1.17 kg/person as the average (The Star, 2024). Malaysia is among the worst offenders in plastic waste mismanagement, where a significant portion of waste is either littered or disposed of in uncontrolled landfills, greatly increasing the risk of it entering the ocean (The Malaysian Insight, 2024). The capacity of landfills is nearly reaching its limit, which is why there is a call to become more sustainable (Malay Mail, 2024). Moreover, the Department of Statistics Malaysia added that the scheduled waste increased by 4.5 percent in 2021, with Selangor, Perak, and Johor leading the rise (The Malaysian Reserve, 2023). In turn, green consumption is on the rise as consumers and business enterprises are trying to minimize their environmental impact. Visa (2023) states that 80 percent of the consumers in Malaysia are aware of the environmental effects of what they consume and are pursuing ways to lessen the impact. More than 40 percent prefer brands that focus on Environmental, Social and Governance (ESG) and 15 percent are ready to pay a higher price to sustainable products.

The rising focus on green consumption is making business organizations shift to environmentally friendly operations as more consumers are turning to environmentally friendly products (Moslehpour et al., 2023). Recyclable packaging, ethical sourcing, and sustainable production processes are becoming increasingly common demands, particularly among the younger generations like Gen Z (Ferrara et al., 2020; Ghaffar et al., 2023; Liang et al., 2022). Green purchase intention (GPI) has been a common concept in the literature by describing a disposition toward amazing products (environmental-friendly products) compared to harmful products (in other words, green purchase intention) (Zhou et al., 2021; Abdullah et al., 2020; Raj et al., 2023).

Nevertheless, even as more people show interest in sustainability, the gap between the intentions and the actual green purchasing practices among the consumers persists especially in Malaysia. Although global literature has explored the

driving forces of GPI, very little empirical literature has been carried out on the situation in Malaysia, particularly, regarding the role of green brand position and environmental concern. It is based on these gaps that the current study is aimed at exploring how the five critical variables (green brand positioning, attitudes towards green product, subjective norms, perceived behavioural control, and environmental concern) influence the green purchase intention among the Malaysian consumers. The results are expected to provide the literature on green consumer behaviour with theoretical contributions and practical implications to the brands and policymakers to meet the intention-action gap and develop sustainable consumption behaviour.

## Problem Statement

### Practical Gap

Malaysians' consumers are highly intending, but they have a long-running intention-action gap. Approximately 60% say that they would embrace green practices and spend more on green products, but only 41% say that they are planning to go green and only 39% are in fact green (Statista, 2024; Visa, 2023). Preference signals are still inconsistent – 70% of T20 consumers give preference to green and 67 percent to green brands especially men. Nevertheless, price sensitivity is one of the greatest obstacles, which restricts the readiness to pay premiums. In the region of APAC, 78 percent show interest in green products including electric vehicles, but only 9 percent make actual purchases (YouGov, 2022; Vodus, 2024; PwC, 2024). Moreover, 86 percent of Malaysians, though not the highest score, believe that mandatory energy saving policies should be implemented, which means that people are highly concerned, and yet, Malaysia is ranked as low in the Environmental Performance Index (41 percent) and 59$^{th}$ in the Climate Change Performance Index, which can be explained partly by its dependence on fossil fuels (Block et al., 2024; CCPI, 2024; Azhari et al., 2023).

Friction on the market-side worsens the problem. The current rate of registered under the MyHIJAU green mark is at 27 percent, which was at 72 percent in 2023, which indicates the poor usage of reliable green branding in the market (MGTC, 2024). Although 63% of the consumers have turned to greener products, 65.6% insist on transparent environmental statements and more than 52% have experienced greenwashing. This negatively affects consumer confidence and blocks the development of green purchase intention (BFokus, 2024; Statista, 2024; Sarawak Tribune, 2024). It is based on these reasons that it is important to understand what is motivating the actual green purchasing behaviour of Malaysian consumers to help close the intention-action gap and to inform policy makers and marketers to improve sustainable consumption.

### Academic Gap

Recent research has extensively explored factors influencing green purchase behaviour globally (Kumar et al., 2019; Panda et al., 2020; Sharma et al., 2023). However, there is limited empirical work that investigates the same within the Malaysian context—especially concerning the roles of green brand positioning and environmental concern (Vu et al., 2022; Han et al., 2022). While studies in Western countries have found a strong link between green brand positioning and purchase intention (Siyal et al., 2021; Simanjuntak et al., 2023), such findings may not fully translate to Malaysia due to contextual differences. Existing local studies tend to rely heavily on the Theory of Planned Behaviour (TPB), focusing mostly on attitude, perceived behavioural control, and subjective norms (Abdullah et al., 2020; Abdul et al., 2021). As a result, the potential influence of green brand positioning on Malaysian consumers remains underexplored. Therefore, further empirical investigation is required to fill this theoretical gap and to better understand how green brand positioning affects consumer intention in Malaysia.

Similarly, environmental concern has been established in international literature as a significant predictor of green purchase intention (Farzin et al., 2023; Siyal et al., 2021). However, in Malaysia, the extent to which consumers' environmental concerns translate into actual purchasing behaviour is unclear. Individual concerns often do not result in actual green purchasing, presenting challenges for marketers and sustainability advocates (Choi et al., 2021; Abdullah et al., 2020). For this reason, this study also aims to evaluate how environmental concern contributes to green purchase intention among Malaysian consumers, thus addressing an important contextual gap in the literature.

**Research Questions**

This research has five main research questions:
RQ1: What is the relationship between green brand positioning and consumers' purchase intention for green products?
RQ2: What is the relationship between perceived behavioural control and consumers' purchase intention for green products?
RQ3: What is the relationship between consumers' attitudes toward green products and their green purchase intention?
RQ4: What is the relationship between subjective norms and consumers' purchase intention for green products?
RQ5: What is the relationship between environmental concern and consumers' purchase intention for green products?

## Previous Related Studies and Development of Hypotheses

With the rising popularity and focus on green products, scholars have conducted extensive research to explore the various factors influencing consumers' intention to purchase items such as eco-fashion, green skincare products, and more. These factors span across different categories, including cognitive aspects, individual consumer characteristics, and social influences (Zhuang et al., 2021). Building on this foundation, this study introduces a theoretical framework for green purchase intention, encompassing key variables such as green brand positioning, attitudes toward green products, perceived behavioural control, subjective norms, and environmental concern.

### Green Purchase Intention

The purchase intention is commonly defined as the willingness of the consumer to pay, meaning that he or she is prepared and likely to buy a product or service (Nguyen et al., 2023; Simanjuntak et al., 2023; Witek and Kuzniar, 2024; Palomino and Barcellos, 2024; Moslehpour et al., 2023; Rama et al., 2024; Gazi et al., 2024; Nguyen et al. 2019). Nguyen et al. (2023) posit that the intention to purchase is a strong predictor of purchase behaviour because the intention to purchase may result in the actual purchase behaviour when reaching a given threshold. The technological progress in environmental, scientific and networking fields such as the internet coupled with the rise in social and environmental consciousness of such matters as population growth and climate change has necessitated the need of marketers to comprehend green purchase intention. This knowledge enables them to formulate or enhance green marketing policies that would encourage green buying behaviour (Lestari et al., 2021; Majeed et al., 2022). Moreover, many corporations have started to match their sustainability performance to the United Nations Sustainable Development Goals (SDGs) (United Nations, 2024), which has resulted in an increased need to research on the green purchase intentions of consumers. The knowledge gained in such studies may assist marketers and businesses to promote green products in building economies (Lashitew, 2021; Raj et al., 2023). Moreover, developing green purchase intentions can also contribute to the favorable brand image and goodwill of an organization, whereas the contemplation of the factors that drive such intentions can promote eco-friendly marketing campaigns (Pebrianti and Aulia, 2021; Wang et al., 2022).

### Green Brand Positioning

Green brand positioning can be described as the strategy of differentiating a brand based on environmentally friendly, safe products-often with focus on natural ingredients-related promotions to create a unique position in the minds of consumers and gain a competitive advantage (Rama et al., 2024; Gazi et al., 2024; Siyal et al., 2021; Wang et al., 2022; Baiquni and Ishak, 2019; Bursan et al., 2021; Situmorang et al. 2021). It has been empirically proven that greater positioning in green brands correlates with a more positive effect on green purchase intention since well-foregrounded green benefits and pledges are more aligned with consumer preferences and trigger green purchases (Rama et al., 2024; Gazi et al., 2024; Siyal et al., 2021; Wang et al., 2022; Baiquni and Ishak, 2019; Bursan et al., 2021; Zhuang et al., 2021). Consequently, the subsequent hypothesis is posited:
**Hypothesis 1**: Green brand positioning has a significant positive influence on consumers' purchase intention for green products.

### Perceived Behavioural Control

Behavioural control (PBC) is the perceived ease or difficulty of the behaviuor and the degree to which one believes able to perform it (Abeysekera et al., 2022; Haque et al., 2024; Zhang et al., 2019; Witek and Kuzniar, 2024; Martinho,

2021; Zahan et al., 2020). It is also used to determine how individuals assess previous experiences and foresee the impediments that constitute the sense of control- the more experience, the fewer impediments, the higher the perceived control (Shang et al., 2024; Zhuang et al., 2021). The majority of readings show that greater PBC is a significant positive indicator of green purchase intention, because confidence and lower perceived barriers lead to intentions to act (Abdullah et al., 2020; Abeysekera et al., 2022; Haque et al., 2024; Martinho, 2021; Nekmahmud and Fekete, 2022; Shang et al., 2024; Zahan et al., 2020; Zhang et al., 2019). Nevertheless, other studies do not indicate an effect and hence, PBC does not necessarily translate into intention such as when green purchases are perceived as inconvenient or not providing any distinct rewards (Witek and Kuzniar, 2024). Based on these insights, the following hypothesis is proposed:

**Hypothesis 2:** Perceived behavioural control has a significant positive influence on consumers' purchase intention for green products.

## Attitude towards Green Products

Attitude can be defined as an assessment of an object, an action, an issue, or a person as positive or negative, and often it is presented in the form of a learned cognitive-affective disposition which is relatively stable but influenced by psychological needs (Tan et al., 2022; Shang et al., 2024; Nguyen et al., 2019; Costa et al., 2021; Zhuang et al., 2021; Abdullah et al., 2020). Most of the studies conclude that positive attitudes to green products relate to green purchase intention in a significant and positive manner. Due to the perception of both environmental and personal gain that is driving the increase in adoption and intention (Nguyen et al., 2019; Shang et al., 2024; Li et al., 2022; Nguyen et al., 2023; Abdullah et al., 2020; Wang et al., 2022; Tan et al., 2022; Testa et al., 2019; Zhang et al., 2019). Still, there are some pieces of evidence, warning that positive attitudes do not necessarily equate with buying behaviour (Gazi et al., 2024). Thus, the following hypothesis is proposed:

**Hypothesis 3:** Attitude towards green products has a significant positive influence on consumers' purchase intention for green products.

## Subjective Norms

The social pressures that can either promote or inhibit behaviour are subjective norms, which in TPB are due to the normative beliefs and the motivation to comply (Haque et al., 2024; Zahan et al., 2020; Abdullah et al., 2020; Li et al., 2022; Zhang et al., 2019; Zhuang et al., 2021; Palomino et al., 2024). Majority of the TPB-based studies report that the subjective norms are a significant and positive predictor of green purchase intention, with consumers perceiving the approval of important referents and young consumers, in particular, listening to their friends, families, and colleagues (Paudel and Li, 2024; Haque et al., 2024; Zahan et al., 2020; Abdullah et al., 2020; Li et al., 2022; Zhang et al., 2019; Zhuang et al., 2021). However, several investigations note no significant effects, meaning that social pressure is not necessarily going to be converted to intention (Kamalanon et al., 2022; Sun et al., 2019; Testa et al., 2019; Sobuj et al., 2021). Considering these insights, the subsequent hypothesis is posited:

**Hypothesis 4:** Subjective norms have a significant positive influence on consumers' purchase intention for green products.

## Environmental Concern

Environmental concern The degree of the population awareness of ecological issues, support of initiatives aimed at reducing these problems, and willingness to take an active part in the proposed solutions (Zhuang et al., 2021; Moslehpour et al., 2023; Gazi et al., 2024; Zhou et al., 2021; Kamalanon et al., 2022; Chang et al., 2024). Moreover, some of the studies define environmental concern as the overall positive attitude of the consumer towards environmental protection (Abdullah et al., 2020; Watson et al., 2024; Zhang et al., 2019; Zeng et al., 2023). Many previous works indicate the presence of significant and positive influence of environmental concern on the intention to purchase green products (Abdullah et al., 2020; Hao et al., 2019; Costa et al., 2021; Farzin et al., 2023; Zeng et al., 2023; Simanjuntak et al., 2023; Zhou et al., 2021; Gazi et al., 2024). In their turn, Joshi and Rahman (2019) provide some evidence suggesting that the environmental concern is not a significant factor to consider in green buying intention. Hence, another hypothesis is proposed:

**Hypothesis 5:** Environmental concern has a significant positive influence on consumers' purchase intention for green products.

## Research Framework

Figure 1 shows the research conceptual model used in the current study. In this study, there are five independent variables which are Green Brand Positioning, Perceived Behavioural Control, Attitude towards Green Products, Subjective Norms and Environmental Concern. There is one dependent variable, Green Purchase Intention. It is hypothesized that all independent variables of this study are significantly positively affecting their green purchase intention. The framework comes from Nguyen et al. (2019) and Siyal et al. (2021) respectively. Figure 1 summarises the research framework for this current study.

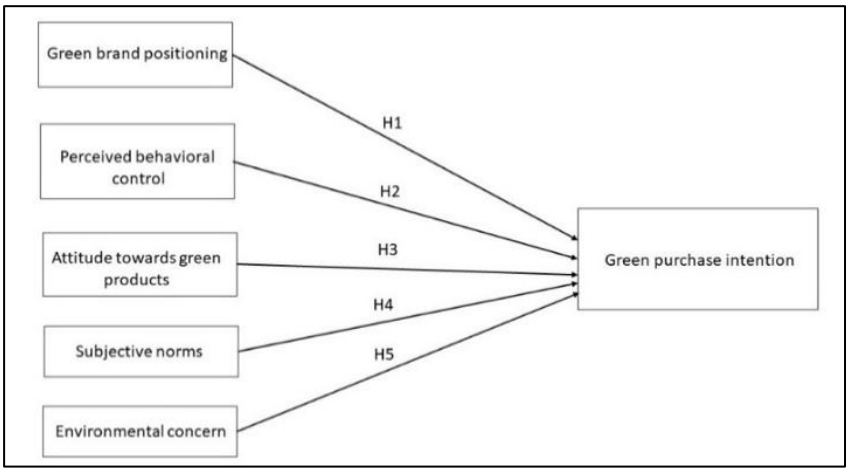


**Figure 1.** Research Framework

# Research Methodology

## Types of Research Design

The study adopted the quantitative approach to systematically measure relationships, evaluate hypotheses, and derive predictions (Creswell et al., 2020), within the broader classification of quantitative, qualitative, and mixed-method designs (Asenahabi, 2019). Aligning with distinctions between experimental and non-experimental designs that place surveys in the latter (Pawar, 2020) and recognizing that cross-sectional studies assess exposures and outcomes concurrently (Creswell et al., 2020), data were collected via an online questionnaire distributed through Google Forms. The analyzed responses yield actionable insights and recommendations for eco-friendly firms seeking to strengthen green purchase intentions.

## Population and Sampling

Population is the full set to which results can be generalised (Shukla, 2020), while the target population is the specific group aligned with the study's objectives (Saunders et al., 2019). This study targeted people interested in green products, previous users, and those planning to buy them, focusing on ages 20 and below and 51 and above. A sample is a practical, cost- and time-efficient subset that represents the population, enabling generalisation (Shukla, 2020; Creswell et al., 2020; Saunders et al., 2019), and an adequate size is critical for reliability and validity (Creswell et al., 2020). Using the Cohen Table and G-Power with a medium effect size and five predictors—green brand positioning, perceived behavioural control, attitude toward green products, subjective norms, and environmental concern—the required sample was 92; adding ~10% to account for dropouts set the minimum at 101 (Andrade, 2020).

## Sampling Technique

Sampling includes the selection of a subset of individuals from a population, with the procedure employed for this selection known as the sampling method, a crucial component in quantitative research (Shukla, 2020). In this study, the researcher utilised purposive sampling, a technique categorised under non-probability sampling. According to Starbuck (2023), non-probability sampling employs non-random selection methods instead of random selection, encompassing techniques such as convenience sampling, purposive sampling, quota sampling, and snowball sampling.

Purposive sampling entails the selection of participants according to predetermined qualities or criteria pertinent to the study (Starbuck, 2023). This strategy was selected as it allowed the researcher to identify respondents who fulfilled criteria, including prior experience in purchasing green items.

## Research Instrument

A research instrument is a tool utilised to collect, measure, and analyse data relevant to a specific study. These instruments may manifest in various formats, including surveys, tests, questionnaires, or interviews, and are crafted to collect data that is valid, reliable, and relevant to the research (Kumar, 2020). Google Forms has gained widespread popularity as an online questionnaire platform worldwide because it is easy to use, cost-effective, highly efficient in data collection and provides detailed results with visualization (Williams, 2024; Lee, 2019; Khan, 2020; Johnson, 2021). Therefore, the questionnaire of this research was distributed to the respondents in the form of Google Forms, and the data was collected in two sections to understand factors influencing consumers' purchase intentions on green products.

Section A encompasses the demographic profiles of the respondents, detailing their purchasing behaviour of green products, as well as their gender, age, race, education, occupation, income, marital status, the specific products acquired, the locations of purchase, and the frequency of these transactions within a month. Section B examined the impact of green brand positioning, perceived behavioural control, attitudes towards green products, subjective norms, and environmental concern on customers' purchase intentions for green products. All eighteen items are evaluated utilising a five-point Likert scale, with one denoting "strongly disagree" and five indicating "strongly agree," applicable to both independent and dependent variables.

# Data Analysis

## Profile of Respondents

Respondents were given a five-point Likert scale questionnaire to complete as part of this study's quantitative research methodology. Google Forms, a reliable online survey tool, was used to import the study's questions. Through social networking sites like Facebook, WhatsApp, and Gmail, the Google Forms link was shared with the study's participants. The study's respondents are those who are interested in, have used, and want to purchase green products and range in age from under 20 to over 51. For this study, a minimum sample size of 101 respondents is required. After the distribution and recycling, 200 responders in all were gathered. People who have never tried green products, are not interested in them, and have no plans to buy them are deemed unsuitable, and their surveys are deemed void. Out of the 200 surveys in this study, 15 were deemed invalid; 185 valid questionnaires were recovered, representing a 92.50% recovery rate. The sample size ensures the dependability of the study results by meeting the requirements for empirical analysis. The demographic data of the people polled, including gender, age, race, education, occupation, income, and other significant demographic factors, was mostly used to design the survey questions in this study. Alle demographic variables that were created for this study are significant demographic characteristics that are the subject of this investigation. Gender, age, race, education, occupation, income (RM), marital status, product category, location, and frequency of green product purchases have all been fairly and accurately represented, according to the results.

## Normality Test

To test the hypothesis, this study employed the structural equation model. The normality test is an important step in choosing statistical techniques for measuring central tendency and analysing data, claim Mishra et al. (2019). The process of determining if the data is normal depends on analysing the skewness and kurtosis values (Orcan, 2020). Hair et al. (2019) state that a normal data distribution is deemed acceptable if the skewness and kurtosis fall between -2 and +2. Every item in the six categories of Green Brand Positioning, Perceived Behavioural Control, Attitude Towards Green Products, Subjective Norms, Environmental Concern, and Green Purchase Intention was subjected to descriptive statistical analysis. The results found that alle measurement items for each variable have skewness and kurtosis values between -2 and +2 and -7 and +7. This indicates that all the measurement items follow the normal distribution, and a structural equation model can be built to test the hypothesis.

## Assessment of Measurement Model

### Internal Consistency Reliability

The internal consistency reliability metric was used in this study's reliability assessment. The Cronbach's Alpha coefficient was used to assess the scale's reliability in this investigation. Cronbach's Alpha was used to determine whether each of the six parts of this study was eligible for dependability. Schrepp (2020) stated that if an aspect's Cronbach's Alpha coefficient is more than 0.7, it is considered reliable and the CITC coefficient of each item should continue to be higher than 0.4. The six components of green brand positioning—perceived behavioural control, attitude towards green products, subjective norms, environmental concern, and green purchase intention—all have Cronbach's Alpha distribution ranges more than 0.7 (0.712-0.841), as the table below illustrates. All the items have CITC values more than 0.4, except for Subjective Norms' SN1 (0.359). Nonetheless, the overall results suggest that the scale used in this study has a certain level of reliability, with each variable and its associated item reliability test meeting the requirements.

### Convergent Validity and Discriminant Validity

Validity pertains to the precision with which a methodology assesses the variable it aims to measure (Ahmed et al., 2021). The researchers identify internal and external validity, encompassing content, construct, criteria, and predictive validity. Construct validity is currently the most employed approach for assessing validity (Albano, 2020). Consequently, this study employed construct validity to demonstrate the scale's validity. The primary and significant methods for assessing validity are exploratory analysis and confirmatory factor analysis (Tavakol & Wetzel, 2020). Confirmatory factor analysis was employed to assess the validity scale of this study.

Confirmatory factor analysis is frequently employed to assess the construct validity of questionnaires. It enables the researcher to validate or refute the fundamental factor structures and assess the degree of alignment between the data and the proposed model (Tavakol & Wetzel, 2020). The research employed structural equation modelling to develop confirmatory factor analysis. Confirmatory factor analysis primarily evaluates convergent validity and discriminant validity. Convergent validity evaluates the degree of correlation among items within their respective factors, whereas discriminant validity examines the capacity to differentiate between the scales of each variable (Cheung et al., 2024). This research employed SmartPLS 4.0 to develop a structural equation model for confirmatory factor analysis. The convergent validity assessment is detailed in Table 1.

**Table 1** Convergent Validity Test

| Variable | Item | Outer Loading | CR | AVE |
|---|---|---|---|---|
| Green Brand Positioning | GBP1 | 0.686 | | |
| | GBP2 | 0.875 | 0.839 | 0.636 |
| | GBP3 | 0.821 | | |
| Perceived Behavioural Control | PBC1 | 0.886 | | |
| | PBC2 | 0.884 | 0.901 | 0.752 |
| | PBC3 | 0.830 | | |
| Attitude Towards Green Products | ATGP1 | 0.772 | | |
| | ATGP2 | 0.915 | 0.878 | 0.706 |
| | ATGP3 | 0.829 | | |
| Subjective Norms | SN1 | 0.541 | | |
| | SN2 | 0.947 | 0.859 | 0.682 |
| | SN3 | 0.925 | | |
| Environmental Concern | EC1 | 0.862 | | |
| | EC2 | 0.784 | 0.863 | 0.677 |
| | EC3 | 0.821 | | |
| Green Purchase Intention | GPI1 | 0.883 | | |
| | GPI2 | 0.839 | 0.904 | 0.759 |
| | GPI3 | 0.892 | | |

Table 1 indicates that the AVE values for six dimensions exceed 0.5, while the CR values surpass 0.7. Simultaneously, the outer loading of each item exceeds 0.5, signifying that the convergent validity of this

investigation is satisfactory. Given that the convergent validity is established, the discriminant validity of each variable requires further evaluation. The discriminant validity assessment utilised the methodology proposed by Fornell and Larcker (Cheung et al., 2024). The study scale exhibits discriminant validity when the square root of the AVE for each variable surpasses the correlation coefficient among those variables. Table 2 indicates that the discriminant validity among each study variable is robust, as each variable exceeds the others in comparison. This study scale possesses a considerable level of validity.

**Table 2** Discriminant Validity Test

| Variable | Attitude Towards Green Products | Environmental Concern | Green Brand Positioning | Green Purchase Intention | Perceived Behavioural Control | Subjective Norms |
|---|---|---|---|---|---|---|
| Attitude Towards Green Products | **0.840** | | | | | |
| Environmental Concern | 0.374 | **0.823** | | | | |
| Green Brand Positioning | 0.299 | 0.384 | **0.798** | | | |
| Green Purchase Intention | 0.562 | 0.445 | 0.404 | **0.871** | | |
| Perceived Behavioural Control | 0.453 | 0.261 | 0.138 | 0.419 | **0.867** | |
| Subjective Norms | 0.348 | 0.440 | 0.470 | 0.487 | 0.267 | **0.826** |

The HTMT method was utilized to further assess whether the discriminant validity was qualified. The results show that the largest value in the HTMT table is 0.673, and all values are less than 0.85. Thus, it can be summarized that the discriminant validity of this study scale is good, and the structural equation model can be constructed according to variable relationships to test hypotheses. Mansoori et al. (2020) asserted that the quality of the structural model should be evaluated through three dimensions: the Coefficient of Determination ($R^2$), Effect Size ($f^2$), and Predictive Relevance ($Q^2$). Table 3 demonstrates that the measurement model's fit and the structural model's quality are satisfactory. The VIF value of each variable is all less than 5, which shows that the model does not have a collinearity problem. At the same time, the model is reasonable, and the reliability of the hypothesis test is high.

**Table 3** Model Fit Index Assessment

| Variable | $R^2$ | $f^2$ | $Q^2$ |
|---|---|---|---|
| Green Brand Positioning | - | 0.023 | - |
| Perceived Behavioural Control | - | 0.061 | - |
| Attitude Towards Green Products | - | 0.149 | - |
| Subjective Norms | - | 0.056 | - |
| Environmental Concern | - | 0.018 | - |
| Green Purchase Intention | 0.478 | - | 0.353 |

The specific path coefficient tests corresponding to each hypothesized relationship are as follows in Table 4. There are three independent variables' p-values which are perceived behavioural control, attitude towards green products and subjective norms below 0.05 while the remaining independent variables, green brand positioning and environmental concern exceed 0.05 which are 0.135 and 0.206 respectively.

**Table 4** Path Coefficient Test

| Relation | β | T | P | 2.5%LLCI | 97.5%ULCI |
|---|---|---|---|---|---|
| Green Brand Positioning → Green Purchase Intention | 0.128 | 1.496 | 0.135 | -0.030 | 0.301 |
| Perceived Behavioural Control → Green Purchase Intention | 0.201 | 2.259 | 0.024 | 0.025 | 0.380 |
| Attitude Towards Green Products → Green Purchase Intention | 0.326 | 3.168 | 0.002 | 0.117 | 0.514 |
| Subjective Norms → Green Purchase Intention | 0.209 | 2.329 | 0.020 | 0.035 | 0.385 |
| Environmental Concern → Green Purchase Intention | 0.114 | 1.265 | 0.206 | -0.049 | 0.302 |

**Summary of Hypotheses**

The structural equation model is commonly employed to examine the influence of relationships among variables. Structural models illustrate the causal connections of latent variables via path analysis and are intended to evaluate hypotheses. A structural equation model was constructed based on the hypothesized relationship of this study. If the p-value was below 0.05, the path was established. Only H2, H3 and H4 were supported with a p-value less than 0.05 for each path.

# Discussion and Implications

## Discussion on Research Questions

**RQ1: What is the impact of green brand positioning on consumers' purchase intention on green products?**
The findings mean that the positioning of green brands has no significant effect over purchase intention of green products by the consumers. The results (b=0.128, T=1.496, p>0.05) imply that the green brand positioning is important, but it does not necessarily lead to purchase intention among the consumers. The outcome is contrary to the previous research like Siyal et al. (2021); Gazi et al. (2024) found significant impact of brand positioning on green purchase intention. The reason could be that consumers do not trust green claims, or they do not find the positioning of the brand credible and unique enough to persuade them. Sarawak Tribune states that misleading information regarding sustainable practices of brands was experienced by more than 52 percent of consumers, and greenwashing prevents them from making environmentally friendly purchases (Sarawak Tribune, 2024). In addition, the demographic of the respondents in this study is predominantly female yet according to the statistics, more than 60% of Malaysians prefer sustainable brands with men (69) having a higher inclination towards this choice (YouGov, 2022). In response to this, the brands should enhance their green positioning strategies through increased openness, genuineness and clear value propositions. To summarize, Hypothesis 1 is not supported.

**RQ2: How does perceived behavioural control influence the consumers' purchase intention on green products?**
The outcome proves that the perceived behavioural control is influential in determining the green purchase intentions of consumers. The results (b=0.201, T=2.259, p<0.05) are positive as the value of perceived behavioural control is positively correlated with purchase intention. These results are aligned with the past research by Nguyen et al. (2019); Siyal et al. (2021); Witek and Kuzniar (2024), which highlights that the belief in the possibility to overcome inhibitors, including affordability, product availability, and access, will influence the purchase decision of consumers positively. In this research, consumers, who perceive less complexity in buying green products, would be more likely to take actions on their purchase intentions. The National Policy on Green Technology in Malaysia has enhanced the perceived ease of access to the green products that facilitates the belief among consumers that they can make environmentally friendly decisions (Rehman et al., 2023; Surianshah et al., 2025). Further, a survey indicates that even after making purchases on many platforms, 42% of Malaysian consumers would always compare prices before making their purchase (Vodus, 2024). Hence, the commitment of consumers to sustainable products can be further enhanced by facilitating their command through affordability and accessibility. To summarize, Hypothesis 2 is supported.

**RQ3: How do consumers' attitudes towards green products influence their green purchase intention?**
These results show that the positive attitude of customers towards environmentally friendly products has a significant impact on their intentions to buy. The findings (b=0.326, T=3.168, p<0.05) point to a very strong positive correlation between a favourable attitude and a green buying intention. The finding aligns with the studies by Witek and Kuzniar (2024) and Martinho (2021), which showed that consumers with a positive attitude towards environmentally friendly products will be more likely to consider them during the buying process. The study suggests that the development of a desirable attitude is achievable through stressing the positive attributes of environment-friendly products such as environmental protection, high quality, and health perception. This strategy will affect their purchase desire of green products as previous research showed that 61 percent of consumers in Malaysia had a positive attitude towards the green products, which was linked to a positive intention to purchase them (Taib et al., 2022). Also, it is found that 47 percent of consumers aged between 25 and 34 and 46 percent of consumers aged between 35 and 44 who have a favourable attitude to environmentally friendly businesses would invest more in such products (Marketing-Interactive, 2022). Consequently, Hypothesis 3 is supported.

**RQ4: How can subjective norms influence the consumers' purchase intention on green products?**
The results demonstrate that subjective norms play an important positive role in influencing the purchase intention of the consumers into green products. The above findings ($b = 0.209$, $T = 2.329$, $p < 0.05$) indicate that the choices made by consumers are affected by social pressure and expectations of the significant referents like family, friends, and peers. The outcome coincides with such research as Abdullah et al. (2020); Zhang et al. (2019), which emphasize the power of social norms in determining sustainable consumer behaviour. Statista (2024) cites results of a survey showing that 80 percent of the Malaysian women shoppers purchased products by accessing live commerce on social media networks. At the same time, the statistics indicate that 74% of customers in Malaysia will buy the product based on the feedback and review of their colleagues or netizens (Statista, 2024; Vodus, 2024). In addition, one of the survey outcomes reveals that nearly half of the Malaysian consumers made a purchase after being influenced by an influencer (Statista, 2023). The researchers propose that raising of awareness and encouraging the use of green products in social networks would have a positive impact on the intentions to purchase. Thus, Hypothesis 4 is supported.

**RQ5: What is the impact of environmental concern on consumers' purchase intention on green products?**
The outcome shows that the environmental concern does not strongly affect intention to purchase green items among consumers. The results ($b = 0.114$, $T = 1.265$, $p > 0.05$), suggest that consumers are not necessarily concerned about the environment when they buy products, even though they can express their fear of the environment. The result is opposite to previous studies, such as Siyal et al. (2021) and Moslehpour et al. (2023), which found the positive relationship between the environmental concern and the green purchasing intention. Another justification can be the presence of barriers that could be in the form of high prices, inadequate supply, or a lack of trust in green product assertions, which block the way of the customers to identify with their environmental ideologies. Vodus reports that the Chinese residents of Malaysia do not want to purchase green products due to the perception that such products are expensive (Vodus, 2024). This is congruent with the study since most of the responses are Chinese. Moreover, regarding the survey conducted by Ernst and Young (EY) in relation to the consumer insights on Energy Transition, most consumers in Malaysia are reluctant to spend the additional resources to enhance the sustainability of the energy they use (Selangor Journal, 2024). Addressing these challenges with the help of effective marketing strategies can help to change consumer buying behaviour into environmental concern. Consequently, Hypothesis 5 lacks support.

## Research Implications

### Practical Implications

This study has several implications that have a direct implication to practitioners, policy makers and firms aiming to bridge the intention-action gap in the Malaysian green consumption market. The findings show that the most important influencing factor on green purchase intention is the attitudes of consumers to green products, subjective norms, and perceived behavioural control. To begin with, companies ought to aim at influencing positive attitudes by effectively conveying the practical advantages of green products that include health, safety, quality, and cost savings in the long term, in addition to the environmental benefits. Advertisements that focus on individual and group benefits will be more successful in convincing the consumer to turn the intention into physical purchases.

Second, it is important to increase the feeling of control of consumers. This would be through making it affordable, enhancing the availability of goods and providing convenient payment or delivery modes. With price sensitivity still being an issue in Malaysia, companies can look at competitive pricing mechanisms, or instalment payment schemes or value-added promotions as a way of making it more accessible. Third, the importance of social influence cannot be underestimated. Because subjective norms are a reliable predictor of green purchase intention, the companies must use the power of social networks as well as peer pressure, as well as recommendations of someone one trusts like the community leader, influencers, or sustainability champions. Social media should be increased through encouraging positive social pressure by encouraging word-of-mouth and user-generated content.

However, in the present work, green brand positioning and environmental concern did not demonstrate any direct importance, but these aspects should not be disregarded by companies. The lofty credibility of brand positioning and the endemic threat of greenwashing erode trust as indicated by low enrolment in reputable green certification programs such as MyHIJAU in Malaysia. Businesses need to thus invest in real and transparent branding that will be a signal of reliability, certifiable eco-credentials, and a long-term commitment to sustainability. The development of trust in environmental claims is important in the long-term perspective to decrease the level of scepticism and create consumer

loyalty. Simply put, the results indicate that both consumer- and market-side weaknesses (brand credibility and transparency) and both consumer-side (attitudes, control, and social influence) and market-side (brand credibility and transparency) interventions ought to be implemented to reduce the green intention-action gap in Malaysia.

## Academic Implications

Academically, the study contributes to several ways to the body of literature regarding green consumer behaviour and sustainability. First, it fills in the pragmatic gap that has been identified in the previous studies by empirically showing how the purchase intentions of the Malaysian consumers are influenced by the behavioural and social factors instead of the branding and concern factors. The fact that the global studies have always indicated that green brand positioning and environmental concern have a great impact, but they do not produce direct influence in this study, indicates that contextual differences should be considered. It shows the relevance of the situated research of consumer behaviour in such emerging markets as Malaysia where affordability, market trust, and cultural norms have a high influence on the results.

Second, the results supplement the academic gap by generalizing the Theory of Planned Behaviour (TPB). Conventional TPB-based Malaysian research largely focuses on attitudes, perceived control over behaviours and subjective norms and minimal focus on other constructs. The research on green brand positioning and environmental concern together with TPB variables confirm the limitations of TPB and reveal that the influence of branding and concern on the development of green purchase intention could be indirect or moderated, instead of direct. This demands more theoretical clarifications and cross-modeling of sustainability studies.

Third, the findings leave new questions to further researchers. The triviality of the green brand positioning could be connected to the problem of the greenwashing and credibility, whereas the absence of the impact of the environmental concern could indicate that the attitudinal awareness could not necessarily result in the purchasing behaviour. Further research could examine the possible mediators (e.g., trust, product knowledge) or moderators (e.g., demographic differences, cultural values) to deconstruct these non-significant results.

Finally, this research adds to the limited number of Malaysian-oriented research on the topic of green consumerism. Placing the results in the local context of high consumer awareness and low actual adoption, it offers grounds on comparative research in the Southeast Asian region. This is vital in making context sensitive theories and in determining cultural, economic and institutional aspects that influence green consumption in the developing economies.

## Conclusion

This study offers significant insights into the determinants of consumers' green purchase intentions. The findings indicate that perceived behavioural control, attitudes towards green products, and subjective norms substantially influence consumers' intentions, although green brand positioning and environmental concern do not have significant impacts. Businesses and politicians may utilise these insights to design targeted tactics that empower consumers, cultivate positive attitudes, and harness social forces to promote green purchases. By emphasising education, accessibility, and social support, enterprises can promote increased consumption of eco-friendly products, harmonising commercial objectives with sustainability initiatives. Future study must rectify existing constraints by investigating supplementary influencing elements and integrating qualitative methodologies to enhance comprehension of consumer behaviour in the green market.

## Conflict of Interest

The authors declare that there is no conflict of interest regarding the publication of this paper.

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