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ORIGINAL ARTICLE

The Role of Environmental Concerns in Green Product Purchasing Decisions

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ABSTRACT

This study aims to investigate the role of environmental concerns in green product purchasing decisions. The present study is in the field of applied research in terms of its purpose. In terms of nature and method, it is a descriptive-survey study. The statistical population of this study is all customers of Kalleh Co. products. Given that the research population is unlimited, a sample size of 384 people was selected using the Cochran formula and the available sampling method. Inferential statistics and the partial least squares (PLS) technique were also used to analyze the data and test the research hypotheses. The results revealed that willingness to pay more, awareness of green price, perceived green benefits, perceived green quality, and green foresight have a positive and significant effect on environmental concerns as well as green purchase decisions. In addition, it was found that environmental concerns have a positive and significant effect on green purchase intention. It was also found that green purchase intention has a positive and significant effect on green purchase decision. All hypotheses of this study were confirmed. Therefore, based on the results obtained, it seems that managers of commercial companies should pay more attention to the environmental concerns of their customers in order to improve the intention of customers to purchase green products.

KEYWORDS

Environmental Concerns, Green Purchase Decision, Green Price Awareness, Green Perceived Benefits, Green Foresight.

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«مقاله پژوهشی»

نقش دغدغه‌های محیط‌زیستی در تصمیم‌گیری خرید محصولات سبز

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چکیده

هدف پژوهش حاضر، بررسی نقش دغدغه‌های محیط‌زیستی در تصمیم‌گیری خرید محصولات سبز بوده است. این پژوهش ازنظر هدف در حیطه تحقیقات کاربردی است. همچنین پژوهش حاضر بر اساس ماهیت و روش، یک پژوهش توصیفی-پیمایشی است. جامعه آماری این تحقیق کلیه مشتریان محصولات کاله بوده‌اند که با توجه به اینکه جامعه پژوهش نامحدود است با استفاده از فرمول کوکران حجم نمونه ۳۸۴ نفر با روش نمونه‌گیری در دسترس انتخاب شدند. همچنین برای تجزیه‌وتحلیل داده‌ها و آزمون فرضیه‌های تحقیق از آمار استنباطی و تکنیک حداقل مربعات جزئی (PLS) استفاده شد. نتایج نشان‌دهنده این بود که تمایل به پرداخت بیشتر، آگاهی از قیمت سبز، منافع ادراک‌شده سبز، کیفیت ادراک‌شده سبز و آینده‌نگری سبز تأثیر مثبت و معناداری بر دغدغه‌های محیط‌زیستی و همچنین تصمیم خرید سبز دارد. علاوه بر این مشخص شد که دغدغه‌های محیط‌زیستی تأثیر مثبت و معناداری بر قصد خرید سبز دارد. همچنین مشخص شد که قصد خرید سبز تأثیر مثبت و معناداری بر تصمیم خرید سبز دارد. تمامی فرضیه‌های این تحقیق مورد تأیید قرار گرفت. لذا با استناد به نتایج به‌دست‌آمده به نظر می‌رسد که مدیران شرکت‌های تجاری باید توجه بیشتری به نگرانی‌ها و دغدغه‌های محیط‌زیستی مشتریان خود داشته باشند تا از این طریق بتوانند قصد خرید محصولات سبز توسط مشتریان را بهبود بخشند.

واژه‌های کلیدی

دغدغه‌های محیط‌زیستی، تصمیم خرید سبز، آگاهی از قیمت سبز، منافع ادراک‌شده سبز، آینده‌نگری سبز.

Introduction

Socio-economic development and better living standards are the first and foremost priorities for any country in the contemporary era. Therefore, the link between technological advancement, mass production, unsustainable consumption behavior, and overuse of unsustainable resources can no longer be ignored. Overconsumption and overproduction are usually cited as two of the main reasons for environmental degradation. On average, between 30 and 40 percent of environmental pollution is caused by unsustainable consumption behavior of consumers. These cases have drawn increasing attention to the category of green consumer behavior in academic communities and policy systems of different countries (Rama & Susanto, 2024). Green purchase intention is defined as an individual's tendency to give priority to products that have environmentally friendly features over traditional alternatives. Perceived green risk plays an important role in consumer behavior (Abbasi et al., 2021).

Current environmental pressures are the result of the dysfunction of conventional production and consumption systems and the linear economic system of "take, make, consume, throw away," which, guided by market forces, has ignored any environmental consequences and constraints. As a result, over generations, we have witnessed the deterioration of population well-being and environmental quality, which in recent years has triggered various actions and movements at the ecological level (Khan et al., 2023). As a result, pro-environmental movements have increased, pressuring companies to adopt clean or green production systems and promote green innovations. In addition, consumer purchasing intentions have changed at the consumption level, leading to an increase in demand for green products (Lopes et al., 2024). One of the important components in green consumer behavior is environmental awareness and knowledge. Environmental awareness is also related to people's awareness of the dangers facing the environment and natural resources on Earth. One of the definitions of environmental awareness is the feeling of concern, discomfort, fear, etc. towards environmental problems. Environmental awareness influences environmentally friendly behavior (Mohammadsalehi et al., 2023). Consumers' environmental knowledge plays a decisive role in promoting green purchasing intentions in a society (Lopes et al., 2024).

On the other hand, one of the effective concepts in the intention to purchase green products that has been ignored in most research is environmental concern. Environmental concern indicates an internal empathetic response, concern, and care for the health of the environment, as well as the intention to restore the damaged ecological habitat and protect the existing ecological balance (Shao et al., 2023). People who are responsible, supportive, kind, and emotionally attached to the environment and ecosystem are generally considered to be very environmentally sensitive. In addition, some researchers have explained that environmentally sensitive people always respect the environment and prefer to examine the health of the environment so that they can take appropriate measures to protect the environment from degradation. Therefore, environmental concern reflects the general mental and emotional connection of people with the environment (Chen et al., 2023).

Despite the extensive studies conducted in the field of green marketing, most of this research has been devoted to the production side, namely the green and environmental actions of factories and manufacturing companies, and the role of internal factors of customers in the field of green consumption behavior has been less investigated. While much research has been conducted on green purchase intention (Chen et al., 2023; Khan et al., 2023), the present study contributes to the literature by including a larger number of variables, resulting in a more comprehensive and detailed conceptual model.

In addition, by considering the dual effects of independent variables on both purchase decision variables and environmental concerns, an attempt has been made to provide a more precise explanation of the mechanisms affecting green purchase decisions. It has also been tried to avoid general variables such as trust and attitude, which have been mentioned many times in previous research (Pourashraf et

al., 2022; Qureshi et al., 2023), in the proposed model. In addition, in the conceptual model of the present study, the variable of green foresight has been introduced as one of the antecedents of green purchase decisions; a concept that has not received much attention in previous research. In addition, the proposed model of this study also refers to the concept of perceived green resources, which refers to the personal aspect and individual benefits of green purchasing rather than the environmental aspect. Finally, it should be noted that the present study is one of the few studies that introduces the willingness to pay more as an antecedent in the green purchasing decision. As Chanda [2] et al. (2023) have stated, in order to institutionalize green consumption behavior, more attention should be paid to the individual and motivational factors of consumers. Therefore, the present study attempts to present a new conceptual framework with sufficient complexity to explain the factors affecting customers' green purchasing decisions by emphasizing internal and individual factors.

Literature review

Environmental concerns indicate the level of awareness of individuals about environmental harms and their desire to reduce them. Environmental concerns lead to increased awareness of environmental problems, which result in changes in consumer behavior, as consumers begin to choose products that reflect these concerns (Qureshi et al., 2023). Willingness to pay more for green represents the maximum amount that an individual is willing to spend to obtain goods and services. Therefore, a consumer's willingness to purchase or pay more for a product depends mainly on their perceived positive value of the product. Although green products are more expensive, consumers may be willing to pay the price difference between them and non-green products (Gusmão et al., 2024). Research has examined the relationship between the higher price of green products and willingness to pay for them. It has been found that consumers who are concerned about environmental issues have a higher demand for green products. Consumers even seem to be willing to pay more for green products when they perceive additional benefits such as safety, higher quality, or improved health outcomes (Gomes et al., 2023). Empirical evidence suggests that willingness to pay more for environmentally friendly products is a strong predictor of the decision to purchase green products (Khan et al., 2023). Based on this evidence, the following hypotheses are formulated:

Willingness to pay more for green has a positive and significant effect on environmental concerns.

Willingness to pay more for green has a positive and significant effect on green purchasing behavior.

Consumer awareness of green price is an important driver for the production and consumption of green products and should be considered when pricing green products. Green products are considered more expensive than conventional products due to the production process and raw materials used (Vania & Ruslim, 2023). Price is considered one of the main factors determining green purchase intention. In this way, it may inhibit green purchase intention, especially among consumers with limited budgets. Consumers who are green-minded are often more aware of green prices. Thus, companies should adopt different pricing strategies according to consumers' levels of green awareness (Veerabhadrappa et al., 2023). Price attribution to green products is significantly affected by asymmetric information in markets, allowing producers and manufacturers greater flexibility to set their desired prices (Meet et al., 2024). It has also been shown in various studies that green price awareness is one of the factors that affects consumers' environmental concerns (Heydari et al., 2021; Lopes et al., 2024). Based on the above, the following two hypotheses are formulated

Green price awareness has a positive and significant effect on environmental concerns.

Green price awareness has a positive and significant effect on green purchasing behavior.

Perceived green quality refers to consumers' overall judgment of the environmental superiority or excellence of a product. Perceived green quality is a key concept in sustainable consumption, as it significantly influences environmental concerns and

consumer decision-making. Some studies have highlighted perceived green quality in influencing consumers' attitudes and behavior towards environmentally friendly products. For example, Lopes et al. (2024) found that perceived green quality has a significant positive effect on consumers' environmental concerns. This suggests that consumers are more likely to choose products that they perceive to be environmentally superior or excellent (Qureshi et al., 2023).

The relationship between perceived green quality and consumers' environmental concerns has also been studied, showing that perceived green quality positively affects consumers' environmental concerns. When consumers perceive a product as environmentally superior or excellent, it creates positive emotions and increases their trust and purchase intention toward environmentally friendly products. This indicates that perceived green quality plays an important role in shaping consumers' attitudes towards sustainability and their willingness to engage in environmentally friendly behaviors (Meet et al., 2024). Considering the above, we will have:

Perceived green quality has a positive and significant effect on environmental concerns.

Perceived green quality has a positive and significant effect on green purchasing behavior.

Perceived green benefits refer to the positive attributes and benefits perceived by consumers towards environmentally friendly products. These benefits include psychological and practical aspects (Patiño et al., 2024). The concept of perceived green benefits is important for understanding consumer behavior and attitudes toward sustainable consumption. This concept reflects the idea that consumers perceive a sense of improvement in their lives through green products. Therefore, understanding the relationship between perceived green benefits and consumers' environmental concerns is crucial for companies and policymakers promoting sustainable consumption. The literature shows that perceived green benefits positively influence consumers' environmental concerns. A study by Gomez et al. (2023) found that perceived green benefits have a significant impact on consumers' environmental concerns and their future orientation toward green consumption. This suggests that when consumers perceive the benefits of green products, they are more likely to develop a stronger sense of responsibility and environmental concern. Similarly, Zhuang et al. (2021) found that perceived green benefits positively influence consumers' purchase intention, perceived value, and trust in green products. These findings demonstrate the importance of perceived benefits of green products in increasing consumers' environmental concerns and encouraging sustainable consumption. In addition to what was previously mentioned, perceived green benefits also have a positive impact on consumers' decision-making process for green products (Lopes et al., 2024). Considering the above, we have:

Perceived green benefits have a positive and significant impact on environmental concerns.

Perceived green benefits have a positive and significant impact on green purchasing behavior.

Green foresight is crucial for shaping consumers' environmental concerns and decision-making processes. Green foresight refers to how consumers evaluate and predict the impact of a product or service on the environment and long-term sustainability (Zhang & Dong, 2020). Future demand for green products is related to consumers' current preference for environmentally friendly products or services. If consumers value green products, this demand is likely to grow (Song et al., 2024). The valuation of green products depends on factors such as environmental impacts and consumer benefits such as health and well-being. In addition, previous shopping experience influences consumers' emotional and cognitive responses. This experience can occur at different moments in the shopping process. Gomez et al. (2023) found that environmental concerns, green foresight, and green purchasing behavior are interrelated concepts. Furthermore, the research literature suggests that green foresight significantly positively influences consumers' green purchasing decisions. Some studies have shown that consumers who have a green foresight are more likely to make environmentally conscious choices and choose sustainable products (Limbu et al., 2023). Therefore, we will have the following two hypotheses:

Green foresight has a positive and significant effect on environmental concerns.

Green foresight has a positive and significant effect on green purchasing behavior

One of the solutions that consumers consider to express their environmental concerns is to purchase green products. Consumers' environmental concerns play an important role in shaping their decision-making process, especially regarding green consumerism (Malhotra & Srivastava, 2024). Environmental concerns can be defined as the level of awareness and importance that individuals attach to the environmental impacts of their consumption choices. These concerns cover various aspects such as depletion of natural resources, pollution, climate change, and the overall sustainability of products and services (Selasih et al., 2025). In this context, since current consumers seem to be environmentally conscious, we can assume that their environmental concern will have a positive effect on their intention to purchase green products. In this context, we state the following hypothesis:

Environmental concern has a positive and significant effect on green purchase intention.

To generate purchase behavior, it is necessary to first have a strong purchase intention. Furthermore, if environmentally friendly products have a positive effect, these purchase intentions can be converted into actual purchases, so customers feel confident to purchase the product. Green purchase behavior is strongly influenced by the green purchase intention that exists in consumers (Patiño et al., 2024). Previous research has shown that green purchase intention has a positive and significant effect on green purchase behavior. Green purchase intention can also mediate the effect of environmental concern and attitude on green purchase behavior. Green purchasing behavior refers to purchasing products that have minimal environmental damage (Veerabhadrappa et al., 2023). Meanwhile, green purchasing is defined as the preference and use of environmentally friendly products produced using ecological processes and materials. The formation of green purchasing intention is the main antecedent of the decision to purchase green products (Dinh et al., 2023). In this context, we state the following hypothesis:

Consumers' green purchasing intention has a positive and significant effect on green purchasing decision.

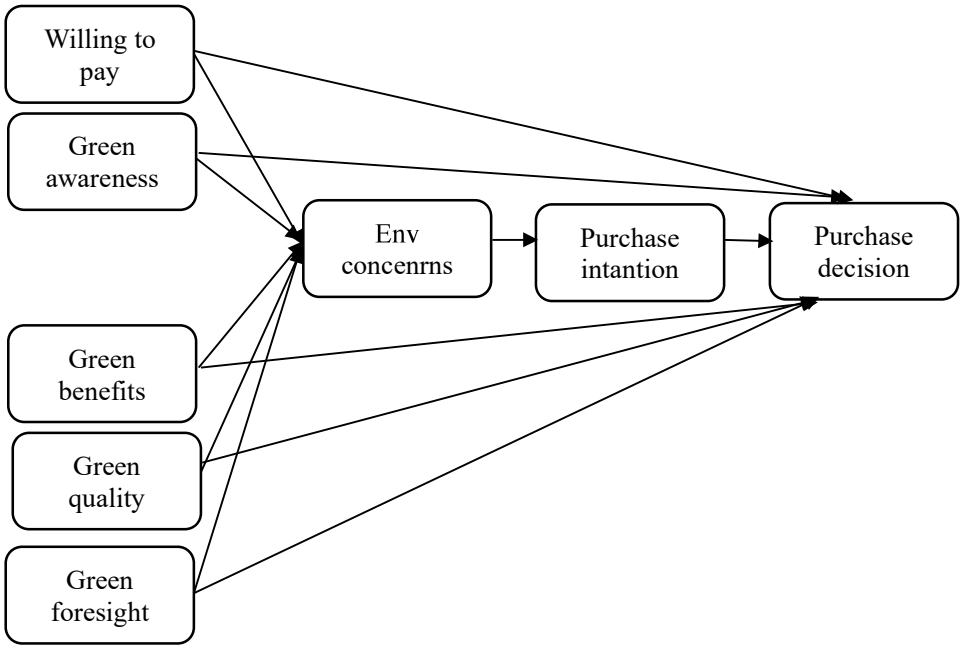

Figure 1. Conceptual Research Model

Al-Ghamdi et al. (2024) conducted a study titled Understanding Factors Affecting Consumers' Conscious Green Purchasing Behavior. The findings show that media and peer influence have a significant effect on activating altruistic and selfish motives, while family influence is insignificant. The correlation between media exposure and peer influence was significantly mediated by altruistic and selfish motives. Putri & Hayu (2024) conducted a study titled The Effect of Environmental Knowledge, Green Product Knowledge, Green Word-of-Mouth, Green Washing, and Green Confusion as Mediators of Green Purchase Intention. The results of the study showed that environmental knowledge has a positive and significant effect on green purchase intention. Apart from that, green word-of-mouth advertising also has a positive but not significant effect on green purchase intention. Mahmoud et al. (2024) conducted a study titled Green Marketing Mix and Repurchase Intention: The Role of Environmental Knowledge. A quantitative approach was used for the research. The findings showed that green price, green location and green advertising had a positive and significant effect on repurchase intention. However, green product had a negligible effect on repurchase intention. The findings also showed that environmental knowledge moderated the relationship between green price and green location on repurchase intention. Environmental knowledge was not found to moderate the relationship between green product, green advertising and repurchase intention.

Chanda et al. (2023) conducted a study titled Factors Affecting Consumers' Green Purchase Intention: Evidence from a Developing Country. The findings of this study show that subjective norms, attitudes towards green products and perceived behavioral control have a positive and significant relationship with green purchase intention. Environmental knowledge also has a positive and significant relationship with environmental sensitivity. There is a positive and significant relationship between environmental sensitivity and attitude towards green products, while the relationship between environmental knowledge and attitude towards green products was not significant. Mohammad Salehi et al. (2023) conducted a study titled "Evaluating the effects of altruistic value, environmental awareness, and social media on green purchasing behavior with the mediating role of normative goal and environmental concern." The results showed that customer perceived effectiveness, social media, environmental awareness, and altruistic value have an effect on normative goal and environmental concern. The role of normative goal and environmental concern has also been shown on green purchasing behavior. Pourashraf et al. (2022) conducted a study titled "Personal factors and environmental attitudes of customers in purchasing environmentally friendly products." The results of testing the research hypotheses showed that there is a significant relationship between consumers' personal factors and their tendency to purchase environmentally friendly products with the mediating role of environmental attitudes.

Research Methodology

This study falls within the category of applied research in terms of its purpose. Methodologically, it adopts a descriptive-survey approach and is conducted in a cross-sectional format with respect to time. The statistical population comprises all customers of the Kale brand, representing an infinite population. Given the lack of precise information regarding the population size, Cochran's formula for an unlimited population has been employed to determine the appropriate sample size, as follows:

$$n = \frac{t^2 pq}{d^2} = \frac{(1.96)^2 (0.5)(0.5)}{(0.05)^2} = \frac{0.9604}{0.0025} = 384$$

$d = 0.05$

$t = 1.96$

$p = 0.5$

$q = 0.5$

Sampling was conducted using a convenience sampling method.

In this study, a researcher-made questionnaire derived from previous questionnaires was used to collect data. This questionnaire consists of 7 dimensions and 29

items. The validity of the questionnaire was evaluated by the content-facet method as well as construct validity. To evaluate the reliability of the questionnaire, Cronbach's alpha coefficient and composite reliability are calculated. The characteristics of the research questionnaire were stated in Table 1.

Table 1. Dimensions and Scales Used to Develop the Research Questionnaire

Variables	Items	Reference
Willing to pay	1-5	Vania, C., & Ruslim, T. S. (2023)
Green awareness	6-7	Lopes, J. M., Pinho, M., & Gomes, S. (2024)
Green benefits	8-9	
Green quality	10-12	
Green foresight	13-16	Lopes, J. M., Gomes, S., & Trancoso, T. (2024)
Environmental concerns	17-20	Lopes, J. M., Pinho, M., & Gomes, S. (2024)
Green purchase intention	21-25	Vania, C., & Ruslim, T. S. (2023)
Green purchase decision	26-29	Lopes, J. M., Gomes, S., & Trancoso, T. (2024)

Descriptive statistics methods such as frequency distribution tables and means were used to examine and describe the general characteristics of the respondents. In addition, inferential statistics and partial least squares (PLS) technique were used to analyze the data and test the research hypotheses. The obtained data were also analyzed using SPSS and Smart PLS statistical software.

Research Findings

The results of the frequency distribution of demographic information of the respondents showed that 182 people (47 percent) were male and 202 people (53 percent) were female. The respondents, in terms of education, included 3 people with a bachelor's degree, 244 people with a diploma and associate's degree, 100 people with a bachelor's degree, and 7 people with a master's degree or higher. In terms of purchasing history of green products, 28 people had three years or less, 174 people had four years, and 182 people had a purchasing history of five years and above. It is worth noting that the normality of the data was examined using the Kolmogorov-Smirnov test, which showed that all research variables follow a non-normal distribution. As a result, inferential analysis was carried out using the structural equation modeling method with the partial least squares approach.

In the partial least squares method, reliability can be measured using Cronbach's alpha coefficients and composite reliability. Cronbach's alpha for all constructs is above 0.5, which indicates high convergent validity. Also, composite reliability values for all constructs are reported to be above 0.5, which indicates that the constructs have appropriate composite reliability.

In this study, in addition to examining the content validity of the questionnaire; convergent and divergent validity were also examined. Convergent validity exists when the standard factor loading is greater than 0.5, the significant statistical values are greater than 1.96, the composite reliability is greater than 0.7, and the average variance extracted is greater than 0.5. Also, the composite reliability must be greater than AVE. In this case, the condition of convergent validity will exist. According to Table 2, the above conditions are met, so the questionnaire has convergent validity.

Table 2. Convergent Validity and Composite Reliability in the Measurement Model Fit

Constructs	Items	Factor loading	T value	AVE	Composite reliability	Cronbach's alpha
Willing to pay	Q01	0.908	87.634	0.818	0.900	0.777
	Q02	0.900	70.758			
Green price awareness	Q03	0.910	103.312	0.830	0.907	0.795
	Q04	0.912	96.040			

Constructs	Items	Factor loading	T value	AVE	Composite reliability	Cronbach's alpha
Green benefits	Q05	0.925	101.427	0.861	0.925	0.839
	Q06	0.931	115.548			
Green quality	Q07	0.900	82.607	0.799	0.923	0.874
	Q08	0.908	86.796			
	Q09	0.873	56.181			
Green foresight	Q10	0.884	68.651	0.743	0.920	0.885
	Q11	0.862	53.356			
	Q12	0.870	57.508			
	Q13	0.832	39.777			
Environmental concerns	Q14	0.871	69.221	0.731	0.916	0.878
	Q15	0.858	53.323			
	Q16	0.862	53.398			
	Q17	0.830	42.528			
Green purchase intention	Q18	0.825	38.484	0.671	0.911	0.877
	Q19	0.849	46.464			
	Q20	0.850	56.183			
	Q21	0.761	29.923			
	Q22	0.810	35.651			
Green purchase decision	Q23	0.788	34.170	0.677	0.893	0.841
	Q24	0.835	50.261			
	Q25	0.787	26.047			
	Q26	0.879	88.265			

Considering the above-mentioned information and the results of the output of the smart PLS software in the above tables, it can be said that the research variables have appropriate validity and reliability (composite reliability coefficient and Cronbach's alpha coefficient).

Results of testing research hypotheses.

Path coefficients and results related to significance are shown in Figure 2; 3; and a summary of the results is shown in Table (3). The numbers written on the paths represent the path coefficients.

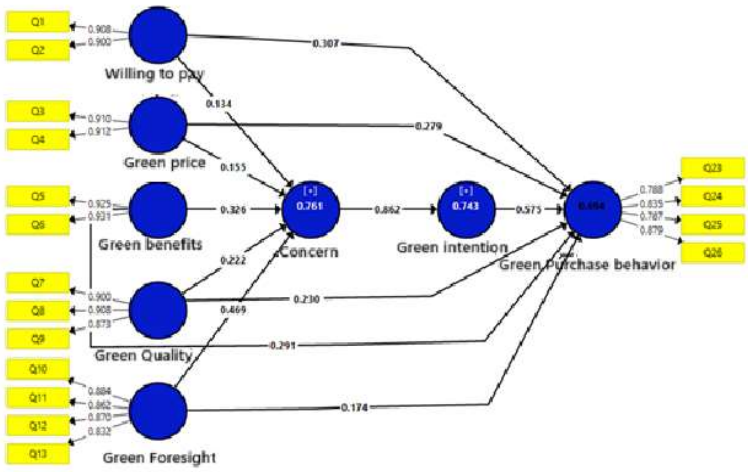

Figure 2. Structural Model of Research Hypotheses in the Case of Standard Coefficients

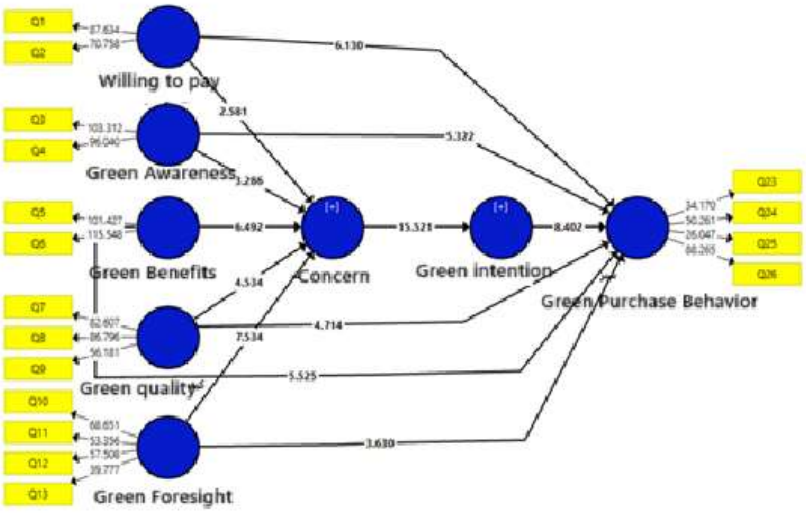

Figure 3. Structural Model of Research Hypotheses in the Case of Significant Coefficients

It is worth mentioning that the Gof formula was used to fit the model, and based on this formula, the GOF value was higher than the acceptable limit (0.3), and accordingly, it can be stated that the model has a good fit. As shown in Figure 3, the t-values of all paths between variables are greater than 1.96, which shows the accuracy of the relationship between the variables and consequently confirms the research hypotheses at a confidence level of 95%.

Table 3. Results from the Structural Model Evaluation

Path Between Variables	Path Coefficient	t-value	Result
Green Willingness to Pay → Environmental Concern	0.134	2.581	Supported
Green Price Awareness → Environmental Concern	0.155	3.286	Supported
Perceived Green Benefits → Environmental Concern	0.326	6.492	Supported
Perceived Green Quality → Environmental Concern	0.222	4.534	Supported
Green Foresight → Environmental Concern	0.469	7.534	Supported
Green Willingness to Pay → Green Purchase Behavior	0.307	6.130	Supported
Green Price Awareness → Green Purchase Behavior	0.279	5.322	Supported
Perceived Green Benefits → Green Purchase Behavior	0.291	5.525	Supported
Perceived Green Quality → Green Purchase Behavior	0.230	4.714	Supported
Green Foresight → Green Purchase Behavior	0.174	3.630	Supported
Environmental Concern → Green Purchase Intention	0.862	15.521	Supported
Green Purchase Intention → Green Purchase Behavior	0.575	8.402	Supported

According to Table (3), the results are interpreted, as well as the results of the present study are compared with previous studies and suggestions are presented in the next section.

Conclusion

The test of the first hypothesis showed that willingness to pay more for green has a positive and significant effect on environmental concerns. Consumers' willingness to buy or pay more for a product depends mainly on their perceived positive value of the product. Although green products are more expensive, consumers may be willing to pay the price difference between them and non-green products. As shown in this study, if people are

financially and psychologically comfortable with paying more and are willing to buy healthy and environmentally friendly products, then their level of environmental concerns and worries is also higher. The result obtained is consistent with the findings of Lopez et al. (2024) and Gusamo et al (2024).

The results of testing the second hypothesis indicate that awareness of green pricing exerts a positive and statistically significant influence on environmental concerns. Price is widely recognized as a fundamental element of the marketing mix, playing a critical role in shaping consumer attitudes and perceptions. This principle equally applies to green products, wherein increased consumer awareness of green pricing—particularly the rationale behind the premium pricing of such products—correlates with heightened environmental concern. In other words, understanding the justification for the higher cost of environmentally friendly products reinforces consumers' environmental values and attitudes. These findings are consistent with prior studies by Vanya et al. (2023), Khan et al. (2023), and Veerabhadrappa et al. (2023).

Furthermore, the test of the third hypothesis demonstrated that perceived green benefits significantly and positively affect environmental concerns. Purchasing decisions often involve inherent risk, especially in situations where post-purchase outcomes are uncertain. Perceived benefits—understood as positive beliefs or expectations—play a vital role in guiding consumer behavior under such conditions. These benefits may encompass aspects such as convenience, functional utility, and product quality. Specifically, the perception of green benefits arises from consumers' recognition that green products contribute to environmental preservation, offer health-related advantages, and generally possess superior quality and sensory appeal. This finding aligns with the work of Wang et al. (2024), who reported a similar positive relationship between perceived green benefits and environmental concern, a conclusion further supported by the research of Lopez et al. (2024).

The test of the fourth hypothesis suggests that perceived green quality has a positive and significant effect on environmental concerns. Perceived quality is the evaluation of superiority that a consumer attributes to a particular product over another product, which is made through a judgment. Perceived quality is a determining factor for manufacturers and marketers because it provides an opportunity to differentiate a product in terms of product performance, ease of use and maintenance, reliability, and durability. When a product is truly of higher quality than other products, the importance of environmental considerations in the customer's mind is strengthened, and thus their environmental concerns increase. This finding is consistent with the results of Khan et al. (2023), Lopes et al. (2024), and Vania and Ruslim (2023).

The test of the fifth hypothesis indicates that green foresight has a positive and significant effect on environmental concerns. One of the determining factors of environmental concerns is the concern that customers have about their future and future generations. In other words, paying attention to the future benefits of green products as well as the negative consequences of current methods of production and sale of products will make customers more concerned about the environment. Hence, the effect of foresight on customers' environmental concerns can be justified. This finding is consistent with the results of research by Gomes et al. (2023) and Qureshi et al. (2023). The test of the sixth hypothesis indicates that the willingness to pay more for green has a positive and significant effect on green purchasing behavior. Products that are produced in a green way often have a higher price than conventional products. Therefore, to increase green purchasing, either the price of products must be low, which is currently not possible; or customers themselves must be willing to pay more to buy green products. The result obtained is consistent with the findings of Lopez et al. (2024), Chen et al. (2023) and Khan et al (2023).

The test of the seventh hypothesis indicates that awareness of green prices has a positive and significant effect on green purchasing behavior. Price is considered one of the most important characteristics in consumer choice. This result indicates that the higher the level of price awareness, the more consumers think about purchasing a company's green products or services. Price is undoubtedly one of the most influential factors in making decisions about purchasing green products available in the

market. Price is a real clue that consumers use in their purchase decisions. The results obtained in this study are consistent with the results of Gomez et al. (2023) and Mahmoud et al (2024).

The test of the eighth hypothesis indicates that perceived green benefits have a positive and significant effect on green purchasing behavior. Perceived green benefits refer to the positive characteristics and benefits perceived by consumers towards environmentally friendly products. The concept of perceived green benefits is important for understanding consumer behavior and attitudes towards sustainable consumption. This concept reflects the idea that consumers perceive a sense of improvement in their lives through green products. Therefore, when consumers feel that a green product really brings health benefits and improves the quality of life, they are more likely to purchase that product. In confirmation of the results obtained previously, Zhuang et al. (2021) found that perceived green benefits positively affect the purchase intention, perceived value and consumers' trust in green products. In the study of Lopez et al. (2024), a positive relationship between perceived green benefits and green purchasing behavior was also reported, which is consistent with the results obtained in the present study.

The test of the ninth hypothesis indicates that perceived green quality has a positive and significant effect on green purchasing behavior. In explaining the result obtained, it should be stated that if the quality is high, the customer's purchase decision is also high. Customers considered perceived quality as a more specific concept based on product and service characteristics. This is especially true in relation to green and environmental products; that is, the customer must conclude that a green product really has a qualitative advantage over other products in order to purchase a product. The result obtained is consistent with the findings of Gusamo et al. (2024); (2024) and Vanya et al. (2023) are consistent.

The test of the tenth hypothesis shows that green foresight has a positive and significant effect on green purchasing behavior. Green foresight refers to how consumers evaluate and predict the impact of a product or service on the environment and long-term sustainability. Consumers who have a green foresight are likely to make informed choices about the environment and choose sustainable products; therefore, their purchasing behavior is also influenced by green foresight. In support of this finding, Gomez et al. (2023) found that environmental concerns, green foresight, and green purchasing behavior are related concepts.

The test of the eleventh hypothesis showed that environmental concerns have a positive and significant effect on green purchasing intention. In relation to this finding, it should be stated that environmental concerns have become a highly debated topic in recent years. Environmental concern refers to the level of emotional involvement in environmental issues. Other than that, environmental concern can be defined as the awareness or perception that the environment is threatened by overuse of resources and pollution by humans. It is said that environmental concerns are the main motivation to encourage the consumption of environmentally friendly products. Consumers who are aware of the importance of environmental protection and care about it motivate them to use products that do not harm the environment. Therefore, the higher the environmental concern, the higher the green purchase intention. In support of this finding, Zameer et al. (2022) stated that environmental concerns pave the way for increased purchase intention for environmentally friendly products. Polas et al. (2024) also showed that environmental concerns have a positive and significant effect on purchase intention. The test of the twelfth hypothesis showed that consumers' green purchase intention has a positive and significant effect on green purchase decision. According to the theory of planned behavior, intention is the immediate antecedent of behavior; that is, when an intention or intention is formed in an individual's mind, the likelihood of that behavior occurring increases. Green purchase intention is defined as the likelihood and tendency of an individual to give preference to products with environmentally friendly features over other traditional products in their purchase considerations. In other words, green purchase intention is defined as the likelihood that a consumer will purchase a particular product to

satisfy their environmental concerns. Purchase intention is said to be a key factor that influences purchase behavior. To create purchasing behavior, it is necessary to first have a strong purchase intention. Furthermore, if environmentally friendly products have a positive impact, these purchase intentions can be converted into actual purchases, so customers feel confident to purchase the product. In support of the obtained result, Meet et al. (2024) showed that green purchasing behavior is strongly influenced by the green purchasing intention that exists in consumers. Previous research has shown that green purchasing intention has a positive and significant effect on green purchasing behavior. Green purchasing intention can also mediate the effect of environmental concern and attitude on green purchasing behavior. Green purchasing behavior means purchasing products that have minimal harm to the environment (Lopez et al., 2024).

Based on the results, the following recommendations are made:

Businesses can improve consumer awareness and environmental concern through educational campaigns, partnerships with environmental organizations, or marketing methods that emphasize the environmental benefits of green products.

It is recommended that businesses use a comprehensive and integrated strategy to promote green consumption. This strategy should include creating premium and beneficial environmentally friendly products, communicating with customers, reducing the cost of producing green products, emphasizing the future impact of environmentally friendly options, and improving consumer environmental awareness.

Businesses should also ensure that their green products meet high quality standards and offer clear and tangible benefits that surpass non-green alternatives. These benefits should be successfully communicated to consumers, emphasizing the direct link between the use of green products and the improvement of environmental well-being

Pricing of green products also plays a significant role, as our results highlight the value of green price awareness. Hence, it is recommended that further review be done in both pricing strategy and the method of informing customers about green products.

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