

## Empowering housewives through green marketing: Fostering eco-friendly household products for sustainable consumption

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### Abstract

The escalating concern over the green gap phenomenon, which underscores a discord between consumers' environmental concerns and purchasing behaviours, has accentuated the importance of exploring eco-friendly consumption patterns. This study delves into the multifaceted factors influencing the purchasing behaviour of eco-friendly household products, focusing on the dynamic interplay among consumer knowledge, values, subjective norms, and perceived behavioural control. Specifically, it aims to elucidate how these variables collectively inform housewives' attitudes towards eco-friendly products and purchasing behaviours. The research gathered data from 300 respondents across Jambi City and Sungai Penuh City within Jambi Province, employing principal component analysis and structural equation modelling to scrutinize the hypothesized relationships between the constructs. The findings underscore consumer values, subjective norms, and perceived behavioural control significantly and positively influence consumer attitudes towards eco-friendly household products. Moreover, a pronounced positive correlation between consumer attitudes and eco-friendly purchasing behaviour was identified, whereas the impact of consumer knowledge on consumer attitudes emerged as negligible. This research enriches the theoretical discourse on eco-friendly purchasing behaviour, particularly concerning household products. It offers critical insights for marketers, policymakers, and environmental advocates aiming to foster sustainable consumption practices by pinpointing the pivotal factors that shape consumer attitudes and behaviours. Additionally, the study lays a robust groundwork for subsequent research endeavours to bridge the green gap and advance environmental sustainability through enlightened consumer decisions.

**Keywords:** *Consumer attitude, Eco-friendly consumption, Green marketing, Purchasing behaviour*

**JEL Classification:** D12, M31, Q56

### INTRODUCTION

The importance of environmental issues has significantly increased recently, reflecting a growing awareness and understanding of ecological concerns among the general public. This rising consciousness has made sustainability a critical global issue

with wide-ranging implications for the environment, economy, and overall development. However, it is crucial to recognize that numerous ecological challenges remain unresolved. The adoption of sustainable behaviours signifies a deep commitment by consumers to develop environmentally responsible habits and address these urgent issues. Researchers such as Amoako et al. (2020) and Diamantopoulos et al. (2003) have focused their studies on the intersection between marketing strategies and environmental sustainability, aiming to clarify the complex relationship between consumer behaviour and environmental outcomes. These studies highlight that environmental degradation is often linked to consumption patterns.

Marketing initiatives have the potential to alleviate environmental problems caused by consumption and overconsumption. Jaiswal & Kant (2018) argue that there is a complex connection between the environment and consumer behaviour. Alhosseini Almodarresi et al. (2019) and Siddique et al. (2021) suggest that the roots of most ecological issues can be traced to consumerism and irregular production practices. On the contrary, Mohiuddin et al. (2018) argue that marketing strategies provide effective solutions for tackling environmental concerns. The shift towards eco-friendly consumer behaviour represents a significant change within marketing research, supported by the growing environmental awareness among the public, the increase in sustainable behaviour, and the incorporation of green consumption trends into the mainstream market.

The study of sustainable product consumption has garnered significant interest, particularly in light of the green gap phenomenon. This gap underscores the mismatch between consumers' expressed environmental concerns and their preservation efforts. In a societal context, adopting eco-friendly products and practices represents a laudable shift in consumer behaviour. The global market for such products has grown considerably, increasing over 20 per cent since 2005. This growth reflects a rising number of consumers choosing eco-friendly products, thereby indicating a global commitment by companies to produce environmentally responsible goods. Wu & Chen (2014) noted that in developed countries, environmental protection is a key factor in purchasing decisions. This pro-environmental behaviour is now spreading to Asian countries, where consumers in developing regions are increasingly concerned about green products, driven by an improved quality of life and a shift towards health consciousness. Household products, which include tools and equipment used in daily activities at home, exemplify the principle of environmental friendliness.

Eco-friendly household products aim to reduce environmental pollution throughout their lifecycle, encompassing production, distribution, and consumption phases (Wu & Chen, 2014). Features of such products include avoiding environmentally harmful materials, commitment to cruelty-free testing practices, and using recyclable materials for packaging. The range of eco-friendly household products covers kitchen items, personal care products, home appliances, and daily necessities such as cleaning agents, soaps, and detergents. A Consumer Survey on Sustainability (2022) found that about 47.8% of respondents reported frequently purchasing household products as their most common environmentally friendly purchases. Therefore, this research will primarily examine the consumption patterns of eco-friendly household products.

Consumers play a pivotal role in adopting environmentally friendly practices when selecting products, as their attitudes significantly impact their purchasing decisions, either positively or negatively. Various studies, including those by Liobikienė & Bernatienė (2017), Rausch & Kopplin (2021), and Taufique (2020), have examined the link between consumer attitudes and buying behaviours. Yet, a notable

discrepancy persists between the positive attitudes toward eco-friendly products and actual purchasing behaviour. Despite an understanding and awareness of the benefits of sustainability, this knowledge does not always lead to purchasing eco-friendly products, highlighting a consistent gap between beliefs and actions. Consumers with strong pro-environmental attitudes are likelier to exhibit pro-environmental behaviours, but the correlation between attitudes and actions is still relatively weak.

Individuals responsible for managing budgets and making crucial decisions about product purchases and consumption patterns, particularly housewives, play an essential role in household decision-making processes. Mothers, in particular, often influence every purchase decision within the home, choosing products and services that are environmentally friendly, energy-efficient, and sustainable. Dhir et al. (2021) emphasized that knowledge catalyzes consumer attitudes, arguing that knowledge significantly affects an individual's beliefs and perceived behavioural control, thus altering consumer behaviour. The research focuses on housewives as a key consumer demographic in this context. Ajzen (1991) pointed out that understanding human behaviour, including that of housewives, is inherently complex and multifaceted. Therefore, housewives need a comprehensive understanding to develop favourable attitudes towards environmentally friendly behaviours.

Housewives often encounter difficulties in evaluating the environmental friendliness of products. Suki et al. (2016) observed that blending knowledge about eco-friendliness with attitudes towards products complicates decision-making, creating a cognitive obstacle to adopting eco-friendly products. This issue merits further investigation into how consumers with sufficient environmental knowledge can access information on preservation methods, ultimately leading them to make eco-friendly purchasing decisions consistently.

The perceived value of green products plays a significant role in shaping housewives' attitudes and behaviours. Studies by Kim et al. (2013) and Taufique (2020) have shown that values significantly influence attitudes, behaviours, and other crucial outcomes. Poncin & Ben Mimoun (2014) also highlighted the importance of exploring perceived value within the consumer experience, given its strong predictive ability on behaviour and purchase intentions. Understanding the incentives that encourage housewives to choose eco-friendly products and how these values impact consumer attitudes and behavioural intentions towards purchases is essential for developing effective marketing strategies. Furthermore, the role of motivation extends beyond personal incentives to include the influence of reference groups. Subjective norms emphasize the importance of these groups and the extent to which a housewife will be motivated to conform to them. Individuals experiencing higher social pressure are likelier to adopt green behaviours, showing a greater tendency to purchase green products.

According to Liu et al. (2020), the viewpoint of an influential figure within a community often serves as a benchmark, guiding consumers when they face similar decisions. This suggests that consumers require a certain level of autonomy over their actions, as behaviours are typically not impulsive but necessitate deliberate control. Understanding this control can illuminate the extent of effort housewives are willing to invest in implementing specific environmentally friendly actions. The interaction between housewives' environmental knowledge, values, subjective norms, and perceived behavioural control, and how these factors influence behaviour through attitudes and the effect of these attitudes on the purchasing behaviour of eco-friendly products, presents a fascinating area for further research. Therefore, this study aims to

explore and identify the connections between attitudes and purchasing behaviours regarding eco-friendly household products among housewives.

The research objectives are outlined as follows: 1) To examine the relationship between consumer knowledge, values, subjective norms, and perceived behaviour control and consumer attitudes towards eco-friendly household products; 2) To explore the relationship between attitudes and purchasing behaviour of eco-friendly household products.

## **METHODS**

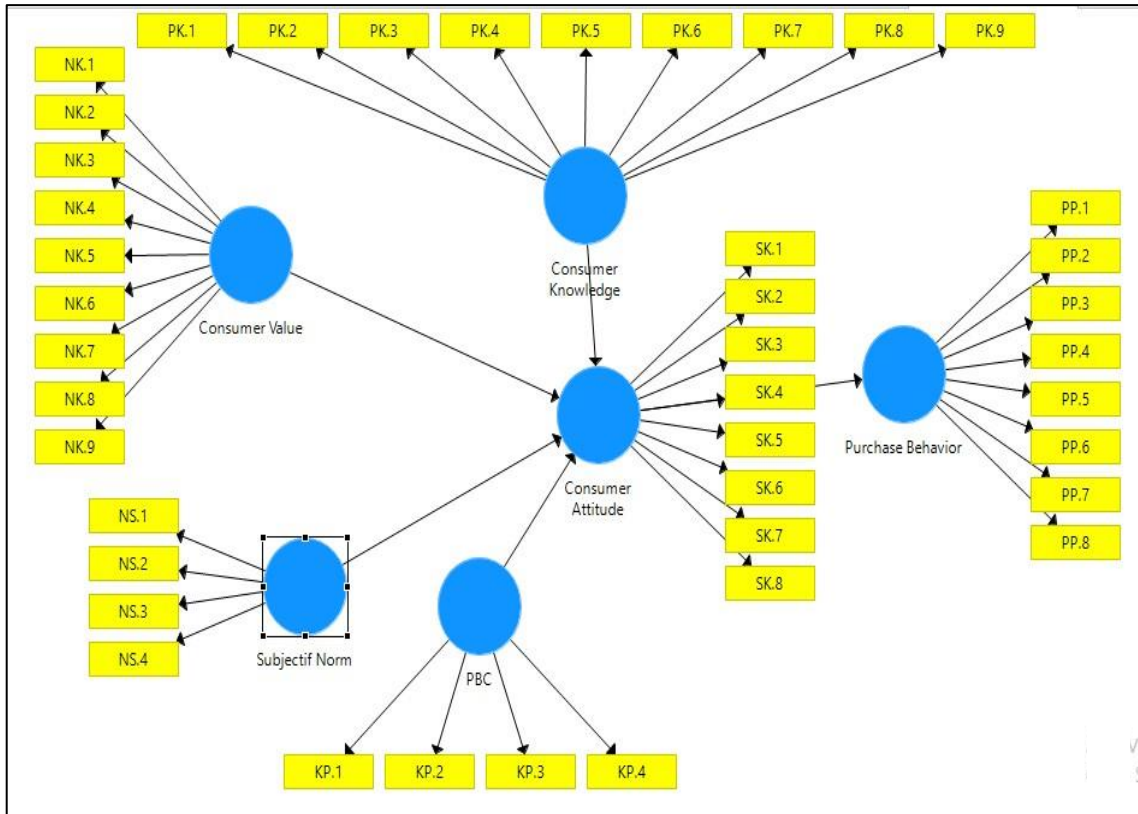
The methodology for this research employs a quantitative approach, concentrating on developing and validating theoretical models through analyzing empirical data. This approach is operationalized using a survey method, with questionnaires as the primary data collection tool. This methodological choice aligns closely with the research objectives, aiming to collect data to help achieve the desired outcomes systematically. The unit of analysis in this study is the household, with a specific focus on housewives, due to their critical role as financial managers of the family and primary decision-makers for daily household needs. The research targets a specific segment of the population: households that have previously purchased and used environmentally friendly products, especially within two cities in the Jambi Province.

Following the theoretical framework suggested by Iacobucci (2010) and Malhotra (1993), which recommends a minimum sample size of 200 for marketing research, this study aims to adhere to this guideline for data collection efforts. A probability sampling technique is employed to assemble the sample, with judgment sampling chosen as the method of preference. This method is selected for its effectiveness in ensuring a representative sample, crucial for the validity of the research findings (Malhotra, 1993). The geographical scope of the study is limited to Jambi City and Sungai Penuh City within the Jambi Province. These locations were chosen based on economic indicators, with Jambi City recognized for having the highest economic growth rate in the province, according to Iqbal et al. (2020). The research covers five Jambi City sub-districts and four Sungai Penuh City.

Data collection is carried out via the distribution of questionnaires, comprising a series of questions or statements to which respondents are asked to provide answers. This method is considered efficient for this study, particularly when the variables of interest and their interrelationships are well-defined and directly relevant to the research questions. Structural Equation Modeling (SEM) is utilized to analyze the relationships between the variables of the conceptual model. This advanced statistical technique is crucial in testing and measuring the dynamics among multiple variables within the research framework.

Moreover, thorough reliability and validity tests are conducted to ensure the reliability and validity of the constructs used in the study. These tests are essential for establishing the research instruments' credibility and findings. Additionally, significance tests are performed to examine the structural model within the research, offering insights into the strength and relevance of the relationships between variables. Clear definitions of the variables are critical to eliminate any ambiguity or misunderstanding regarding the variables under study. This comprehensive methodological framework aims to facilitate an in-depth exploration of housewives' attitudes and purchasing behaviours towards eco-friendly household products, thereby contributing valuable insights to consumer behaviour and environmental sustainability.

Furthermore, the research framework presented in Figure 1 outlines the conceptual model guiding this study, illustrating the connections between independent variables (consumer knowledge, consumer values, subjective norms, and perceived behavioural control), an intervening variable (consumer attitude), and the dependent variable (consumer behaviour). This model is pivotal in examining how various factors influence consumers' attitudes towards eco-friendly household products and how these attitudes affect their purchasing behaviours.



**Figure 1.** Research model

Drawing on theoretical foundations, a review of pertinent literature, and the discussions outlined earlier, the following hypotheses are proposed to examine the relationships within the research framework:

- H1: Consumer knowledge significantly influences consumer attitudes towards eco-friendly household products.
- H2: Consumer values significantly impact consumer attitudes towards eco-friendly household products.
- H3: Subjective norms significantly affect consumer attitudes towards eco-friendly household products.
- H4: Perceived behavioural control significantly affects consumer attitudes towards eco-friendly household products.
- H5: Consumer attitudes significantly influence the purchasing behaviour of eco-friendly household products.

Operational variables are measured using ordinal scales based on respondents' answers in a questionnaire. These variables serve as a foundation for formulating hypotheses and constructing the structural model of the study (Table 1).

**Table 1.** Definition of operational research variables

No	Variable	Definition	Dimension	Indicator
1.	Consumer Knowledge	The information that consumers possess enables them to identify and address environmental issues. (Lin & Niu, 2018)	<ul style="list-style-type: none"> <li>• Objective Knowledge</li> <li>• Subjective Knowledge</li> <li>• 3. Direct Experience</li> </ul>	<ul style="list-style-type: none"> <li>• Understanding the differences in production processes (PK1)</li> <li>• Being aware of product information (PK2)</li> <li>• Recognizing avoidable negative impacts (PK3)</li> <li>• Using the product (PK4)</li> <li>• Identifying environmentally friendly products (PK5)</li> <li>• Understanding roles and contributions to the environment (PK6)</li> <li>• Choosing products with better environmental impacts (PK7)</li> <li>• Integrating products into daily life (PK8)</li> <li>• Experiencing satisfaction with the performance of environmentally friendly products (PK9)</li> </ul>
2.	Consumer Value	The overall evaluation by consumers of a product is based on the assessment of what they have received and what they have given to obtain the product. (Woo & Kim, 2019)	<ul style="list-style-type: none"> <li>• Emotional Value</li> <li>• Functional Value</li> <li>• Social Value</li> <li>• Conditional Value</li> </ul>	<ul style="list-style-type: none"> <li>• Positive environmental contribution (NK1)</li> <li>• Preference for all environmentally friendly household products (NK2)</li> <li>• Perceived good standard quality (NK3)</li> <li>• Convenience in product use (NK4)</li> <li>• Motivation to purchase at lower prices (NK5)</li> <li>• Environmental acceptance (NK6)</li> <li>• Setting an environmental example (NK7)</li> <li>• Availability of products in the vicinity (NK8)</li> <li>• Purchasing due to price reductions (NK9)</li> </ul>
3.	Perceived Behavior Control (PBC)	An individual's perception of their control or authority over performing certain behaviours. (Rhodes & Courneya, 2003)	<ul style="list-style-type: none"> <li>• Self-efficacy</li> <li>• Controllability</li> </ul>	<ul style="list-style-type: none"> <li>• Ability to choose products according to preferences (KP1)</li> <li>• Confidence in product use (KP2)</li> <li>• Overcoming obstacles (KP3)</li> <li>• Control over purchasing environmentally friendly products (KP4)</li> </ul>
4.	Subjective Norm	Responses from reference groups about certain behaviours are considered when	<ul style="list-style-type: none"> <li>• Injunctive Component</li> <li>• Descriptive</li> </ul>	<ul style="list-style-type: none"> <li>• Support from the immediate environment (NS1)</li> </ul>

No	Variable	Definition	Dimension	Indicator
		deciding to engage in specific behavioural patterns. (Rhodes & Courneya, 2003)	Component	<ul style="list-style-type: none"> <li>• Informational and financial support (NS2)</li> <li>• Increasing trends (NS3)</li> <li>• Environmental acceptance of product usage (NS4)</li> </ul>
5.	Consumer Attitude	An individual's evaluation of the environment, perceptions of their responsibilities, and role in contributing to environmental sustainability. (Lin & Niu, 2018)	<ul style="list-style-type: none"> <li>• Environment Attitude</li> <li>• Individual Attitude</li> </ul>	<ul style="list-style-type: none"> <li>• Tendency to purchase environmentally friendly products (SK1)</li> <li>• Long-term orientation (SK2)</li> <li>• Responsibility for positive impact product use (SK3)</li> <li>• Responsibility for environmentally friendly product use (SK4)</li> <li>• Valuing the use of environmentally friendly products (SK5)</li> <li>• Satisfaction with positive impact products (SK6)</li> <li>• Pride in using environmentally friendly products (SK7)</li> <li>• Reduction of plastic and other non-degradable materials (SK8)</li> </ul>
6.	Purchasing Behavior	The actions and processes involved in searching, using, evaluating, and disposing of consumer products/services/ideas to satisfy needs. (Lin & Niu, 2018)	<ul style="list-style-type: none"> <li>• Product Search</li> <li>• Product Usage</li> <li>• Product Evaluation</li> <li>• Product Disposal</li> </ul>	<ul style="list-style-type: none"> <li>• Seeking information about product origin, methods, and impacts (PP1)</li> <li>• Choosing certified/eco-friendly labelled products (PP2)</li> <li>• Replacing conventional products with eco-friendly options (PP3)</li> <li>• Selecting products with reusable packaging (PP4)</li> <li>• Considering environmental impacts in decision-making (PP5)</li> <li>• Exhibiting behavioural accuracy (PP6)</li> <li>• Reducing single-use packaging (PP7)</li> <li>• Minimizing non-biodegradable packaging use (PP8)</li> </ul>

## RESULT AND DISCUSSION

### Sample characteristic

Table 2 presents a detailed comparison of the characteristics of the sample based on various demographics such as location, age of respondents, educational background, and product classification. This segmentation provides insights into the diversity of the sample population and their preferences regarding eco-friendly household products.

**Table 2.** Respondent characteristic

Information		Number	Percentage
Location	Jambi City	179	59.7
	Sungai Penuh City	121	40.3
Age of Respondents	18-27 years old	77	25.6
	28-37 years old	92	30.6
	38-47 years old	90	30.0
	48-57 years old	32	10.6
	> 57 years old	9	3.0
Educational Background	High School	132	4.0
	Diploma	16	5.30
	Bachelor Degree	111	37.0
	Magister Degree	32	10.7
	Doctoral Degree	9	3.0
Green Product Clasification	Kitchen Set	133	44.3
	Electronic Appliances	18	6.0
	Personal Equipment	82	27.3
	Cleaning Equipment	53	17.7
	Furniture	14	4.7
Total		300	100.0

The data indicates that most respondents (59.7%) are in Jambi City, with the remaining 40.3% in Sungai Penuh City. This distribution across two significant areas within Jambi Province suggests a well-balanced sample. The age distribution of the sample spans a wide range, with the largest groups being those between 28-37 years old (30.6%) and 38-47 years old (30.0%). This indicates that middle-aged respondents, who are typically responsible for household purchasing decisions, are the primary focus of this study.

The educational background of respondents varies significantly, with a substantial portion having completed high school (44.0%), followed by those holding a Bachelor's degree (37.0%). This variation showcases a broad spectrum of educational levels among the respondents, which could influence their understanding and attitudes towards eco-friendly products.

Regarding product classification, kitchen sets emerge as the most preferred green product category (44.3%), followed by personal equipment (27.3%). This preference underscores the importance of focusing on these categories in marketing strategies and product development for eco-friendly household items.

### **Model of environmental product purchase behaviour**

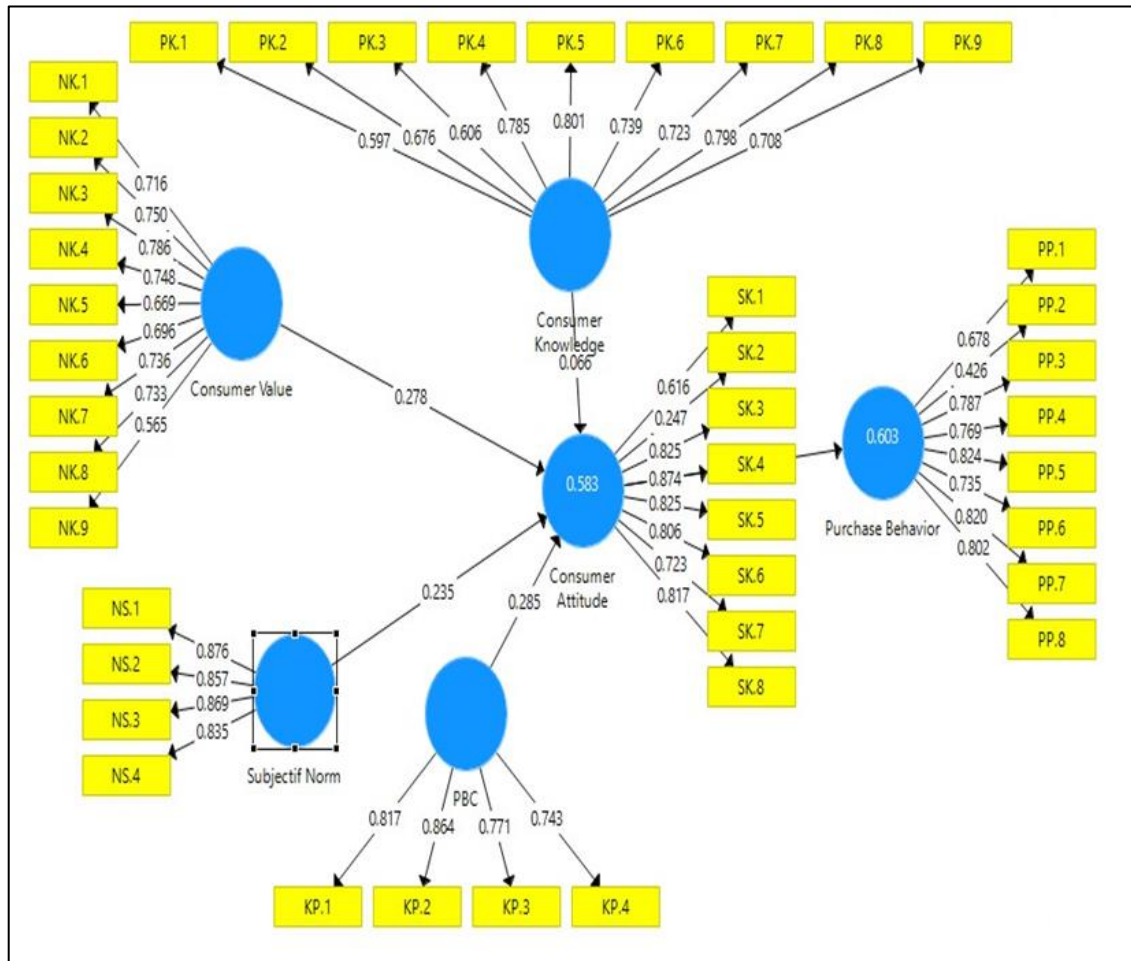
Before further analysis, an initial evaluation of the model regarding the validity and reliability of the indicators for the latent variables (constructs) is performed. Validity is tested using convergent and discriminant validity of the indicators, while reliability is assessed using two criteria: composite reliability and Cronbach's alpha.

Convergent validity is determined based on the correlation between item and construct scores. An indicator is convergently valid if its correlation (loading value) is  $\geq 0.50$ . Furthermore, discriminant validity is assessed by examining each construct's average variance extracted (AVE). An indicator is deemed discriminantly valid if its AVE value  $> 0.5$ .

The reliability of constructs is measured using two criteria: composite reliability and Cronbach's alpha. Both Cronbach's alpha and composite reliability should be above



0.7, although a Cronbach's alpha up to 0.6 is still acceptable. The validity and reliability testing of the model is presented in Figure 2 and Table 3.



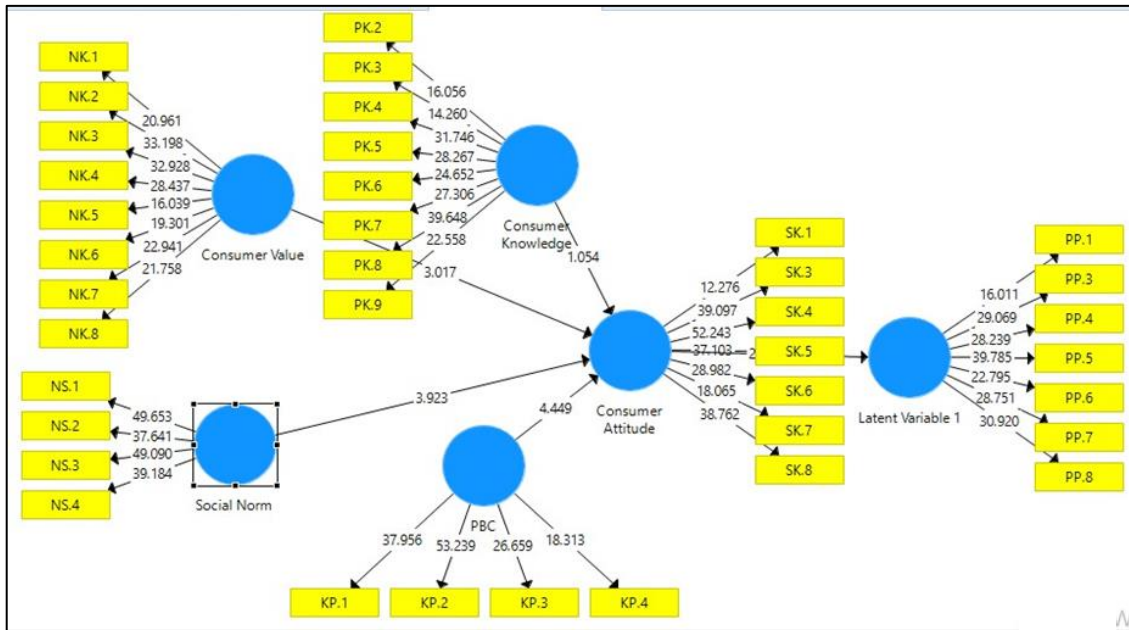
**Figure 2.** Outer loading model of environmental product purchase behaviour

All research variables, including consumer knowledge, consumer values, subjective norms, consumer attitudes, and purchase behaviour, demonstrate good validity and reliability. According to the data, the correlation of all construct indicators (loading factor) is above 0.5 (Figure 2). Similarly, it is observed from the table that the AVE value is above 0.5, Cronbach's alpha value exceeds 0.7, and the composite reliability value is above 0.7 (Table 3). This indicates a robust model for understanding environmental product purchase behaviour, with reliable and valid constructs for measuring the intended variables.

**Table 3.** Validity and reliability of the model

No	Variables	AVE	Cronbach's Alpha	Composite Reliability
1	Consumer attitude	0.551	0.869	0.901
2	Consumer knowledge	0.516	0.881	0.905
3	Consumer value	0.509	0.878	0.903
4	Perceived behavior control	0.640	0.812	0.876
5	Purchase behavior	0.549	0.878	0.904
6	Subjective norm	0.739	0.882	0.919

Next, the influence between variables can be observed from the coefficient values and the significance of the t-statistic. An influence is considered significant if the probability of the t-statistic is less than  $\alpha=1\%$ ,  $5\%$ , or  $10\%$ .



**Figure 3.** Model-based on processing bootstrapping

Data processing through bootstrapping will be conducted to test hypotheses based on the constructs established. Table 4's Hypotheses Testing results provide insights into the relationships between consumer knowledge, values, subjective norms, perceived behavioural control, consumer attitude, and purchase behaviour.

**Table 4.** Hypotheses testing

	Original Sample	Standard Deviation	T Statistics	P Values	Result
Consumer Knowledge -> Consumer Attitude	0.089	0.084	1.054	0.292	Not Supported
Consumer Value-> Consumer Attitude	0.251	0.083	3.017	0.003	Supported
Subjective Norm -> Consumer Attitude	0.239	0.061	3.923	0.000	Supported
PBC -> Consumer Attitude	0.284	0.064	4.449	0.000	Supported
Consumer Attitude -> Purchase Behavior	0.783	0.027	29.143	0.000	Supported

These results underline the significant influence of consumer values, subjective norms, and perceived behavioural control on consumer attitudes towards eco-friendly products, which, in turn, significantly affect purchase behaviour. However, the direct impact of consumer knowledge on attitudes was not established, suggesting that while knowledge is important, it may interact with other factors to influence attitudes and behaviours. This insight contributes to understanding consumer behaviour in the context of eco-friendly product purchasing and highlights areas for further research, particularly regarding the role of knowledge in shaping sustainable consumer behaviours.

***The impact of consumer knowledge on consumer attitude***

The research findings reveal that consumer knowledge does not significantly affect attitudes towards eco-friendly household products in both Jambi City and Sungai Penuh City. This outcome suggests that although households may be aware of the benefits, features, and quality of products or services, such knowledge alone does not necessarily cultivate a positive attitude towards adopting eco-friendly household products. These products, encompassing household appliances, furniture, kitchen utensils, cleaning tools, electronics, textiles, personal care items, health products,

decorations, and communication tools, often incorporate or are manufactured from plastic. Despite plastic's advantages, such as being lightweight, durable, waterproof, and inexpensive, its excessive use poses a considerable environmental challenge.

This discovery that environmental knowledge does not automatically translate into pro-environmental behaviour or favourable attitudes towards eco-friendly purchases challenges the conclusions of several prior studies. Zaremohzzabieh et al. (2020), for instance, discovered a direct positive impact of environmental knowledge on consumer attitudes, a finding echoed by Alhosseini Almodarresi et al. (2019) and Lin & Niu (2018), who observed a significant positive influence of knowledge on consumer attitudes towards eco-friendly products.

Conversely, Kollmuss & Agyeman (2002) contended that the link between knowledge and attitude might be minor, highlighting that research outcomes could differ based on the study's specific context, subject, and demographic. Similarly, Van Tran & Nguyen (2021) proposed that attitude does not necessarily mediate the relationship between knowledge and behaviour, suggesting that knowledge might not adequately predict consumer attitudes or behaviours towards eco-friendly products.

These variations underscore the intricate nature of consumer behaviour, indicating that while knowledge is a crucial element, it needs to be augmented by other factors like values, subjective norms, and perceived behavioural control to effectively shape consumer attitudes and behaviours towards eco-friendly household products. This complexity calls for a comprehensive approach to fostering environmentally responsible consumption behaviours, acknowledging the various factors influencing consumer decision-making.

### ***The impact of consumer value on consumer attitudes***

The research findings emphasize a significant relationship between consumer values and attitudes towards eco-friendly products, highlighting values' pivotal role in moulding consumer perceptions and decision-making processes. In economics, the exploration of consumer perceived value has been central. Jung et al. (2020) describe it as the consumer's overall assessment of a product's utility, weighing the benefits received against the sacrifices made. This study demonstrates that the value consumers in Jambi City and Sungai Penuh City place on eco-friendly household products significantly shapes their attitudes towards these items.

Simatupang & Junaidi (2020) observed that although consumers prefer high-value goods and services, their financial capabilities often limit their decisions. This dynamic accentuates the importance of value in steering household decisions, especially among housewives who acknowledge the dual advantage of utilizing environmentally friendly products—benefiting both household consumption patterns and the environment. The complexity of understanding what constitutes value to consumers suggests that exploring the life experiences that influence the beliefs and values of active environmentalists could yield deeper insights into what drives consumer values towards the environment.

Housewives' perception of value regarding eco-friendly products entails evaluating both tangible and intangible benefits, reflecting their environmental preferences, desires for goods or services, and overall ecological expectations. The consumption value theory, proposed by Sheth et al. (1991), divides consumer-perceived value into functional, social, emotional, cognitive, and conditional values. Nonetheless, this study concentrates on four dimensions of perceived value—emotional, functional, social, and economic—as defined by Zhang et al. (2018). Emotional value stems from satisfying emotional needs, the functional value from the benefits of a product's features

meeting individual needs, the social value from enhancing social relationships or connection with like-minded individuals through purchases, and the economic value from the financial benefits of using a product or service.

The strong connection between consumer value and attitudes towards eco-friendly household products is supported by prior research, including studies by Amin & Tarun (2021), Amoako et al. (2020), Essiz et al. (2023), Segev & Liu (2021), and Woo & Kim (2019). These results underscore the complex nature of consumer value and its profound impact on attitudes towards eco-friendly consumption. They provide valuable insights for marketers and policymakers seeking to foster sustainable consumer behaviours.

### ***The effect of subjective norms on consumer attitudes***

The study's findings underscore that subjective norms significantly shape consumer attitudes towards household products, highlighting the pivotal role of social influences in consumer behaviour. Subjective norms refer to an individual's perception of the expectations of key reference groups, such as family and friends, regarding their participation in specific behaviours. This concept emphasizes the importance of social approval or disapproval in the decision-making process for adopting certain consumption patterns.

The influence of subjective norms on consumer attitudes is notably strong in households where close relationships affect preferences and aversions. For example, parents who lead healthy lifestyles often instil these habits in their children and other family members, showing how a household's consumption patterns can mirror shared values and practices. Buying non-plastic products to reduce waste illustrates how individual actions can be moulded by the desire to align with the environmentally responsible behaviours supported by one's social network.

In collectivist cultures, where the opinions of family and friends are highly valued, the impact of subjective norms on purchasing decisions becomes even more significant. Liu et al. (2020) pointed out the deep-rooted collectivist values in China, where family and friends' opinions greatly influence consumer choices. Likewise, adherence to communal values and kinship is essential in the culturally rich contexts of Jambi and Sungai Penuh. In such environments, if the consumer majority views environmental consciousness favourably, individuals are more likely to perceive the purchase of green products as a correct action and as one that affirms their membership within their reference group.

The direct link between subjective norms and the development of individual attitudes towards eco-friendly purchasing behaviours has been validated by other studies as well. Shin & Hancer (2016) identified the significant role of subjective norms in attitude formation, while Abdullah Al-Swidi et al. (2014) observed a positive relationship between subjective norms and the purchase of eco-friendly products. These findings suggest that subjective norms are a more critical determinant of purchase intentions than commonly recognized, supported by further analysis by Shukla (2019). These studies highlight the essential influence of social factors and normative beliefs in directing consumer attitudes and actions, especially regarding environmental sustainability and the choice of eco-friendly household items.

### ***The effect of perceived behavioural control on consumer attitudes***

As introduced by Ajzen (1991) within the Theory of Planned Behavior framework, the concept of perceived behavioural control emphasizes that individuals' perceptions of their capability to perform a specific behaviour significantly influence that behaviour. This concept captures the extent to which individuals believe executing

a particular action is within their control and ability. The research findings illustrate a significant relationship between perceived behavioural control and consumer attitudes towards household products among Jambi and Sungai Penuh Cities housewives.

Perceived behavioural control involves the perceived ease or difficulty of executing a behaviour, which is thought to affect intentions and actual behaviours directly. Sultan et al. (2020) discovered that experiences reinforcing behavioural control could lead to positive behavioural intentions, directly impacting purchasing behaviours. Similarly, Abrar et al. (2021) found that perceived behavioural control positively influences the likelihood of purchasing eco-friendly fashion products in India. This indicates that consumers are more inclined to make eco-friendly choices when they feel empowered and capable.

Yadav & Pathak (2016) underscored the substantial effect of perceived behavioural control among the younger demographic on their interest in purchasing eco-friendly products, suggesting that control perception can encourage environmentally friendly purchasing decisions. This observation is supported by studies from Lavuri (2021) and Sultan et al. (2020), which also identified a strong link between behavioural control and consumer attitudes towards eco-friendly products.

Kishore Kumar et al. (2015) further affirmed the positive relationship between perceived behavioural control and green consumer behaviour, proposing that the greater the control consumers perceive they have over their ability to engage in eco-friendly behaviours, the more likely they are to demonstrate such behaviours. However, it is important to note that research by Johe & Bhullar (2016) offers a different perspective, suggesting that perceived behavioural control does not significantly influence when mediating the relationship between self-identity and purchase intention. This variance highlights the complexity of the factors driving eco-friendly purchasing behaviours and suggests that the influence of perceived behavioural control might differ based on other determinants or contexts.

In summary, the evidence strongly indicates that perceived behavioural control is crucial in shaping consumer attitudes towards eco-friendly household products. This underlines the significance of equipping consumers with the necessary knowledge, skills, and resources to make environmentally responsible decisions.

### ***The effect of consumer attitudes on consumer purchasing behaviour***

The research findings highlight that consumer attitudes significantly impact green purchasing behaviour for household products in Jambi and Sungai Penuh City, as outlined in Table 3. This relationship aligns with the perspective of Cherian & Jacob (2012), who argued that attitudes could predict individual behaviours. Additionally, Amoako et al. (2020) suggested that the more favourable an individual's attitude towards a behaviour is, the more likely they are to engage in it, a concept supported by research from Alhosseini Almodarresi et al. (2019) and Lehmann & Sheffi (2020). However, findings by do Paço et al. (2014) indicate that the connection between attitudes and behaviours is not always linear, pointing out situations where actual product purchase efforts may not reflect expressed consumer attitudes.

This research proposes that consumer attitudes are a key determinant of purchasing behaviour for eco-friendly products, implying that a positive attitude towards eco-friendly products increases the likelihood of eco-friendly purchases. This assertion reflects broader behavioural trends; for example, if family members are positive about exercising, they are more likely to engage in regular physical activity, or if they prefer healthy eating, they will choose foods that match their dietary preferences.

Nonetheless, various situational factors can influence the link between attitude and behaviour. Sometimes, individuals may not act according to their attitudes due to external pressures, social norms, or constraints. For instance, an individual positively inclined towards recycling might not participate in recycling activities if the facilities are unavailable.

This nuanced view of the relationship between consumer attitudes and purchasing behaviour underscores the complexity of converting eco-friendly attitudes into practical actions. It emphasizes the necessity of nurturing positive attitudes towards eco-friendly products and ensuring that consumers have the resources, opportunities, and support needed to actualize these attitudes. Overcoming obstacles to eco-friendly purchasing behaviour, such as product availability, affordability, and convenience, is crucial in bridging the gap between positive consumer attitudes and real green purchasing actions.

## **CONCLUSION AND RECOMMENDATIONS**

### **Conclusion**

This marketing research investigates the environmental impact by exploring the connection between environmental perceptions and consumer behaviour. It highlights the pivotal role of housewives in making purchasing decisions for household products. As the primary consumers and managers of household budgets, their choices significantly shape household consumption patterns. The study has shown that consumer values, perceived behavioural control, and subjective norms among housewives notably influence their attitudes towards eco-friendly household products. However, it uncovered a negligible relationship between consumer knowledge and consumer attitudes. Furthermore, a strong correlation was identified between the attitudes of housewives and their purchasing behaviour of eco-friendly products within households.

### **Recommendations**

Household members must recognize the diverse factors influencing their purchasing behaviours beyond knowledge, values, behavioural control, and subjective norms. This understanding can assist in making more informed choices and establishing achievable goals for buying green products.

The findings reveal that positive attitudes towards products do not automatically lead to purchases. Businesses should understand that additional marketing and consumer engagement efforts must transform positive attitudes into actual sales of eco-friendly products.

The study indicates that altering attitudes alone may not foster sustainable consumption. Policymakers should contemplate enacting further strategies and interventions, like regulations and incentives, to stimulate the acquisition of sustainable products. This could include educational campaigns, subsidies for eco-friendly products, or infrastructure enhancements that support environmentally friendly decisions.

The scope of this study was confined to two cities within the Jambi Province, indicating the necessity for future research to cover a wider geographical area. Extending the research scope could unveil insights into a broader array of consumer behaviours and attitudes towards eco-friendly household products, providing a more holistic view of the drivers of sustainable consumption. This expanded understanding can better guide businesses and policymakers in promoting environmental sustainability through consumer behaviour.

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