

Factors Influencing Purchase Intention of Bamboo, Rattan and Schizostachyum Aciculare Products Among Consumers: The Moderating Role of Self-Efficacy



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ABSTRACT

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The utilization of bamboo, rattan and Schizostachyum aciculare in crafting items reflects the cultural heritage of Vietnam. These products not only contribute to environmental protection and human well-being but also generate economic benefits for the community while enhancing the value of Vietnamese bamboo, rattan and Schizostachyum aciculare resources. This study aimed to examine the factors influencing consumers' purchasing decisions regarding bamboo, rattan and Schizostachyum aciculare products in Vietnam. A sample of 426 consumers in Vietnam was surveyed using a non-probability sampling method, and the research hypotheses were tested using Smart-PLS software. The results indicate that subjective norms, uniqueness, perceived quality, environmental concerns, and attitudes towards bamboo, rattan, and Schizostachyum aciculare products have a direct impact on purchase behavior. Additionally, self-efficacy plays a moderating role in the relationship between attitudes and purchase intention, as well as between environmental concern and purchase intention. Based on the findings, the authors will propose managerial implications for businesses to develop the strategies that attract and promote consumers' intentions to purchase bamboo, rattan and Schizostachyum aciculare products.

1. INTRODUCTION

Currently, the environment is facing various issues, such as environmental pollution, resource depletion, and climate change. These issues pose demands for sustainable development in society, including green consumption. Products made from bamboo, rattan and Schizostachyum aciculare, known for their durability, diverse designs, and limited environmental impact, are a good choice for green consumption behavior [1]. According to the Market Report (2024), the market for bamboo products is projected to increase from \$70.59 billion in 2023 to \$75.12 billion in 2024, with a CAGR of 6.4% [2]. Similarly, the market for rattan products is predicted to have a CAGR of 6.5% from 2023 to 2029. In Vietnam, handcrafted products have been exported to over 163 countries and territories worldwide, with an annual sales revenue of about \$2.2 billion. Handcrafted products are also listed among the top 10 export items, with the United States accounting for 35% of the total export value [3]. The majority of consumers in Vietnam have demonstrated positive actions toward environmental protection. Furthermore, the findings from a survey indicate that a significant proportion, approximately 60%, of consumers exhibit environmental awareness by embracing green products. This group of consumers demonstrates a willingness to pay premium prices for environmentally friendly products and expresses concerns regarding the use of synthetic materials [4]. However, the domestic market for bamboo, rattan and Schizostachyum

aciculare handcrafted products remains sluggish despite the undeniable environmental benefits of these products.

The theory of planned behavior (TPB), originally introduced by Ajzen and Fishbein [5] in 1975, suggests that behavioral intentions are shaped by attitudes, subjective norms, and perceived behavioral control. From a research perspective, based on the TPB, previous studies have indicated that individuals with positive attitudes toward green consumption [6], conformity to social norms supporting green consumerism [7], and environmental concern [8, 9] are likely to have positive intentions and engage in green consumption behavior. However, other studies have also concluded that attitudes alone are not sufficient predictors of intentions or behavior [10-12]. The gap between attitudes, intentions, and actual consumption is referred to as the green gap [11, 13]. A limited number of studies that have examined additional moderating factors, such as perceived behavioral control, have explored this research gap [14]. However, perceived behavioral control is a broad construct that cannot capture the specificity required for different types of green products such as bamboo or rattan. By incorporating self-efficacy, a specific component of perceived behavioral control, this study aims to bridge this research gap.

According to BRT, attitudes reflect individuals' positive or negative evaluations of specific behaviors, and consumers' attitudes are formed through reasoning processes [15]. When individuals possess strong rationality, they are more likely to positively support and evaluate a particular behavior, thus

developing the necessary motivation to engage in that behavior [16]. The BRT's reasons might be uniqueness [17] and perceived quality [18].

2. LITERATURE REVIEW

2.1 Theories

2.1.1 Behavioral reasoning theory (BRT)

The BRT was initially proposed by Westaby [19] in 2005. A conceptual framework is provided for analyzing the relative significance of "reasons for" and "reasons against" an individual's intentions to adopt an innovation. The theory aimed to address individuals' theoretical and empirical importance by employing justifications, explanations, and reasons to rationalize their actions. Within the domain of green products, such as environmentally friendly products, individuals may be motivated to use them due to their environmental concerns. This choice reflects their dedication and comprehension of the environmental consequences associated with these products. BRT establishes crucial empirical connections between values, beliefs, justifications (for and against), attitudes, and behavioral intentions.

Behavioral intention, which is influenced by several motivating factors such as attitudes, subjective norms, and perceived behavioral control, is the key predictor of behavior, as posited by behavior recognition theory (BRT). Academic researchers have extensively employed BRT to investigate consumer behavior across diverse contexts. For instance, Westaby et al. [20], Norman et al. [21], Claudy et al. [22], Claudy et al. [23], Gupta and Arora [24], Tandon et al. [25], and Dhir et al. [26] have employed BRT in their studies on consumer behavior.

2.1.2 The theory of planned behaviour (TPB)

The TPB, initially proposed by Fishbein and Belief [27] in 1975, suggests that intentions are influenced by attitudes, subjective norms, and perceived behavioral control [28]. It is among the most extensively studied models in the field of social psychology when it comes to predicting behavioral intentions [29-32]. Furthermore, the TPB is widely utilized in numerous research studies that investigate consumer behavior related to environmentally friendly choices [9, 33-39].

In response to the growing demand for environmentally friendly consumption to mitigate climate change, this study aims to investigate the factors that influence consumers' purchase behavior toward bamboo, rattan, and *Schizostachyum aciculare* products. The findings indicate that factors such as uniqueness, subjective norms, environmental concerns, perceived quality, and attitudes all shape consumers' purchase intentions for bamboo, rattan, and *Schizostachyum aciculare* products. Additionally, the study identifies the moderating effect of self-efficacy, which helps bridge the gap between consumers' attitudes and purchase intentions. Based on these results, the authors propose several managerial implications for businesses and organizations operating within the bamboo, rattan, and *Schizostachyum aciculare* industries.

2.1.3 Bamboo, rattan and *Schizostachyum aciculare* products

Bamboo has a long history of use across various industries, including fuel and food production, fence-making, vegetable baskets, and decorative items. In modern times, bamboo continues to find applications in paper production,

construction materials, furniture, and it holds significant importance in the handicraft industry [40]. Bamboo stems are utilized as interior frame structures or processed through splitting, peeling, or core extraction to create mats and woven baskets. The applications of bamboo weaving are diverse, ranging from bridge construction to baskets, fish traps, and furniture [41]. Woven bamboo is extensively employed for various purposes within local communities and plays a vital role in the livelihoods of rural populations [42].

2.2 Hypotheses development

2.2.1 Subjective norms and intention to purchase bamboo, rattan and *Schizostachyum aciculare* products

"Subjective norms" refer to the perceived social pressure to engage or refrain from engaging in a particular behavior, as defined by Ajzen [28] and cited in Han and Kim [43]. Park [44] and Zhang et al. [45] emphasize the influence of close individuals such as friends, family members, colleagues, or business partners and their substantial impact on shaping subjective norms. When consumers hold positive subjective norms regarding a specific behavior, they are more inclined to develop positive intentions related to that behavior [43, 46]. Building on this understanding, the authors proposed the hypothesis:

H1: Subjective norms positively influence the intention to purchase bamboo, rattan and *Schizostachyum aciculare* products.

2.2.2 Perceived quality and intention to purchase bamboo, rattan and *Schizostachyum aciculare* products

Enhanced product quality facilitates consumers' acceptance and development of brand loyalty [47, 48]. Perceived quality refers to consumers' overall evaluation of a product's quality, encompassing a comprehensive assessment [49]. It holds significant importance in customers' decision-making processes and their subsequent brand loyalty. Researches conducted by Aigbe [39], Yang [50], Saleem et al. [51], and Lomboan [18] have demonstrated that the intention to purchase environmentally friendly products and traditional fabrics is positively and directly influenced by perceived product quality. Based on these findings, the authors proposed the hypothesis:

H7: Perceived quality positively influences the intention to purchase bamboo, rattan and *Schizostachyum aciculare* products.

2.2.3 Uniqueness and intention to purchase bamboo, rattan and *Schizostachyum aciculare* products

Uniqueness has been a subject of study in various research models related to fashion products and consumer behavior, with the aim of capturing the desire for distinctiveness and the positive pursuit of differentiation to cultivate a unique personal image among consumers [52-54]. Handicraft products possess a distinct characteristic due to the high involvement of individuals in their creation, being handmade, and reflecting unique personal values [17]. This desire for uniqueness can significantly influence consumers' decisions to purchase handicraft products [55, 56]. Building upon these insights, the authors proposed the hypothesis:

H5: Uniqueness positively influences the intention to purchase bamboo, rattan and *Schizostachyum aciculare* products.

2.2.4 Environmental concern and intention to purchase bamboo, rattan and Schizostachyum aciculare products

Environmental concern plays a crucial role in shaping individuals' purchase intentions by impacting their attitudes, subjective norms, and perceived behavioral control [37]. It signifies an individual's dedication to ecological issues and environmental protection, demonstrating a sense of involvement and awareness of environmental consequences [38]. Studies conducted by Aigbe [39], Zhao et al. [9], and Tanwir and Hamzah [8] has provided evidence that environmental concern, also known as environmental consciousness, exerts a favorable influence on the intention to purchase green products. Building on these findings, the authors proposed the hypothesis:

H10: Environmental concern positively influences the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

2.2.5 Attitudes toward bamboo, rattan and Schizostachyum aciculare products and intention to purchase bamboo, rattan and Schizostachyum aciculare products

When consumers are concerned about environmental impacts and believe that companies and businesses should prioritize an "eco-friendly" image in their production practices, their attitudes toward behavior becomes a significant consideration. However, this attitude may not necessarily translate into a positive attitude when making purchasing decisions [57]. Extensive research on green consumer behavior has consistently demonstrated that attitudes have a direct and positive influence on the intention to purchase green products [6, 38]. Building on these insights, the authors proposed the hypothesis:

H12: Attitudes toward bamboo, rattan and Schizostachyum aciculare products positively influence the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

2.2.6 Attitudes toward bamboo, rattan and Schizostachyum aciculare products and subjective norms

According to Ajzen's TPB, there exists a predictive relationship between consumers' attitudes toward a product or service and their subjective norms [28]. Wu [58] found that subjective norms can directly influence attitudes, and the two variables have a significant interrelationship. When individuals receive positive support from important others or organizations, their attitudes also tend to become more positive [59]. Based on this theoretical foundation, Kim et al. [60] and Xu et al. [61] also demonstrated that subjective norms directly influence attitudes. However, in the context of makeup product purchases in Sweden, studies by Nikdavoodi [62] and Choi and Suh [63] discovered that attitudes positively impact on subjective norms. Therefore, in this study, the authors employed the hypothesis that attitudes positively impact on subjective norms to test and further reinforce this hypothesis.

Additionally, in the context of green products, research on green hotels [43, 37] and the intention to purchase organic food [64, 65] has consistently shown that attitudes have a positive influence on the intention to engage with environmentally-friendly services and products. Based on these findings, the authors proposed the hypotheses:

H3: Subjective norms partial mediates the relationship between attitudes and intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H14: Attitudes toward bamboo, rattan and Schizostachyum aciculare products positively influence subjective norms.

2.2.7 Attitudes toward bamboo, rattan and Schizostachyum aciculare products and perceived quality

Han and Kim [43] demonstrated the significant impact of perceived quality on consumers' attitudes toward green hotels. This finding is supported by practical observations, as a higher perceived quality of a product or service generally leads to more positive customer attitudes [66]. Similar positive and direct effects of perceived quality on consumer attitudes were found in studies on organic food by Devakumar and Chowdappa [67] and on green cosmetics by Echhad and Ghaith [68] about bamboo, rattan, and Schizostachyum aciculare products.

Moreover, attitudes toward green furniture were found to positively influence on the intention to purchase such furniture [69]. Wang et al. [70] also identified a significant relationship between attitude and green purchasing intention. Additionally, Hou et al. [66] and Echhad and Ghaith [68] highlighted that attitudes not only serves as a direct outcome of perceived quality but also acts as an intermediary factor in the relationship between perceived quality and the intention to purchase bamboo, rattan, and Schizostachyum aciculare products. Based on these findings, the authors proposed the hypotheses:

H6: Perceived quality positively influences attitudes toward bamboo, rattan and Schizostachyum aciculare products.

H16: Attitudes partial mediate the relationship between perceived quality and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

2.2.8 Attitudes, uniqueness and the intention to purchase bamboo, rattan and Schizostachyum aciculare products

Indian consumers exhibit a positive attitude toward American products, primarily due to their association with modernity, individuality, and distinctiveness [71]. The positive attitudes are further amplified among Indian consumers, who have a desire to express their uniqueness. Additionally, subjective norms play a significant role in influencing purchase intentions and consumer attitudes toward luxury fashion brands [72]. These norms are closely tied to the need for uniqueness and status, influenced by individuals' perceptions of social pressures [72].

In contrast, attitudes have a positive impact on consumers' purchase intentions [73], attitudes toward organic food positively influences purchase intentions [25], and attitudes have positive impacts on the intention to purchase green furniture [69]. Wang and Li [74] and Halepete [75] also reported the mediating relationship of attitudes between uniqueness and purchase intention. Attitudes, in turn, play an intermediate role between the supporting reason (uniqueness) and purchase intention in the background theory of BRT [19]. Building on these insights, the authors proposed the hypotheses:

H4: Uniqueness positively influence attitudes toward bamboo, rattan and Schizostachyum aciculare products.

H15: Attitudes partial mediate the relationship between uniqueness and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

2.2.9 Attitudes toward bamboo, rattan and Schizostachyum aciculare products and environmental concern

Based on the TPB, the research findings by Xu et al. [69]

have demonstrated that environmental concerns have a positive impact on attitudes toward green furniture products. Environmental concern is found to be a precursor to behavioral intention rather than attitudes [76]. Generally, environmental awareness does not have a direct impact on green consumer behavior but instead indirectly influences it through other factors [5, 37, 77]. To demonstrate the indirect influence of environmental concern on behavioral intentions, studies by Bamberg [36] and Xu et al. [69] have shown that environmental concern positively affects behavioral intentions through core factors in the TPB, including attitudes.

Moreover, consumer attitudes toward handicraft products significantly influence their purchase intention [78], environmentally sustainable products [79], and green products [80]. Bamberg [36] and Chen and Tung [37] have proposed that attitudes play a mediating role in the relationship between environmental concern and purchase intention. Consequently, attitudes can be seen as a mechanism through which environmental concern influences purchase intention. Based on these findings, the authors proposed the hypotheses:

H8: Environmental concern positively influences attitudes toward bamboo, rattan and Schizostachyum aciculare products.

H13: Attitudes partial mediate the relationship between environmental concern and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

2.2.10 Environmental concern and subjective norms

Environmental awareness, which encompasses individuals' knowledge and understanding of environmental issues, is a crucial factor that shapes their behavior as green consumers. The level of environmental awareness possessed by consumers has a significant influence on their decision-making and actions when it comes to purchasing and using environmentally friendly products [79, 81-83]. Several studies, such as those by Zhang and Luo [84], and Nadlifatin et al. [85], have found that environmental concern positively and directly influences consumers' subjective norms. According to the study by Kamalanon et al. [38], environmental concern is a factor that has a positively influence on the purchase intention of green products among consumers in Taiwan and Vietnam.

In a study conducted by Xu et al. [69], it was observed that environmental concern positively influences subjective norms, and these subjective norms, in turn, positively affect the intention to purchase green furniture. Similarly, other studies by Zhang and Luo [84] and Chen and Tung [37] have

recognized the intermediary function of subjective norms in the connection between environmental concern and the intention to buy green products. This suggests that subjective norms, encompassing the perceived social pressures and expectations related to environmentally friendly behaviors, play a mediating role in transmitting the influence of environmental concern to the intention to engage in green purchasing. Building on these findings, the authors proposed the hypotheses:

H2: Subjective norms partial mediates the relationship between environmental concern and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H9: Environmental concern positively influences subjective norms.

2.2.11 The moderating role of self-efficacy

Research conducted in various fields, including organic food [13] and renewable energy [10, 11], has identified a gap between consumers' attitudes and their intentions to purchase green products. However, Rylander and Allen [86] argue that a regulatory factor can bridge this gap. Xu et al. [69] and Elhoushy and Jang [14] found that self-efficacy serves as an internal regulatory factor influencing attitudes and green consumer behavior.

Multiple experimental studies have provided empirical evidence supporting a positive association between environmental consciousness and the intention to procure green products [87-90]. These studies also reveal a certain discrepancy between environmental consciousness and the actual willingness to engage in green consumer behavior, which is mediated by factors such as social status [91], recycling intentions [92], and perceived policy effectiveness. While environmental concern has been found to moderate the relationship between self-efficacy and perceived behavioral control in various studies [92-94], no existing research has specifically investigated the moderating role of self-efficacy in influencing the relationship between environmental concern and the intention to purchase green products. Based on these observations, the authors proposed the hypotheses:

H11a: Self-efficacy moderates the relationship between environmental concern and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H11b: Self-efficacy moderates the relationship between attitudes and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

Based on the above hypotheses, the authors propose a research model, which is presented in Figure 1.

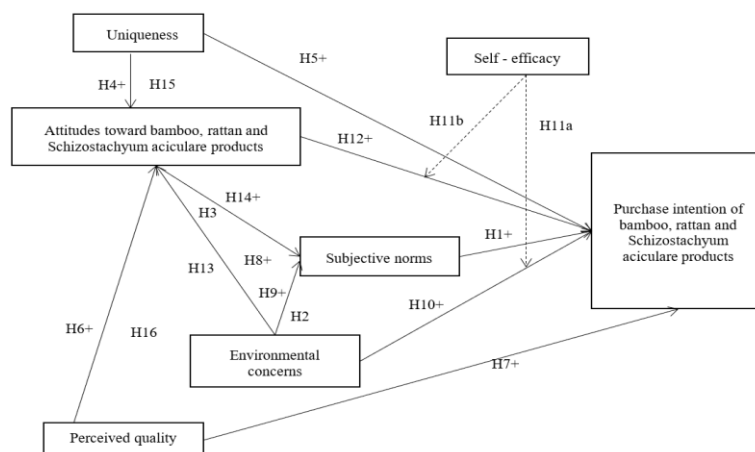


Figure 1. Research model

3. METHODS

3.1 Research process

Qualitative Study: Due to Figure 2, after engaging in discussions with multiple store managers regarding bamboo, rattan, and *Schizostachyum aciculare* products and identifying the research problem, the authors conducted a comprehensive literature review on prior studies related to green consumer behavior. Subsequently, the authors developed a questionnaire and sought input from one associate professor and two individuals holding master's degrees specializing in economics and business administration to refine the measurement scale. To gather additional insights, the authors also attended VIFA EXPO 2024, the Vietnam International Furniture Fair, and

gathered opinions from booth owners who were also owners of handicraft bamboo, rattan, and *Schizostachyum aciculare* production workshops in Vietnam.

Quantitative Study: In figure 2, to refine the measurement scale, the authors conducted a preliminary survey with a sample of 50 respondents, which included customers and other students who provided valuable feedback. Following this, the authors conducted an official survey, utilizing both face-to-face and online methods, with a total of 447 respondents. The collected data were carefully filtered using Excel and SPSS, resulting in the exclusion of 21 invalid responses. The final dataset consisted of 426 valid respondents. The authors employed Smart PLS software to evaluate and model the linear structural relationships within the data.

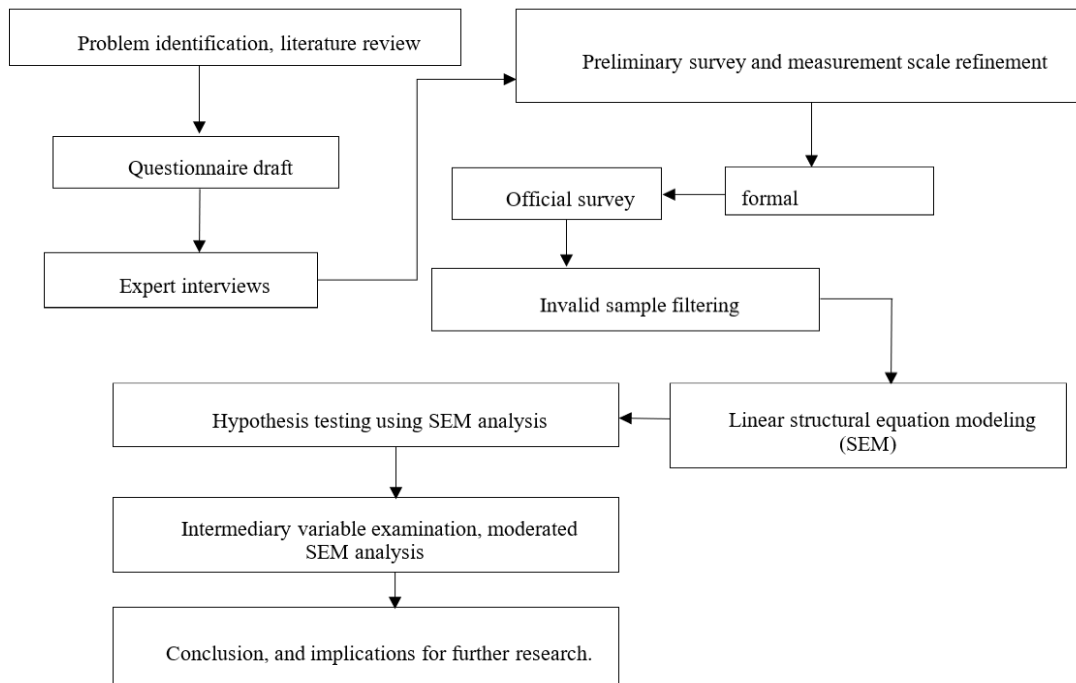


Figure 2. The research processes

3.2 Measurement

The measurement scales utilized in this study were adapted from previous studies and have demonstrated high reliability. The subjective norm scale consisted of 4 observed variables, as established by Kamalanon et al. [38]. The uniqueness scale incorporated 4 observed variables, as outlined by Zhang et al. [95]. The perceived quality scale included 5 observed variables, as validated by Aigbe [39]. The environmental concern scale comprised 6 observed variables, drawing from the works of Zhao et al. [9] and Xu et al. [69]. The self-efficacy scale consisted of 5 observed variables, as established by Ahmad et al. [94] and Zhang et al. [95]. The attitude toward bamboo, rattan, and *Schizostachyum aciculare* products scale incorporated 4 observed variables, building on the research by Pani [78] and Kumar et al. [79]. Lastly, the intention to purchase bamboo, rattan, and *Schizostachyum aciculare* products scale included 5 observed variables, drawing from the works of Wang et al. [77] and Tanwir and Hamzah [8].

3.3 Data collection and sample

For this research, a convenient random sampling approach

will be utilized, taking into account the available resources and the research context. Although this method has its limitations, the researchers have chosen to employ it due to resource and time constraints. To address the potential drawbacks of convenient random sampling, the researchers have applied Excel and the SPSS program to filter the data. This involved assessing the kurtosis and skewness of the data and excluding respondents whose data was deemed unreliable.

The participants surveyed in this study are customers who have purchased bamboo, rattan, and *Schizostachyum aciculare* products. The survey was conducted using both offline and online methods. For the online approach, the researchers distributed Google Form links through various social networks, such as Facebook and Zalo. As for the offline method, surveys were administered at supermarkets, exhibitions featuring bamboo, rattan, and *Schizostachyum acicular* products, as well as stores specializing in these items. The survey sample consisted of 200 online respondents and 250 offline respondents, specifically targeting consumers in Vietnam.

To determine an appropriate sample size for structural equation modeling (SEM), the researchers applied the sample size calculation method proposed by Tabachnick and Fidell [96]. Consequently, a sample size of approximately 450 was

determined, taking into account the possibility of non-response surveys.

3.4 Measurement model analysis

This study integrates two behavioral theories to explore consumer behavior concerning purchases of bamboo, rattan, and *Schizostachyum aciculare* items. The proposed study paradigm incorporates both moderating and mediating relationships, so the complex research model is analyzed utilizing the PLS-SEM method [97]. Then, the outcomes of the proposed research model are elucidated, and the hypotheses are tested using the SmartPLS software.

4. RESULT

4.1 Descriptive statistics

After synthesizing the results, the authors obtained a total of 447 survey samples. After excluding surveys that did not meet the requirements and cleaning the data, the authors obtained a complete survey dataset consisting of 426 samples.

Table 1. Demographic characteristics (n=426)

Characteristics		Frequency	(%)
Gender	Male	130	30.5%
	Female	292	68.5%
	Other	4	0.9%
Age	18-25 years old	241	56.6%
	26-34 years old	117	27.5%
	35-45 years old	53	12.4%
	46-54 years old	11	2.6%
	Over 55 years old	4	9%
Marital Status	Married	138	32.4%
	Unmarried	287	67.4%
	Divorced	1	0.2%
	High school	42	20.3
	Undergraduate	136	65.7
Educational Level	Secondary school, high school	7	1.6%
	Intermediate level	0	0%
	College	13	3.1%
	University	380	89.2%
	Postgraduate	26	6.1%
Income	Under 200 USD	133	31.2%
	From 200 USD to 400 USD	97	22.8%
	From 400 USD to 750 USD	141	33.1%
	From 750 USD to 1,500 USD	37	8.7%
	Above 1,500 USD	18	4.2%

Based on data processing, Table 1 presents the findings from the survey conducted among 426 consumers. Among the surveyed individuals, 292 were female, accounting for 68.5% of the sample, while there were 130 male respondents, representing 30.5%. Upon analyzing the distribution of age groups, it becomes apparent that individuals between the ages of 18 and 25 exhibited the highest representation, comprising 56.6% of the sample, with a total of 241 respondents. This suggests that the intention to purchase bamboo, rattan, and *Schizostachyum aciculare* products is particularly popular among young consumers. The next age group, comprising 26-

34 years old, consisted of 117 individuals, accounting for 27.5% of the sample, followed by the 35-45 age group, which included 53 respondents, representing 12.4%. The age groups of 46-54 years old and above 55 years old had a relatively lower proportion of 9%.

In terms of marital status, 287 individuals were unmarried, making up 67.4% of the sample, while 138 surveyed individuals were married, accounting for 32.4%. Regarding education, the preponderance of the surveyed customers possessed a university degree, accounting for 89.2% of the sample with a total of 380 respondents. The next highest education levels were college and postgraduate degrees, accounting for 6.1% and 3.1%, respectively, while the proportion of individuals with secondary and high school education was the lowest at 1.6%.

In terms of income, the highest proportion of surveyed individuals, at 33.1%, had an income ranging from 200 USD to 750 USD. 31.2% of the respondents had an income below 200 USD, 22.8% had an income ranging from 200 USD to 400 USD, while the remaining individuals had incomes ranging from 750 USD to 1,500 USD (8.7%) and above 1,500 USD (4.2%).

4.2 Exploratory factor analysis of higher-order structures

Table 2 presents the findings derived from the exploratory factor analysis (EFA), which employed the criterion of eigenvalues greater than 1 to identify significant factors. The analysis revealed that six factors effectively captured the information within the 33 observed variables. These six factors accounted for a cumulative variance of 65.931%, surpassing the 50% threshold. Consequently, these six extracted factors explain a substantial portion, specifically 65.931%, of the variability within the dataset consisting of the 33 observed variables in the EFA.

Based on Table 3, the EFA results for each independent variable indicate that the Kaiser-Meyer-Olkin (KMO) measure is greater than 0.5 (0.913>0.5), and the significance value of Bartlett's test is 0.000 (<0.05). All remaining factor loadings are greater than 0.5, except for the observed variable, NFU04. The research team removed the NFU04 observed variable, resulting in 32 remaining observed variables. According to the EFA results, there are no cases where a factor loading is high on both factors simultaneously or where factor loadings are close to each other. Therefore, the factors ensure convergence and discriminant validity in the EFA analysis. Additionally, there is no cross-loading of variables, indicating no mixing of observed variables in the factors.

According to Table 4, the authors excluded two observed variables, namely PI02 due to a factor loading below 0.5 and SN04 due to loading onto two factors. After removing these two observed variables, there were 30 remaining observed variables. The EFA results for each independent variable indicate that the Kaiser-Meyer-Olkin (KMO) measure is greater than 0.5 (0.904>0.5), and the significance value of Bartlett's test is 0.000 (<0.05). All remaining factor loadings are greater than 0.5. According to the EFA results, there are no cases where a factor loading is high on both factors simultaneously or where factor loadings are close to each other. Therefore, the factors ensure convergence and discriminant validity in the EFA analysis. Additionally, there is no cross-loading of variables, indicating no mixing of observed variables, and there are 30 remaining observed variables.

Table 2. The total explained variance of the observed variables

Factor	Total Variance Explained						
	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	8.744	31.230	31.230	8.310	29.678	29.678	4.530
2	3.543	12.653	43.883	3.218	11.493	41.171	5.489
3	2.160	7.714	51.597	1.700	6.073	47.244	5.799
4	1.654	5.908	57.505	1.216	4.344	51.588	3.757
5	1.322	4.722	62.227	.833	2.975	54.563	5.285
6	1.037	3.704	65.931	.598	2.136	56.699	6.311
7	.807	2.883	68.814				
8	.704	2.515	71.329				
9	.664	2.372	73.701				
10	.597	2.130	75.831				
11	.561	2.003	77.834				
12	.553	1.974	79.808				
13	.510	1.820	81.628				
14	.504	1.800	83.428				
15	.478	1.706	85.134				
16	.435	1.554	86.688				
17	.421	1.502	88.190				
18	.409	1.462	89.652				
19	.390	1.392	91.044				
20	.352	1.258	92.302				
21	.331	1.180	93.483				
22	.313	1.117	94.600				
23	.295	1.054	95.654				
24	.283	1.012	96.665				
25	.255	.911	97.576				
26	.248	.887	98.463				
27	.235	.840	99.303				
28	.195	.697	100.000				

Table 3. The EFA results of the independent and mediator variables

	Pattern Matrix					
	Factor					
	1	2	3	4	5	6
SE03	.880					
SE01	.850					
SE05	.829					
SE04	.823					
SE02	.810					
EC02		.816				
EC04		.755				
EC03		.692				
EC05		.669				
EC01		.622				
EC06		.522				
PQ03			.814			
PQ02			.705			
PQ05			.647			
PQ01			.628			
PQ04			.628			
SN02				.800		
SN03				.669		
SN01				.572		
SN04				.566		
NFU03					.766	
NFU02					.723	
NFU01					.646	
AT04						.750
AT03						.724
AT02						.641
AT01						.621

Table 4. The EFA results of the independent and mediator variables

	Pattern Matrix		
	Factor		
	1	2	3
PI05	.845		
PI04	.779		
PI03	.719		
PI01	.580		
AT02		.836	
AT03		.821	
AT04		.605	
AT01		.600	
SN02			.766
SN01			.652
SN03			.553

4.3 Testing the SEM model

Convergence validity, internal consistency reliability, and discriminant validity are used to test the measurement model.

Based on the research by Hair et al. [97], the reliability of a scale is deemed acceptable when Cronbach's alpha (CA) and composite reliability (CR) coefficients exceed 0.7. Additionally, indicator loadings should exceed 0.708, and the average variance extracted (AVE) should surpass 0.5. In this regard, both the CA and CR criteria satisfy the reliability threshold.

Table 5 presents the Cronbach's alpha coefficients and average variance extracted (AVE) values for the measurement scale, all of which surpass the threshold of 0.7. Hence, the scale demonstrates satisfactory reliability. Moreover, the extracted AVE is substantially greater than 0.5, indicating

convergence validity among the variables, and suggesting that the latent variables account for more than half of the variance in their respective indicators [97].

Table 6 presents the results of the discriminant validity testing of the latent variables in the model using the Heterotrait-Monotrait (HTMT) correlation criterion [98]. The

HTMT values are below the threshold of 0.85. Therefore, the measurement scale of the research variables achieves discriminant validity. Additionally, the SRMR in Table 7 is 0.064 (<0.08) the NFI is 0.807 (>0.8), meaning that the model achieves good fit [97].

Table 5. Measurement model: outer loadings, reliability, and AVE

Scale	Loading	CA	CR (Rho_C)	AVE	Scale	Loading	CA	CR (Rho_C)	AVE
SN		0.758	0.846	0.580	SE		0.919	0.936	0.745
SN01	0.745				SE01	0.790			
SN02	0.803				SE02	0.872			
SN03	0.748				SE03	0.880			
NFU		0.804	0.872	0.630	SE04	0.877			
NFU01	0.739				SE05	0.894			
NFU02	0.829				AT		0.843	0.895	0.680
NFU03	0.823				AT01	0.825			
PQ		0.848	0.892	0.623	AT02	0.842			
PQ01	0.808				AT03	0.836			
PQ02	0.835				AT04	0.794			
PQ03	0.806				PI		0.872	0.907	0.661
PQ04	0.709				PI01	0.824			
PQ05	0.784				PI03	0.832			
EC		0.854	0.891	0.577	PI04	0.820			
EC01	0.759				PI05	0.791			
EC02	0.740								
EC03	0.751								
EC04	0.740								
EC05	0.816								
EC06	0.751								

Table 6. Measurement model: Heterotrait-Monotrait (HTMT) discriminant validity

	AT	EC	NFU	PI	PQ	SE	SN	SExAT	SExEC
AT									
EC	0.663								
NFU	0.455	0.337							
PI	0.773	0.607	0.646						
PQ	0.73	0.599	0.477	0.685					
SE	0.412	0.224	0.238	0.191	0.165				
SN	0.624	0.559	0.568	0.737	0.564	0.256			
SExAT	0.337	0.275	0.336	0.39	0.245	0.504	0.286		
SExEC	0.292	0.164	0.218	0.269	0.208	0.443	0.209	0.658	

Table 7. Model fit

	Saturated Model	Estimated Model
SRMR	0.064	0.078
NFI	0.807	0.797

4.4 Structural model results

Using the bootstrapping method with a sample size of 10,000, the structural model was tested. The results in Table 8 show that the variance inflation factor (VIF) values are below 3.0, indicating no issue of multicollinearity. The 95% confidence intervals indicate that all the paths in the model are significant and positive. The p-values of the relationships are all below 0.05, except for the p-value of the relationship between self-efficacy (SE) and the intention to purchase products from bamboo, rattan and Schizostachyum aciculare (PI). It can be concluded that all the relationships are accepted, except for the SE x EC->PI relationship [97].

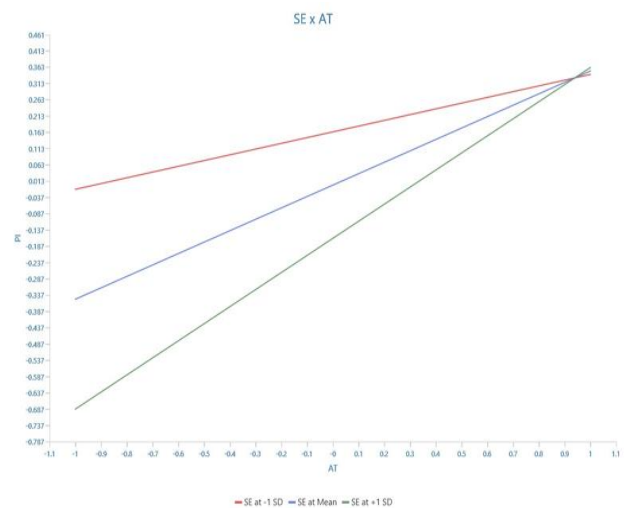


Figure 3. SE moderate the impact of AT to PI

Table 8. Hypotheses testing results

Hypothesis	Relationship	β	Path Coefficient	STDEV	T Statistic	Confidence Intervals	P-Value	VIF	Conclusion
<i>Direct effect</i>									
H1	SN->PI	0.227	0.228	0.042	5.427	[0.144-0.31]	0.000	1.589	Supported
H4	NFU->AT	0.125	0.126	0.036	3.495	[0.053-0.194]	0.000	1.202	Supported
H5	NFU->PI	0.223	0.225	0.041	5.490	[0.058-0.211]	0.000	1.395	Supported
H6	PQ->AT	0.406	0.404	0.056	7.285	[0.294-0.512]	0.000	1.502	Supported
H7	PQ->PI	0.118	0.118	0.045	2.634	[0.031-0.206]	0.008	1.884	Supported
H8	EC->AT	0.325	0.326	0.051	6.371	[0.222-0.422]	0.000	1.371	Supported
H9	EC->SN	0.257	0.259	0.054	4.774	[0.1474-0.36]	0.000	1.478	Supported
H10	EC->PI	0.095	0.096	0.041	2.336	[0.014-0.174]	0.020	1.667	Supported
H12	AT->PI	0.350	0.349	0.046	7.579	[0.258-0.44]	0.000	2.223	Supported
H14	AT->SN	0.353	0.354	0.059	5.983	[0.236-0.467]	0.000	1.478	Supported
<i>Indirect effect</i>									
H2	EC->SN->PI	0.058	0.059	0.015	3.783	[0.031-0.091]	0.000		Supported (Partial mediation)
H3	AT->SN->PI	0.08	0.081	0.020	3.985	[0.047-0.126]	0.000		Supported (Partial mediation)
H13	EC->AT->PI	0.114	0.113	0.022	5.227	[0.075-0.161]	0.000		Supported (Partial mediation)
H15	NFU->AT->PI	0.044	0.044	0.014	3.134	[0.019-0.075]	0.002		Supported (Partial mediation)
H16	PQ->AT->PI	0.142	0.141	0.028	4.994	[0.092-0.206]	0.000		Supported (Partial mediation)
<i>Moderator effect</i>									
H11a	SE x EC->PI	-0.002	-0.003	0.048	0.049	[(-0.094)-0.091]	0.961	1.832	No Supported
H11b	SE x AT->PI	0.174	0.169	0.047	3.728	[0.087-0.269]	0.000	2.080	Supported
<p><i>R² adjusted</i> R² PI=0.632 R² AT=0.481 R² SN=0.291</p> <p><i>f²</i> f² PQ-> AT=0.213 (Medium impact) f² AT-> PI=0.153 (Medium impact) f² EC-> AT=0.150 (Medium impact) f² AT-> SN=0.120 (Small impact) f² NFU-> PI=0.098 (Small impact) f² SN-> PI=0.090 (Small impact) f² EC-> SN=0.063 (Small impact) f² NFU-> AT=0.025 (Small impact) f² PQ-> PI=0.020 (Small impact) f² EC-> PI=0.015 (Very small impact) f² SExAT-> PI=0.035 (Small impact)</p>									

Source: Authors' compilation

In Figure 3, SE moderates the impact of AT to PI significantly, meaning when SE is higher (SE at mean or SE at + 1 SD), the stronger the impact of AT to PI.

The bootstrap results indicate the standardized effect coefficients of the direct relationships, such as PQ=>AT is 0.406, AT=>SN is 0.353, AT=>PI is 0.350, EC=>AT is 0.325, SN=>PI is 0.227, NFU=>PI is 0.223, EC=>SN is 0.257, NFU=>AT is 0.125, PQ=>PI is 0.118, and EC=>PI is 0.095. This shows that subjective norm (SN), uniqueness (NFU), perceived quality (PQ), environmental concern (EC), and attitudes toward bamboo, rattan and Schizostachyum aciculare products (AT) positively impact on the intention to purchase bamboo, rattan and Schizostachyum aciculare products. In other words, the higher the subjective norm, uniqueness, perceived quality, environmental concern, and attitude toward

bamboo, rattan and Schizostachyum aciculare products, the higher the intention to purchase bamboo, rattan and Schizostachyum aciculare products. On the other hand, uniqueness, perceived quality, and environmental concern have positive impacts on the attitudes toward bamboo, rattan and Schizostachyum aciculare products, meaning that the higher the uniqueness, perceived quality, and environmental concern, the more positive the attitudes toward bamboo, rattan and Schizostachyum aciculare products. Additionally, environmental concern has a positively influence on subjective norms, indicating that the higher the environmental concern, the higher the subjective norm of consumers. Therefore, hypotheses H1, H4, H5, H6, H7, H8, H9, H10, and H12 are accepted. The results also show that the standardized effect coefficients of the intermediate relationships, such as

AT=>SN=>PI, are 0.080, EC=>SN=>PI is 0.058, and NFU=>AT=>PI is 0.044; PQ=>AT=>PI is 0.142, EC=AT=PI is 0.144. These relationships are within the confidence interval, meaning that hypotheses H2, H3, H13, H15, and H16 regarding the intermediate relationships are accepted.

The adjusted R-squared coefficient of SN is 0.291, indicating that the variables EC and AT explain 29.1% of the variance in SN. Similarly, the adjusted R-squared coefficient of AT is 0.481, indicating that the variables NFU, PQ, and EC explain 48.1% of the variance in AT. The adjusted R-squared coefficient of PI is 0.632, indicating that the variables SN, NFU, PQ, AT, and EC explain 63.2% of the variance in PI.

According to the f^2 criterion [99], the impact of PQ and PI ($f^2=0.213$), AT and PI ($f^2=0.153$), EC and AT ($f^2=0.150$) is of medium effect size ($0.15 \leq f^2 < 0.35$). On the other hand, the relationships of NFU and PI ($f^2=0.098$), SN and PI ($f^2=0.090$), EC and SN ($f^2=0.063$), SE_{AT} and PI ($f^2=0.035$), NFU and AT ($f^2=0.025$), PQ and PI ($f^2=0.020$), and SN and AT ($f^2=0.120$), have a small effect size ($0.02 \leq f^2 < 0.15$). The impact of EC and PI ($f^2=0.015$) is extremely small ($f^2 < 0.02$). As mentioned above, this study aims to analyze and test the moderating role of the SE factor in the relationships between AT and PI and between EC and PI. Hypotheses H11a and H11b demonstrated that SE significantly moderates the relationship between AT and PI ($\beta = 0.174, p=0.000$), but does not moderate the relationship between EC and PI ($\beta = -0.002, p=0.961$). Therefore, H11b is accepted, while H11a is not.

The results from the PLS-SEM model indicate 10 direct effects, 5 indirect effects, and 1 moderating effect.

H1: Subjective norms positively influence the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H2: Subjective norms partial mediate the relationship between environmental concern and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H3: Subjective norms partial mediate the relationship between attitude and intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H4: Uniqueness positively influences attitudes toward bamboo, rattan and Schizostachyum aciculare products.

H5: Uniqueness positively influences the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H6: Perceived quality positively influences attitudes toward bamboo, rattan and Schizostachyum aciculare products.

H7: Perceived quality positively influences the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H8: Environmental concern positively influences attitudes toward bamboo, rattan and Schizostachyum aciculare products.

H9: Environmental concern positively influences on subjective norms.

H10: Environmental concern positively influences the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H11b: Self-efficacy moderates the relationship between attitude and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H12: Attitudes toward bamboo, rattan and Schizostachyum aciculare products positively influence the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H13: Attitudes partial mediate the relationship between environmental concern and the intention to purchase bamboo,

rattan and Schizostachyum aciculare products.

H14: Attitudes toward bamboo, rattan and Schizostachyum aciculare products positively influence subjective norms.

H15: Attitudes partial mediate the relationship between uniqueness and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

H16: Attitudes partial mediate the relationship between perceived quality and the intention to purchase bamboo, rattan and Schizostachyum aciculare products.

4.5 Prediction power of the model

Table 9. Prediction power of the model

	Q²predict	PLS-SEM MAE	LM MAE
AT01	0.326	0.636	0.649
AT02	0.338	0.564	0.531
AT03	0.332	0.603	0.536
AT04	0.294	0.630	0.645
PI01	0.299	0.571	0.580
PI03	0.351	0.542	0.527
PI04	0.309	0.558	0.559
PI05	0.363	0.586	0.599
SN01	0.182	0.614	0.582
SN02	0.178	0.639	0.660
SN03	0.114	0.696	0.672

Source: Authors' compilation

The results in Table 9 indicate that the Q²predict values of AT, SN, and PI are all greater than 0, which suggests a predictive relationship of the model. Looking at Table 9, it can be observed that the number of observed variables with a PLS-SEM_MAE index is smaller than that of LM_MAE, with 6 observed variables out of a total of 11 observed variables. The study chose the PLS-SEM_MAE index for analysis because the PLS-SEM MV error histogram did not follow a normal distribution [100]. The PLS-SEM_MAE index for the five observed variables indicates that the indicators used in the PLS-SEM analysis exhibit lower prediction errors compared to the LM method, thereby suggesting a moderate level of predictive capability. According to Shmueli et al. [100], the model has average predictive ability.

4.6 Discussion

Hypothesis H1 is accepted, indicating that subjective norms (SN) have a direct and positive influence on the intention to purchase bamboo, rattan and Schizostachyum aciculare products (PI) with a standardized coefficient of 0.227. This result contradicts the findings of Kamalanon et al. [38] but is consistent with the studies conducted by Park et al. [101], Kumar et al. [79], Wang et al. [70], Maichum et al. [102], and others.

The research results show that hypotheses H4, H6, and H8 are accepted (NFU, PQ, and EC have a direct and positive impact on AT) with standardized coefficients of 0.125, 0.406, and 0.325, respectively. This result is similar to the previous researches [47, 69, 103].

Hypotheses H5, H7, H10, and H12 are accepted with standardized coefficients of 0.223, 0.118, 0.095, and 0.35, respectively, indicating that uniqueness (NFU), perceived quality (PQ), and attitudes (AT) all positively influence on the intention to purchase bamboo, rattan and Schizostachyum aciculare products. This finding is consistent with the studies conducted by Choi and Suh [63], Latter [72], Aigbe [39], Tanwir and Hamzah [8], Kamalanon et al. [38], and others.

Statistical analysis shows that the research results are consistent with previous studies using the TPB model by Ajzen [5] and Xu et al. [69]. Hypotheses H9 and H14 are both accepted, indicating that environmental concern (EC) and attitudes toward bamboo, rattan and *Schizostachyum aciculare* products (AT) positively impact on subjective norms (SN) with standardized coefficients of 0.257 and 0.353, respectively.

Hypotheses H2 and H3: The mediating role of the subjective norms (SN) between environmental concern (EC) and purchase intention (PI), and between attitudes toward bamboo, rattan and *Schizostachyum aciculare* products and purchase intention (PI) in this study is similar to the findings of Wang et al. [70] and Maichum et al. [102].

With standardized coefficients of 0.114, 0.044, and 0.142, it shows the complete mediating relationship through attitudes toward bamboo, rattan and *Schizostachyum aciculare* products (AT). The statistical results support the acceptance of hypotheses H13, H15, and H16, demonstrating the mediating role of attitudes toward bamboo, rattan and *Schizostachyum aciculare* products (AT) in the relationship between environmental concern (EC), uniqueness (NFU), perceived quality (PQ), and the intention to purchase bamboo, rattan and *Schizostachyum aciculare* products. This finding is similar to the studies conducted by Kamalanon et al. [38], Zhao et al. [9], Xu et al. [69], and the TPB model by Ajzen [28].

Hypothesis H11b is accepted with a standardized regression coefficient of 0.174, indicating that self-efficacy moderates and influences the relationship between attitudes toward bamboo, rattan and *Schizostachyum aciculare* products (AT) and the intention to purchase bamboo, rattan and *Schizostachyum aciculare* products (PI), similar to the findings of Chan [80] and Zhao et al. [9]. However, hypothesis H11a with a standardized coefficient of -0.002, $p=0.961 > 0.05$, is not accepted. The results show that self-efficacy does not necessarily play a moderating role in the relationship between environmental concern (EC) and the intention to purchase bamboo, rattan and *Schizostachyum aciculare* products (PI).

5. CONCLUSION AND MANAGERIAL IMPLICATION

5.1 Conclusion

Through the research process, the research team reviewed both domestic and international literature, conducted preliminary studies, built models and scales, and achieved the predetermined objectives before commencing the research. Firstly, the research results indicate that attitudes have the strongest positive impact on consumer's intention to purchase bamboo, rattan and *Schizostachyum aciculare* products ($\beta=0.35$), followed by subjective norm ($\beta=0.227$), uniqueness ($\beta=0.223$), perceived quality ($\beta=0.118$), and environmental concern ($\beta=0.095$). According to the research findings, subjective norm serves as a mediator between environmental concern ($\beta=0.058$) and intention to purchase bamboo, rattan and *Schizostachyum aciculare* products, and between attitudes ($\beta=0.08$) and intention to purchase bamboo, rattan and *Schizostachyum aciculare* products. Attitudes, on the other hand, act as mediator between environmental concern ($\beta=0.114$), uniqueness ($\beta=0.044$), perceived quality ($\beta=0.142$), and intention to purchase bamboo, rattan and *Schizostachyum aciculare* products. After analysis and testing, the authors have identified the moderating role of self-efficacy in the relationship between attitudes (AT) the intention to

purchase bamboo, rattan and *Schizostachyum aciculare* products. Accordingly, self-efficacy significantly moderates the relationship between AT and PI ($\beta=0.174$), but does not alter the relationship between EC and PI ($\beta=-0.002$).

This study aims to investigate and promote the purchase of items made from bamboo, rattan, and *Schizostachyum aciculare*. By analyzing the findings of this study, the authors aim to provide recommendations for managers to develop marketing strategies that promote sustainable consumption among consumers. Additionally, the novelty approach of this study is to examine the influence of attitudes on the intention to purchase items made from bamboo, rattan, and *Schizostachyum aciculare*, as well as how self-efficacy impacts this relationship. The inclusion of self-efficacy helps bridge the gap between behavior and attitudes. The additional novelty of this study lies in the potential to expand the TPB by incorporating the concepts of uniqueness and perceived quality from the behavioral reasoning theory.

5.2 Managerial implications

Based on the analysis of the research findings, we propose several management implications for businesses and organizations operating in the bamboo, rattan, and *Schizostachyum aciculare* industries.

Firstly, consumers' attitudes toward these products, which are influenced by their shopping experiences, thoughts, opinions, and emotions, have a significant impact on their intention to purchase. Therefore, businesses in this industry should focus on enhancing product promotion and brand image through various mass media channels. They should provide comprehensive and detailed information about bamboo, rattan, and *Schizostachyum aciculare* products, helping consumers understand their characteristics, benefits, and relevant details. In addition to traditional channels such as newspapers and television, businesses should consider utilizing multiple channels, including social media platforms like TikTok, to reach a wider audience.

To improve the consumer shopping experience, business owners should consider factors such as product display, payment options, warranties, returns, and service quality. Considering the current consumer trend, businesses should not only develop direct distribution channels but also explore e-commerce platforms, including live selling streams and shoppable videos.

Secondly, social norms emerged as the second-most significant factor influencing consumers' intentions to purchase these products. To effectively influence consumer intention, businesses should collaborate with organizations and government entities to promote safe and environmentally friendly consumption. Implementing communication campaigns involving Key Opinion Leaders (KOLs) and Key Online Celebrities (KOCs) can help consumers perceive the connection between environmental protection and bamboo, rattan, and *Schizostachyum aciculare* products. Leveraging platforms like TikTok for communication and sales purposes can be a valuable strategy. Collaborating with environmental organizations and associations through joint initiatives, sponsorships, and supporting their activities can also enhance communication efforts. Additionally, businesses can utilize press conferences, events, and trade fairs to advertise their company and showcase bamboo, rattan, and *Schizostachyum aciculare* products.

Lastly, to enhance purchase intention through uniqueness, marketers should emphasize the distinct characteristics of handmade products in their communication messages. Businesses can consider operating in niche markets with limited-edition bamboo, rattan, and *Schizostachyum aciculare* products or expanding their product line with unique categories. It is crucial for business owners to continuously improve their craftsmanship, prioritize quality, and highlight the stories behind the products to excel in this aspect.

5.3 Limitations

Although the study conducted by the authors effectively accomplished its objectives, it is important to recognize certain limitations. Primarily, the utilization of a non-probability sampling method, specifically convenience sampling, is acknowledged. This approach does not guarantee a representative sample of the entire population, thereby constraining the generalizability of the research findings. Secondly, the variables included in the study were not extensive and diverse enough, which may have an impact on the research outcomes. The research model only has the ability to predict the average, indicating that there may be other unidentified factors influencing the intention to purchase bamboo, rattan, and *Schizostachyum aciculare* products.

Thirdly, the research was conducted solely in Vietnam due to time and resource constraints. To enhance the comprehensiveness and generalizability of the findings, it is recommended that future studies broaden the scope of investigation to encompass additional countries. This would provide a more comprehensive and robust understanding of the factors influencing consumer intentions to purchase these products. Additionally, the authors may consider incorporating additional factors such as peer influence, skepticism, customers' mood or multi-sensory marketing into the model that have the potential to influence the intention to purchase, using alternative theoretical frameworks. It would also be beneficial to include more observed variables or increase the number of observed variables within the factors of the research model.

5.4 Practical implications

This research has the potential to foster the consumer's inclination to purchase bamboo, rattan, and *Schizostachyum aciculare* products, consequently making a valuable contribution toward reducing carbon footprints. This is especially significant given that bamboo and rattan products are predominantly manufactured without using fossil fuels or producing carbon dioxide. Moreover, by ensuring a stable production output of bamboo, rattan, and *Schizostachyum aciculare* products, this research can provide job security for artisans in traditional craft villages, thereby safeguarding Vietnamese national culture. Furthermore, this study may also attract external resources to support its bamboo, rattan, and *Schizostachyum aciculare* production industry, thereby promoting its sustained growth and development.

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