International Journal of Scientific Research and Management (IJSRM)

||Volume||12||Issue||05||Pages||6402-6418||2024|| |Website: https://ijsrm.net ISSN (e): 2321-3418

DOI: 10.18535/ijsrm/v12i05.em11

Factors Affect Green Product Purchase Decisions: The Mediating Role of Green Brand Image

Thai Thi Thuy Oanh

Ho Chi Minh International University, Vietnam Eastern International University, Vietnam

Abstract:

Research on environmentally conscious consumer behaviour requires particular attention to Asian markets. Although Vietnam is an Asian developing nation with a noted environmental conscience, little is known about their green product purchase habits and decisions. Thus, the goal of this study is to investigate the factors influencing Vietnamese consumers' decisions regarding purchasing green products. The study evaluates a collection of theoretically proposed hypotheses using a convenience-based methodology. A 30-variable questionnaire was used to gather information from 347 residents. Exploratory and confirmatory factor analyses were used to analyse the data. The suggested theories were tested using structural equation modelling. The findings demonstrated that the customers were eager to support protecting the environment, aware of their environmental duties, and ready to look for information about sustainable goods. Supporting environmental protection, drive for environmental responsibility, green product experience, environmental friendliness of companies, social appeal, and green brand image are all recognised as significant variables that have a direct impact on consumers' decisions to buy green products. Additionally, the study discovered that the association between these factors and decisions to purchase green products is mediated by the image of green brands. By investigating the variables influencing Vietnamese consumers' preferences to buy environmentally friendly goods, this study offers insightful information on green purchasing habits in that country. The findings can help marketers create persuasive green marketing campaigns that highlight the environmental, social, and individual advantages aligned with the brand image linked to purchasing green products. These approaches will have positive impacts on their purchase decisions.

Keywords: green brand image, green product purchase decisions, Vietnamese customer behaviour

1. Introduction

Green products have recently gained popularity because of their limited adverse effects on health and the environment (Choi & Johnson, 2019; Palevich, 2012). Consumers' growing consciousness of sustainability has led to noticeable changes in their purchasing behaviours and actions (Nguyen et al., 2020; Yang et al., 2020). Organizations are becoming more inclined to create environmentally sustainable strategies and incorporate them into their products and services in response to changing consumer preferences (Chang et al., 2021). By implementing these eco-friendly activities, businesses can enhance their brand image and position themselves as socially responsible entities (Nguyen et al., 2020; Situmorang et al., 2021).

Researchers have been studying the characteristics of green customers in various marketplaces since understanding consumer awareness, and the factors that influence green purchasing behaviour has significant significance (Medeiros & Ribeiro, 2013). The study examines the environmental dimensions of buyer behavior, namely the need for green goods, and emphasizes the importance for firms to implement sustainable practices in order to maintain competitiveness in the market (Hansen, 2009). Although most studies on green consumer behavior primarily examine Europe and America, there are continuous endeavors to extend these notions globally in order to investigate the similarities and differences that may emerge between cultures in terms of ecological awareness (Kumar & Ghodeswar, 2015). The policies of the

government and business approaches in numerous Asian nations are being reformed to prioritize long-term sustainable development, which encompasses environmental preservation (Johri & Sahasakmontri, 1998; Kaman, 2008). Studies undertaken by Lee (2008), Lee (2009), Gurau & Ranchhod (2005), and Yam-Tang & Chan (1998) provide evidence that environmentally friendly consumption is increasingly becoming more prevalent in Asian countries. However, the findings consistently contradict each other because customers' green purchasing behaviour might vary across different cultures, social contexts, and demographic factors (Nayak et al., 2019). Hence, this study will examine the factors that affect green purchasing decisions in Vietnam, a developing country. Besides that, numerous scholars have examined the relationship between various variables and green brand image; nevertheless, the mediation effect of green brand image on environmental protection, responsibility, and friendliness concerning purchasing decisions remains unexplored (Bukhari et al., 2017). Thus, this study also examines this issue.

Besides that, this study explicitly examines the food business in Vietnam, a rapidly developing Asian country (Van et al., 2019; Nguyen et al., 2019). Vietnam has the potential to be an attractive marketplace for organic and environmentally friendly food products (Van et al., 2019; Nguyen et al., 2019). Moreover, Vietnamese individuals allocate over 50% of their earnings towards purchasing food and beverage items (GSO, 2012). The food quality and safety issue in Vietnam has garnered growing interest from consumers, businesses, and investors (Van et al., 2019; Nguyen et al., 2019). The Vietnamese population is experiencing a significant increase in environmental awareness (Nguyen et al., 2017). The increasing recognition of this issue leads to a desire to adopt more environmentally friendly consuming habits to reduce adverse environmental effects (Nguyen et al., 2024).

Nevertheless, there needs to be more research into the factors contributing to increased intentions for green consumption among the Vietnamese public despite the considerable potential for such behaviour in Vietnam (Nguyen et al., 2024). Hence, it is necessary to comprehend the variables influencing environmentally conscious purchasing decisions. The study aims to investigate the many aspects of environmental awareness among Vietnamese customers and examine how these factors influence their decisions to purchase green products.

2. Literature review

Supporting environmental protection (SEP) means embracing a perspective of environmentally friendly behaviour and sensitivity towards ensuring long-term sustainability (Barr & Gilg, 2006). They seek ecologically advantageous product design and function characteristics that minimize environmental effects and significantly contribute to environmental preservation (Lee, 1990; Escalas & Bettman, 2005). These customers evaluate the features of a product, such as recyclable ingredients and packaging, to improve the environment (Forkink, 2010; Luchs et al., 2010). Individuals are motivated to make green product purchase decisions (GPPD) to support protecting the environment (Gadenne et al., 2011). They acknowledge the significance of green products in enhancing environmental quality and demonstrate their commitment to environmental conservation by buying and owning green items (Escalas & Bettman, 2005). Hence, a hypothesis was proposed:

H1: SEP positively impacts GPPD.

The aspects that drive for environmental responsibility (DFER) are thoughts and inner standpoints that contribute to preserving natural resources, the environment, and other species (Gadenne et al., 2011; Kumar & Ghodeswar, 2015). They have emotional engagement with environmental conservation matters (Lee, 2008; Lee, 2009) and suppose they can personally contribute to environmental preservation by engaging in environmentally friendly behaviours on a personal level. Consumers have become aware of the adverse effects of the environment on humans and other living species, and they recognise their duty to take care of the surroundings (Gadenne et al., 2011). Hence, a hypothesis was proposed:

H2: DFER positively impacts GPPD.

Green products refer to environmentally friendly items, as they do not harm the environment, contain fewer toxic substances, use recycled packaging, and are made from materials that are not harmful to the planet (Gurau & Ranchhod, 2005). The consumers' experience with green products significantly influences their

decisions to purchase green items (Kumar & Ghodeswar, 2015). It pertains to the willingness of consumers to acquire information about the environmental characteristics of green products (Kumar & Ghodeswar, 2015). To do this, individuals try to independently acquire knowledge about environmentally friendly items, including information on their ingredients, their influence on the environment, and their usefulness (Laroche et al., 2001). Customers with experience in green products actively spread information and understanding about these products to their acquaintances, facilitating continuous understanding and sharing (Khare, 2014; Cheah & Phau, 2011). Product evaluation, as an outcome of the learning procedure, allows consumers to comprehend the environmental advantages of green products and leads to the effective formation of a preference for eco-friendly goods (Cegarra-Navarro & Martinez, 2010).

The green product experience (GPE) significantly impacts consumers' purchasing decisions, which helps people make effective decisions and increases their readiness to to focus more for sustainable goods (Zhao et al., 2014; Barber et al., 2009). Consumers with more experience with environmentally friendly products are likelier to engage in eco-friendly purchasing behaviour (Laroche et al., 2001). The previous green purchase influences people's decision to make continuous purchases (Zhao et al., 2014; Barber et al., 2009). Hence, a hypothesis was proposed:

H3: GPE positively impacts GPPD.

Recently, there has been a growing awareness of environmental issues caused by global warming (Chen, 2008a). It has led to a requirement for organisations to offer products that are both environmentally friendly and meet customer requirements effectively (Chen, 2008a). Besides that, consumers concerned about the environment have urged corporations to tackle environmental problems and create products and processes with a smaller environmental impact (Gadenne et al., 2011). The commitment to sustainability exhibited by companies directly influences consumers' perception of green products (Ambec & Lanoie, 2008; Hart, 1995; Porter & Van der Linde, 1995). Companies strive to create products that have little negative impact on the environment, implement manufacturing techniques and operations that are ecologically sustainable, and adhere to both national and international legislation (Papadopoulos et al., 2010).

The environmental friendliness of companies (EFOC) proves to be a crucial determinant in customer purchasing decisions (Kumar & Godeswar, 2015). In advance of making a purchase decision, environmentally conscious shoppers assess the substance of items (Laroche et al., 2001). Customers require businesses to engage in environmentally friendly practices which ensure that their production procedures, substances, and products effectively handle environmental issues (Gadenne et al., 2011). Consumers are more inclined to reject purchasing goods from companies suspected of polluting entities and to engage in boycotts against corporations that fail to comply with environmental standards or absurdly exploit environmental activism to boost sales (Laroche et al., 2001). Hence, a hypothesis was proposed:

H4: EFOC positively impacts GPPD.

Individuals in society often seek acknowledgement from others, leading them to use things that can elevate their social status (Sen et al., 2001). Consumers perceive that utilizing environmentally friendly merchandise grants them this appreciation (Bukhari et al., 2017). As members of the community, consumers acquire and exchange knowledge and are aware of the opinions of others on a specific product (Dholakia et al., 2004). They assess items by considering feedbacks as well as perspectives other people perspectives (Escalas & Bettman, 2005). The influence of social appeal (SA) on the development of product preferences has been identified (Lee, 2008). Within a society that prioritizes environmental sustainability, consumers generally view adopting environmentally responsible behaviours to enhance their image and embrace modern lifestyles (Grier & Deshpande, 2001). Furthermore, if individuals fail to exhibit such behaviour, they will be regarded as antiquated within the societal context (Grier & Deshpande, 2001).

Consumers' purchasing decisions are influenced by the opinions of those inside their social networks (Bearden & Rose, 1990). Individuals have apprehensions regarding the perception of others towards them based on their purchasing choices, which subsequently impact their actions (Escalas & Bettman, 2005). They intend to purchase things that align with society's opinions (Sen et al., 2001) and to shape their social status (Ozaki & Sevastyanova, 2011). The purchase decisions of green products reflect customers' desire to

be environmentally friendly and demonstrate their commitment to environmental conservation to conform to social expectations (Park & Ha, 2012; Oliver & Lee, 2010). Therefore, consumers comprehend the advantages of selecting environmentally friendly choices (Nyborg et al., 2006), which enhances their preference for expensive green items (van Dam & Fischer, 2013) and significantly impact their purchasing choices of eco-friendly products (Griskevicius et al., 2010). Hence, a hypothesis was proposed:

H5: SA positively impacts GPPD.

The green brand image (GBI) refers to collecting customers' beliefs and associations about a company, specifically related to its environmental commitments and concerns (Cretu & Brodie, 2007). The assessment of the environmentally friendly brand image comprises these components: the brand is considered the most reliable standard for environmental commitments; the brand demonstrates professionalism in terms of environmental reputation; the brand achieves success in ecological efficiency; the business has successfully established itself in effectively handling environmental concerns; and the brand is considered reliable in completing its environmental commitments (Chen, 2010).

Previous research has shown that the green image of a business has a considerable influence on consumers' purchasing decisions (Chen, 2008). Companies strive to promote themselves as sustainable, environmentally friendly, and green in order to attract consumer preference during the purchasing process (Chen, 2008). Consumers concerned about the environment align themselves with environmentally friendly brands and express their intention to purchase from them (Gadenne et al., 2011). Hence, a hypothesis was proposed:

H6: GBI positively impacts GPPD.

A green image signifies that a business is environmentally friendly and responsible and appeals to consumers who prioritize these values (Bukhari & Bhatti, 2017). Due to increasing environmental awareness and government regulations, brands must establish an image that portrays them as environmentally friendly (Jain & Kaur, 2004). Businesses engage in green marketing activities to promote their environmentally friendly products and sustainable habits and address environmental concerns associated with their brands (Hu & Wall, 2005; Corrigan, 1996; Chen et al., 2006; Porter & van der Linde, 1995; Chen, 2008, 2010). If a consumer trusts a brand to be green, it will lead him to purchase from it (Bukhari & Bhatti, 2017). Hence, hypothesises were proposed:

H7: GBI mediates the relationship between SEP and GPPD.

H8: GBI mediates the relationship between DFER and GPPD.

H9: GBI mediates the relationship between GPE and GPPD.

H10: GBI mediates the relationship between EFOC and GPPD.

H11: GBI mediates the relationship between SA and GPPD.

From the literature above, a framework was proposed:

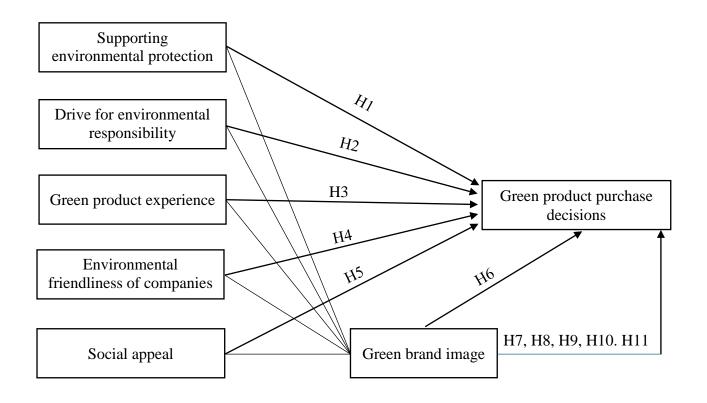


Figure 1. The proposed study model

3. Methodology

Prior to the release of the final questionnaire, it was necessary to conduct a pre-test and revise the questions (Burns & Bush, 2000). The questionnaire was given to 30 customers and professionals who could ensure its correctness and dependability by offering feedback and recommendations on the questionnaire's structure, logical coherence, pertinent scenarios, and comprehension capacity. The review procedure of this investigation enhanced the clarity of the final question sheet from the respondent's point of view. The questionnaire was divided into two sections: the first encompassed factors such as gender, age, income, education level and professional status. The second section focused on assessing the construction and evaluation of all essential variables. The sample size ranges from approximately 200 to 300, demonstrates the approximate and consistent quality of the results (Comrey & Lee, 2013). The study aimed to collect data from 350 customers who experienced green purchases in Binh Duong, Vietnam. The author made online interaction and explained the study's objectives to the respondents. The respondents could answer the questions promptly upon receiving the survey link via emails and social accounts. Consequently, a total of 347 individuals provided accurate results that are suitable for data analysis. The valid responses would be collected, while the invalid ones would be eliminated. The sampling quota was a convenience-based method for filtering suitable candidates for the sample. All the items were measured using a five-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree).

The data was inputted and examined using SPSS software version 27 to analyze the demographic data and to conduct the exploratory factor analysis (EFA). Then, the research utilized PLS-SEM using the SmartPLS version 4.1.0.0 software to check the model fit index and examine the proposed framework. PLS-SEM is a collection of statistical techniques used to examine the connections among a group of both continuous and discrete distinct variables and dependent variables (Ullman & Bentler, 2012). SEM enables the simultaneous estimation of all elements in a model and allows for estimating the causal relationship between latent concepts using indicators that combine measurement and the theoretical model's structure (Bowen & Guo, 2011). The study includes 30 sample variables and 347 effective observations, surpassing the recommended minimum sample size for SEM.

The GPE construct was measured by four variables. The DFER construct was measured by five variables. The EFOC was measured by two variables. The GPPD were measured by three variables. The SEP construct was measured by nine variables. The SA was measured by two variables. These variables were adopted from Kumar's study (2015). The GBI construct was measured by five variables, which were adopted from the study of Chen (2010), Cretu and Brodie (2007), and Padgett and Allen (1997).

4. Data analysis and findings

4.1. Demographic analysis

A total of 347 valid responses were gathered from the 350 consumers that were surveyed. **Table 1** lists the demographic characteristics. Exploratory factor analysis was used to analyze the data in order to determine and confirm the elements that made up each component. From the result shown in **Table 1**, it can be concluded that the data was accurate enough to represent the study population.

Table 1. The demographic analysis

	Frequency	Percent						
Gender (n=347)								
Male	160	46.1%						
Female	171	49.3%						
Others	16	4.6%						
Age (n=347)								
20 – 25	44	12.7%						
26 – 30	66	19%						
31 – 35	66	19%						
36 – 40	46	13.3%						
41 – 45	62	17.9%						
46 – 50	63	18.2%						
Academic qualification (n=347)								
High school or less	73	21%						
Bachelor	181	52.2%						
Postgraduate or above	93	26.8%						
Professional status (n=347)								
Student	22	6.3%						
Self-employed	100	28.8%						
Employed	225	64.8%						

Income (n=347)								
<10 million	93	26.8%						
From 11 million to 15 million	99	28.5%						
From 16 million to 20 million	57	16.4%						
From 21 million to 25 million	38	11%						
From 26 million to 30 million	26	7.5%						
Above 30 million	34	9.8%						

4.2.Measurement model

The result showed that the CMIN/DF = 2.185 (<3), GFI = 0.870 (>0.8), CFI = 0.933 (>0.9), TLI = 0.923 (>0.9), RMSEA = 0.053 (<0.06) which could be concluded the measurement model was well-suited according to the study of (Hair et al., 2011). The factor loadings for these constructs varied from 0.745 to 0.916, within the acceptable range established by Hulland (1999). Therefore, while considering the elements that explain other aspects, it was observed that these factors exhibited satisfactory variability. The item's measurement was deemed reliable overall. Hair et al. (2011) asserted that VIF values should be less than 5 to prevent issues with collinearity. The study's VIF satisfied the threshold level. The result is shown in **Table 2**.

Table 2. Constructs' properties and items' loadings

Constructs	Variables	Outer loadings	VIF	Cronbach's alpha	Average variance extracted (AVE)
	DFER1	0.869	2.574		
Drive for environmental	DFER2	0.770	1.750		0.660
responsibility	DFER3	0.765	1.730	0.870	
(DFER)	DFER4	0.808	1.944		
	DFER5	0.845	2.356		
Environmental friendliness of	EFOC1	0.909	1.708	0.783	0.822
companies (EFOC)	EFOC2	0.904	1.708	0.783	
	GBI1	0.860	2.619		
	GBI2	0.768	1.709		
Green brand image (GBI)	GBI3	0.768	1.788	0.881	0.679
	GBI4	0.838	2.661		
	GBI5	0.881	3.372		

Green product experience (GPE)	GPE1	0.837	2.007			
	GPE2	0.883	2.548	0.859	0.704	
	GPE3	0.824	1.938		0.704	
	GPE4	0.809	1.864			
Green product purchase	GPPD1	0.840	1.766			
decisions	GPPD2	0.853	1.785	0.821	0.737	
(GPPD)	GPPD3	0.882	2.125			
Social appeal (SA)	SA1	0.911	1.808	0.801	0.834	
	SA2	0.916	1.808	0.801		
	SEP1	0.837	2.305			
	SEP2	0.765	1.953			
	SEP3	0.745	2.044			
Supporting environmental	SEP4	0.763	2.446			
protection (SEP)	SEP5	0.750	4.064	0.925	0.627	
	SEP6	0.855	2.981			
	SEP7	0.824	2.398			
	SEP8	0.791	2.455			
	SEP9	0.787	2.305			

Table 3. Heterotrait-monotrait ratio (HTMT) – Matrix

	DFER	EFOC	GBI	GPE	GPPD	SA	SEP
DFER							
EFOC	0.741						
GBI	0.717	0.717					
GPE	0.717	0.738	0.731				
GPPD	0.715	0.712	0.747	0.707			
SA	0.712	0.686	0.694	0.660	0.705		
SEP	0.664	0.653	0.694	0.655	0.672	0.638	

Table 4. Fornell-Larcker criterion

	DFER	EFOC	GBI	GPE	GPPD	SA	SEP
DFER	0.812						
EFOC	0.613	0.907					
GBI	0.628	0.595	0.824				
GPE	0.619	0.605	0.636	0.839			
GPPD	0.607	0.571	0.636	0.594	0.858		
SA	0.595	0.543	0.582	0.547	0.573	0.913	
SEP	0.598	0.556	0.628	0.585	0.588	0.551	0.792

This study examined the internal consistency and reliability of the constructs using the composite reliability (CR) devised by Jöreskog (1971). The indicator values corresponded to various degrees of approval. Drolet & Morrison (2001) found that the ideal levels of dependability fell within the range of 0.7 to 0.9, while acceptable values of reliability fell within the range of 0.6 to 0.7. Since the model fit statistics have satisfied the predetermined threshold levels set by Hair et al. (2011), we can conclude that the measurement items accurately represent their underlying latent construct. Subsequently, the measurement model was employed to evaluate the convergent and discriminant validity of the measurement scales. The study found that all constructs had a coefficient of reliability (CR) greater than 0.7. The study model's vital dependability and internal consistency were demonstrated by every construct, as Netemeyer et al. (2003) mentioned. This study also determined that a Cronbach's alpha value greater than 0.7 is adequate. To evaluate the convergent validity of a construct, the average extracted variation (AVE) should exceed 0.5 (Hair et al., 2011). The AVE value in this study varied between 0.627 and 0.834, suggesting convergent validity.

Similarly, the Heterotrait-Monotrait Ratio of Correlations (HTMT), as presented in **Table 3** by Henseler et al. (2015), indicates that all the values are below the predetermined threshold of 0.9. Thus, the assessment model exhibits enough accuracy to proceed with the following phase of the research, which involves analysing the structural model.

The author used two approaches to assess discriminant validity: the Fornell-Larcker criterion and the Heterotrait-Monotrait Ratio of Correlations (HTMT). The Fornell-Larcker criterion asserts that the Average Variance Extracted (AVEs) square roots are more statistically significant than the cross-construct correlations (Roldán & Sánchez-Franco, 2012). The evidence shown in **Table 4** suggests that almost all the constructs exhibit sufficient discriminant validity.

4.3. Structural model

Table 5. The structural model

Relationships	Н	0	M	STDEV	T	P	Decisions
SEP → GPPD	H1	0.142	0.143	0.051	2.0787	0.005	Accepted
DFER → GPPD	H2	0.147	0.146	0.058	2.0529	0.011	Accepted
GPE → GPPD	НЗ	0.133	0.133	0.054	2.0472	0.013	Accepted
EFOC → GPPD	H4	0.112	0.111	0.053	2.0130	0.033	Accepted

SA → GPPD	Н5	0.147	0.146	0.052	2.0811	0.005	Accepted
GBI → GPPD	Н6	0.218	0.216	-0.002	0.107	0.329	Accepted
SEP → GBI → GPPD	Н7	0.050	0.050	0.018	2.0735	0.006	Accepted
DFER → GBI → GPPD	Н8	0.038	0.037	0.016	2.0304	0.021	Accepted
GPE → GBI → GPPD	Н9	0.049	0.048	0.017	2.0902	0.004	Accepted
EFOC → GBI → GPPD	H10	0.031	0.030	0.013	2.0327	0.020	Accepted
SA → GBI → GPPD	H11	0.033	0.032	0.014	2.0336	0.020	Accepted

H: Hypothesis; O: Original sample; M: Sample mean; STDEV: Standard deviation; T: T statistics (|O/STDEV|); P: P values

The study demonstrated a statistically significant relationship (p<0.05) between SEP and GPPD. It supports hypothesis H1, which suggests that those with a positive inclination towards green items are more inclined to buy green products. This outcome aligns with the research conducted by Follows and Jobber (2000), Gadenne et al. (2011) and Escalas and Bettman (2005), who found that customers who are aware of the environmental impact of their consumption habits tend to make ecologically conscious purchasing decisions.

The statistical analysis reveals a substantial correlation between customers' DFER and their purchase of green products (p<0.05). This finding supports hypothesis H2, which suggests that consumers who are conscious of their obligations towards the environment are more willing to buy environmentally friendly products. This discovery aligns with the findings of Lee (2009) and Gadenne et al. (2011), who confirmed that consumers who recognise the significant impact of their activities on environmental quality are more likely to intend to make environmentally friendly purchases.

The study also found substantial evidence (p<0.001) for the positive connection between customers' experience with green products and their purchase decisions about sustainable products (H3). The results of this study align with the findings of D'Souza et al. (2006), Laroche et al. (2001) and Kim and Chung (2011), which demonstrated a positive relationship between customers' experience with green products and their environmentally friendly purchases. Oliver and Lee (2010) discovered that a willingness to gather knowledge regarding green products strongly correlates with green purchases.

The study also provides proof of a relationship between the EFOC and customers' decisions to purchase green products (H4) (p<0.001). This finding aligns with the results of Laroche et al. (2002), who also observed a positive association between these two factors. Consumers tend to purchase products from companies that demonstrate environmentally friendly behaviour, while they tend to criticise companies that do not (Kumar, 2015).

Additionally, the statistical analysis reveals a positive relationship (H5) (p < 0.05) between SA and the decision to purchase green products. It suggests that those who aspire to be part of an ecologically conscious community and uphold environmentally sustainable lifestyles are more inclined to buy environmentally friendly products. This finding is in agreement with the results reported by Lee (2009), Oliver and Lee (2010), Ozaki and Sevastyanova (2011), Nyborg et al. (2006), van Dam and Fischer (2013), Griskevicius et al. (2010).

Moreover, the study outcome also illustrates the direct positive impact of GBI on customers' GPPD. People who care about the environment engage with eco-friendly brands to show their intention to purchase

from them. It is aligned with the findings of Gadenne et al. (2011). This finding also aligns with the findings of Salfina and Gusri (2018) and Windiana et al. (2020), which indicate that brand image benefits consumers' purchase decisions. The study conducted by Alamsyah and Mohammed (2019) shows that customers are more inclined to adopt environmentally friendly items when they perceive a brand to have an environmentally friendly image.

The outcome also confirms the mediating role of GBI in the effect of green product experience, DFER, EFOC, support environmental protection, and SA on GPPD. Consumers actively attempt to acquire information about environmentally friendly products from their surrounding environment and possessions to respond favourably to environmental issues (Hamilton & Sherman, 1996). Consumers often attempt to determine whether brands have a favourable environmental reputation (Bukhari et al., 2017).

5. Discussions and implications

5.1. Discussions

Consumers actively seek information on environmentally friendly items in their daily lives and goods to respond positively to environmental issues (Hamilton & Sherman, 1996). Consumers frequently aim to ascertain whether businesses possess a commendable environmental reputation. Recent studies on green consumerism have increasingly concentrated on the buying habits of environmentally friendly items. This study aims to gain a deeper understanding of the perspectives held by customers who purchase environmentally friendly items and how these perspectives can mitigate the ecological ramifications of their consumption patterns. The results of this study indicate that Vietnamese consumers have a notable degree of environmental consciousness, as demonstrated by their decisions to buy environmentally friendly products. They prioritize environmental conservation, recognize their duty to protect the environment, acknowledge the presence of environmental issues and potential solutions at an individual level, actively seek out environmental information about products, and make environmentally conscious purchasing choices. They assess and appraise environmentally-friendly products based on their own set of standards in order to make informed purchasing decisions. Therefore, the demand for environmentally friendly items is contingent upon the particular ecological attributes that consumers want in these products.

The correlation between SEP and a DFER with the decision to buy green products confirms that buying eco-friendly items requires a careful and conscious assessment of such products' environmental, individual, and social impacts. Additionally, it suggests that customers ask for satisfaction of their helpful, affective, and emotional demands, which impact their buying decisions. It demonstrates the adoption of an ecologically conscious lifestyle by their consumption habits and the importance of green items. Marketing specialists for environmentally friendly products should effectively convey how acquiring, utilising, and discarding these products directly addresses consumers' concerns about conservation of the environment and their duties with relation to the environment. It is essential to examine the environmental attributes of green products and comprehend how they may be effectively marketed to align with the individual preferences of the target demographics. Focused on customer strategies effectively turns customers' encouragement of environmental protection and desire for social responsibility into decisions to purchase green products.

The study observed that the GPEencompasses acquiring specialised knowledge about the product, including its properties and features, and experiencing emotions associated with and engaging with it. It is reflected in the activities of seeking and exchanging knowledge and in the utilisation and possession of products. The product experience encompasses seeking and disseminating knowledge about items' distinctive environmental characteristics and qualities. The strong correlation between the experience of using green products and the choice to purchase them highlights the importance of the functional, emotional, and experiential advantages green products offer in purchasing decisions linked to green products. Marketers should advertise green products by providing educational opportunities and facilitating knowledge exchange.

The research discovered a significant association between the EFOC and environmentally friendly purchase decisions. The impact of companies' environmental friendliness on consumer purchase decisions of green products can be determined by investigating how truths about enterprises' environmental actions

influence clients' assessments and awareness of enterprises' environmental behaviour and the environmental consequences of the products. Therefore, consumers prioritising the environment expect businesses to perform their duties using environmentally responsible techniques. They prefer purchasing things from firms that demonstrate sustainability. Conversely, they choose not to buy products from companies accused of causing pollution. Marketers must recognise the importance of the environmental impact of their company's activities on the purchasing behaviour of environmentally conscious consumers. It has further ramifications for corporations to adhere to environmental standards to gain consumer acceptance of their products.

A further investigation was conducted to examine the correlation between SA and decisions made while purchasing environmentally friendly products. The significant relationship indicates that the perspectives of others on an individual's actions significantly impact consumers' purchasing decisions when it comes to environmentally friendly products. Consumers purchase green products when these products are widely acknowledged as symbols of endorsing environmental conservation, expressing consumers' self-image, and reflecting a positive societal significance. Individuals aspiring to achieve a social standing characterised by moral integrity, strong views on issues, and a commitment to environmental responsibility choose to embrace an eco-friendly lifestyle, actively acquire green products, and incorporate them into their consumption habits. Therefore, when marketers introduce an environmentally friendly product into the Vietnamese market, this discovery can be valuable to them in formulating marketing strategies and promotional strategies. In their advertising campaigns, marketers targeting the Vietnamese market for green products should prioritise associating enhanced self-esteem with environmentally friendly items.

A consumer's positive perception of a GBI is closely linked with their likelihood of purchasing. The demand for green products will rise if they can demonstrate their qualities in terms of high product quality. In this scenario, the product's quality must surpass competing products. If the product has a noticeable impact after its use, many consumers will likely be fond of it. In order to enhance the excellent perception of a green product brand, businesses must persistently develop and introduce innovative green products, stimulating customer purchase decisions. Developing a positive GBI is essential to enhance consumer purchase decisions.

The study outcome also highlights the mediating role of GBI in the relationship between SEP, DFER, green product experience, EFOC, SA and GBI. Organisations increasingly strive to cultivate a green brand besides their brand image. The presence of a GBI signifies that a brand is part of the broader set of consumers who are environmentally conscious and responsible. Due to growing awareness of the environment among customers, brands are pressured to be environmentally responsible. As a result, brands try to foster an image that portrays them as environmentally conscious and sustainable.

Similarly, businesses develop initiatives associated with corporate social responsibility to enhance their reputation. Additionally, green advertising campaigns are conducted to portray the green products, green behaviours, and sustainability priorities of brands. The notion of planned behaviour states that an individual's thoughts directly influence their behaviours. Similarly, when a consumer has confidence in a brand's commitment to sustainability, it will motivate them to purchase that brand.

5.2. Managerial implications

This research has implications for marketers responsible for formulating marketing strategies for environmentally friendly items in the Vietnamese market. The study's findings suggest that marketing experts should establish a connection between green products and consumers' perception. Additionally, the marketing of environmentally-friendly products should provide consumers with accurate information regarding the environmental impact of the companies, details about the green products themselves, alignment with their desired social image, and value to their lifestyles. Therefore, it is crucial for businesses to thoroughly comprehend the requirements of their consumer categories and subsequently tailor their positioning of green products to meet those needs.

Marketers should increase customer awareness about sustainability. They can successfully address this issue by using marketing communication strategies to highlight the environmental issues nowadays.

Businesses should also let customers realise how urgent it is to reduce the adverse effects on the environment by consuming more sustainable goods. Hence, marketers can efficiently employ social media channels to communicate these issues. This study also highlights the essential role of GBI in encouraging customers to purchase green products. Hence, firms can utilize the advantages of social media platforms to promote their green image to customers. Customers who perceive the green image of the business tend to purchase more.

This study contributes to comprehending environmentally conscious consumers in the Vietnamese context. It provides valuable insights into the factors that drive consumer demand for eco-friendly items in the Vietnamese market. The results can be utilised by green product managers seeking to understand the fundamental behaviour of potential green product customers. Therefore, marketers can utilise these tools to efficiently engage with consumers to sustain or expand their share of the marketplace.

5.3. Theoretical implications

This study provides a theoretical contribution to understanding the elements influencing GPPD in the Vietnamese market, which can be considered to be the survival of businesses. The study specifically examines the importance of the GPEand the environmental friendliness of enterprises in influencing the purchasing decisions of Vietnamese customers when it comes to green products. Vietnamese consumers prioritise the GPEand the EFOC when making purchasing decisions for green products rather than solely considering the product's greenness or environmental consciousness. Additionally, the study acknowledges the importance of SEP and driving for environmental responsibility when purchasing green products.

5.4. Limitations and future research direction

This study has certain limitations. The sample data were collected from Binh Duong and may have represented only some Vietnamese population. Future studies should take samples from other locations. Secondly, the research only focuses on the food industry, which may not generate accurate results for other industries. Thus, future research should be conducted in various sectors. Third, the research utilized convenience sampling, limiting its generalizability. In order to ensure the generalizability of the findings, future research should employ probability sampling. Furthermore, this study used a cross-sectional approach to gather data from a particular moment. Future research should include a longitudinal approach, enabling researchers to observe the study aspects' evolution over time.

5.5. Conclusions

The purchasing decisions of Vietnamese customers for green products are highly influenced by SEP and DFER, green product experience, EFOC, SA and GBI. Vietnamese customers seek to acquire knowledge about environmentally friendly items, enhance their understanding of such products, and actively engage with them. To do this, they actively research information about environmentally friendly products and seek advice from their peers. In addition, they prefer purchasing products from companies that demonstrate ecologically responsible behaviour. Conversely, they actively avoid purchasing products from organisations accused of being polluters. Additionally, they exchange their experiences regarding environmentally friendly products and, as a result, perceive the social desirability of supporting environmental conservation.

Reference

- 1. Alamsyah, D. P., & Muhammed, H. A. A. (2019). Antecedents of green awareness for Eco-Friendly Products. *ASEAN Marketing Journal*, *10*(2), 3.
- 2. Ambec, S., & Lanoie, P. (2008). Does it pay to be green? A systematic overview. *The Academy of Management Perspectives*, 45-62.
- 3. Barber, N., Taylor, C., & Strick, S. (2009). Wine consumers' environmental knowledge and attitudes: Influence on willingness to purchase. *International Journal of Wine Research*, 59-72.
- 4. Barr, S., & Gilg, A. (2006). Sustainable lifestyles: Framing environmental action in and around the home. *Geoforum*, *37*(6), 906-920.
- 5. Bearden, W. O., & Rose, R. L. (1990). Attention to social comparison information: An individual difference factor affecting consumer conformity. *Journal of Consumer Research*, 16(4), 461-471.

- 6. Bowen, N. K., & Guo, S. (2011). Structural equation modeling. Oxford University Press.
- 7. Bukhari, A., Rana, R. A., & Bhatti, U. T. (2017). Factors influencing consumer's green product purchase decision by mediation of green brand image. *International Journal of Research*, 4(7), 1620-1632.
- 8. Burns, A.G. and Bush, R.F. (2000). Marketing Research, (3rd. ed.). *Upper Saddle River*, NJ: Prentice Hall.
- 9. Cegarra-Navarro, J. G., & Martinez, A. M. (2010). Managing environmental knowledge through learning processes in Spanish hospitality companies. *The Spanish Journal of Psychology*, 13(2), 827-840.
- 10. Chang, T. W., Chen, Y. S., Yeh, Y. L., & Li, H. X. (2021). Sustainable consumption models for customers: Investigating the significant antecedents of green purchase behavior from the perspective of information asymmetry. *Journal of Environmental Planning and Management*, 64(9), 1668-1688.
- 11. Cheah, I., & Phau, I. (2011). Attitudes towards environmentally friendly products: The influence of ecoliteracy, interpersonal influence and value orientation. *Marketing Intelligence & Planning*, 29(5), 452-472.
- 12. Chen, Y. S. (2008). The driver of green innovation and green image—green core competence. *Journal of business ethics*, 81, 531-543.
- 13. Chen, Y. S. (2008). The positive effect of green intellectual capital on competitive advantages of firms. *Journal of business ethics*, 77, 271-286.
- 14. Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business ethics*, *93*, 307-319.
- 15. Chen, Y. S., Lai, S. B., & Wen, C. T. (2006). The influence of green innovation performance on corporate advantage in Taiwan. *Journal of business ethics*, 67, 331-339.
- 16. Choi, D., & Johnson, K. K. (2019). Influences of environmental and hedonic motivations on intention to purchase green products: An extension of the theory of planned behavior. *Sustainable Production and Consumption*, 18, 145-155.
- 17. Comrey, A. L., & Lee, H. B. (2013). A first course in factor analysis. Psychology press
- 18. Corrigan, J. (1996). How a green image can drive Irish export growth. *Greener Management International*, (16).
- 19. Cretu, A. E., & Brodie, R. J. (2007). The influence of brand image and company reputation where manufacturers market to small firms: A customer value perspective. *Industrial marketing management*, 36(2), 230-240.
- 20. D'Souza, C., Taghian, M., Lamb, P., & Peretiatkos, R. (2006). Green products and corporate strategy: an empirical investigation. *Society and business review*, *1*(2), 144-157.
- 21. de Medeiros, J. F., & Ribeiro, J. L. D. (2013). Market success factors of sustainable products. *Independent Journal of Management & Production*, 4(1), 188-207.
- 22. Dholakia, U. M., Bagozzi, R. P., & Pearo, L. K. (2004). A social influence model of consumer participation in network-and small-group-based virtual communities. *International journal of research in marketing*, 21(3), 241-263.
- 23. Drolet, A. L., & Morrison, D. G. (2001). Do we really need multiple-item measures in service research? *Journal of service research*, 3(3), 196-204.
- 24. Escalas, J. E., & Bettman, J. R. (2005). Self-construal, reference groups, and brand meaning. *Journal of consumer research*, 32(3), 378-389.
- 25. Follows, S. B., & Jobber, D. (2000). Environmentally responsible purchase behaviour: a test of a consumer model. *European journal of Marketing*, *34*(5/6), 723-746.
- 26. Forkink, A. (2010). Perception, awareness, and acceptance of green kitchen cleaners: go green market research. *Retrieved February*, *6*, 2011.
- 27. Gadenne, D., Sharma, B., Kerr, D., & Smith, T. (2011). The influence of consumers' environmental beliefs and attitudes on energy saving behaviours. *Energy policy*, *39*(12), 7684-7694.
- 28. General Statistics Office of Vietnam. Vietnam Household Living Standards Survey 2012; GSO: Hanoi, Vietnam, 2014.
- 29. Grier, S. A., & Deshpandé, R. (2001). Social dimensions of consumer distinctiveness: The influence of social status on group identity and advertising persuasion. *Journal of Marketing Research*, 38(2), 216-224.

- 30. Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: status, reputation, and conspicuous conservation. *Journal of personality and social psychology*, 98(3), 392.
- 31. Gurău, C., & Ranchhod, A. (2005). International green marketing: A comparative study of British and Romanian firms. *International marketing review*, 22(5), 547-561.
- 32. Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed, a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-152.
- 33. Hamilton, D. L., & Sherman, S. J. (1996). Perceiving persons and groups. *Psychological review*, 103(2), 336.
- 34. Hansen, M. G. (2009). Environmental engagement and product knowledge among consumers of electric light bulbs in Albany, California. *published in ES196 May*, 1-12.
- 35. Hart, S. L. (1995). A natural-resource-based view of the firm. *Academy of management review*, 20(4), 986-1014.
- 36. Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the academy of marketing science*, 43, 115-135.
- 37. Hu, W., & Wall, G. (2005). Environmental management, environmental image and the competitive tourist attraction. *Journal of sustainable tourism*, *13*(6), 617-635.
- 38. Hulland, J. (1999). Use of partial least squares (PLS) in strategic management research: A review of four recent studies. *Strategic management journal*, 20(2), 195-204.
- 39. Jain, S. K., & Kaur, G. (2004). Green Marketing: An Indian Perspective. *Decision* (0304-0941), 31(2).
- 40. Johri, L. M., & Sahasakmontri, K. (1998). Green marketing of cosmetics and toiletries in Thailand. *Journal of consumer marketing*, 15(3), 265-281.
- 41. Jöreskog, K. G. (1971). Statistical analysis of sets of congeneric tests. *Psychometrika*, 36(2), 109-133.
- 42. Khare, A. (2014). Consumers' susceptibility to interpersonal influence as a determining factor of ecologically conscious behaviour. *Marketing intelligence & planning*, 32(1), 2-20.
- 43. Kilbourne, W., & Pickett, G. (2008). How materialism affects environmental beliefs, concern, and environmentally responsible behavior. *Journal of business research*, 61(9), 885-893.
- 44. Kumar, P., & Ghodeswar, B. M. (2015). Factors affecting consumers' green product purchase decisions. *Marketing Intelligence & Planning*, 33(3), 330-347.
- 45. Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of consumer marketing*, 18(6), 503-520.
- 46. Lee, D. H. (1990). Symbolic Interactionism: Some Implications for Consumer Self-Concept and Product Symbolism Research. *Advances in consumer research*, 17(1).
- 47. Lee, K. (2008). Opportunities for green marketing: young consumers. *Marketing intelligence & planning*, 26(6), 573-586.
- 48. Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behavior. *Journal of consumer marketing*, 26(2), 87-96.
- 49. Luchs, M. G. et al. 2010. The Sustainability Liability: Potential Negative Effects of Ethicality on Product Preference. *Journal of Marketing* 74: 18–31.
- 50. Nayak, R., Akbari, M., & Far, S. M. (2019). Recent sustainable trends in Vietnam's fashion supply chain. *Journal of Cleaner Production*, 225, 291-303.
- 51. Netemeyer, R. G., Bearden, W. O., & Sharma, S. (2003). Scaling procedures: Issues and applications.
- 52. Nguyen, H. V., Nguyen, N., Nguyen, B. K., Lobo, A., & Vu, P. A. (2019). Organic food purchases in an emerging market: The influence of consumers' personal factors and green marketing practices of food stores. *International journal of environmental research and public health*, 16(6), 1037.
- 53. Nguyen, T. K. C., Nguyen, D. M., TRINH, V. T., TRAN, T. P. D., & CAO, T. P. (2020). Factors affecting intention to purchase green products in Vietnam. *The Journal of Asian Finance, Economics and Business*, 7(4), 205-211.
- 54. Nguyen, T. N., Nguyen, H. V., Lobo, A., & Dao, T. S. (2017). Encouraging Vietnamese household recycling behavior: Insights and implications. *Sustainability*, *9*(2), 179.

- 55. Nguyen, X. H., Nguyen, T. T., Anh Dang, T. H., Dat Ngo, T., Nguyen, T. M., & Anh Vu, T. K. (2024). The influence of electronic word of mouth and perceived value on green purchase intention in Vietnam. *Cogent Business & Management*, 11(1), 2292797.
- 56. Nyborg, K., Howarth, R. B., & Brekke, K. A. (2006). Green consumers and public policy: On socially contingent moral motivation. *Resource and energy economics*, 28(4), 351-366.
- 57. Oliver, J. D., & Lee, S. H. (2010). Hybrid car purchase intentions: a cross-cultural analysis. *Journal of consumer marketing*, 27(2), 96-103.
- 58. Ozaki, R., & Sevastyanova, K. (2011). Going hybrid: An analysis of consumer purchase motivations. *Energy policy*, 39(5), 2217-2227.
- 59. Padgett, D., & Allen, D. (1997). Communicating experiences: A narrative approach to creating service brand image. *Journal of advertising*, 26(4), 49-62.
- 60. Palevich, R. (2011). Lean sustainable supply chain the: How to create a green infrastructure with lean technologies. Ft press.
- 61. Papadopoulos, I., Karagouni, G., Trigkas, M., & Platogianni, E. (2010). Green marketing: The case of Greece in certified and sustainably managed timber products. *EuroMed Journal of Business*, 5(2), 166-190.
- 62. Park, J., & Ha, S. (2012). Understanding pro-environmental behavior: A comparison of sustainable consumers and apathetic consumers. *International Journal of Retail & Distribution Management*, 40(5), 388-403.
- 63. Porter, M. E., & Linde, C. (1995). van der (1995). Green and competitive: ending the stalemate. *Harvard Business Review*, 73(5), 120-134.
- 64. Salfina, L., & Gusri, H. (2018). Pengaruh citra merek, kualitas produk dan harga terhadap minat beli pakaian anak-anak studi kasus Toko Rizky dan Afdal Pariaman. *Jurnal Indovisi*, *1*(1), 232801.
- 65. Sen, S., Gürhan-Canli, Z., & Morwitz, V. (2001). Withholding consumption: A social dilemma perspective on consumer boycotts. *Journal of Consumer research*, 28(3), 399-417.
- 66. Situmorang, T. P., Indriani, F., Simatupang, R. A., & Soesanto, H. (2021). Brand positioning and repurchase intention: The effect of attitude toward green brand. *The Journal of Asian Finance, Economics and Business*, 8(4), 491-499.
- 67. Ullman, J. B., & Bentler, P. M. (2012). Structural equation modeling. *Handbook of Psychology, Second Edition*, 2.
- 68. van Dam, Y. K., & Fischer, A. R. (2015). Buying green without being seen. *Environment and Behavior*, 47(3), 328-356.
- 69. Van Huy, L., Chi, M. T. T., Lobo, A., Nguyen, N., & Long, P. H. (2019). Effective segmentation of organic food consumers in Vietnam using food-related lifestyles. *Sustainability*, *11*(5), 1237.
- 70. Windiana, L., Bakhtiar, A., Kurniasih, V. R., & Basamah, S. (2020). The Effect of Green Marketing toward the Consumers Buying Interest of Starbucks Coffee Mediated By Brand Image. *Habitat*, 31(1), 36-41.
- 71. Yam-Tang, E. P., & Chan, R. Y. (1998). Purchasing behaviours and perceptions of environmentally harmful products. *Marketing Intelligence & Planning*, *16*(6), 356-362.
- 72. Yang, Z., Nguyen, T. T. H., Nguyen, H. N., Nguyen, T. T. N., & Cao, T. T. (2020). Greenwashing behaviours: Causes, taxonomy and consequences based on a systematic literature review. *Journal of Business Economics and Management*, 21(5), 1486-1507.
- 73. Yeon Kim, H., & Chung, J. E. (2011). Consumer purchase intention for organic personal care products. *Journal of consumer Marketing*, 28(1), 40-47.
- 74. Zhao, H. H., Gao, Q., Wu, Y. P., Wang, Y., & Zhu, X. D. (2014). What affects green consumer behavior in China? A case study from Qingdao. *Journal of Cleaner Production*, 63, 143-151.
- 75. Zuraidah, R., Hashima, H., Yahya, K., & Mohamad, S. (2012). Environmental conscious behaviour among male and female Malaysian consumers. *OIDA International Journal of Sustainable Development*, 4(8), 55-64.