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Why do consumers buy paper bags? The Impact of Habit, Consumer Awareness and Sustainability as Drivers of Environmentally Responsible Consumer Behavior

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ABSTRACT

This study investigates the drivers of environmentally responsible consumer behavior among Indonesian consumers, focusing on the impact of habit, consumer awareness, and sustainability. A sample of 252 participants were surveyed to examine the relationship between sustainability values, consumer vulnerability awareness, community consumer instrumentality awareness, personal consumer instrumentality awareness, habits, and responsible consumer behavior. This study used Structural Equation Modeling (SEM) with Smart-PLS 4 to analyze the data. The results showed a significant positive relationship between sustainability values, dimensions of consciousness, habits, and responsible consumer behavior. The findings emphasize the critical role of high awareness, personal agency, and habitual behavior in promoting green choices. These insights provide valuable guidance for businesses, policymakers, and environmental advocates who want to encourage positive environmental change through consumer behavior.

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1. INTRODUCTION

Plastic is the most frequently used material worldwide due to its practicality, but unfortunately, the overuse of plastic hurts the environment and human health [1]. Today, the problem of plastic use has become one of the most serious and pressing environmental issues z(Ardhiyansyah, Iskandar, and Riniati 2023; Wang, Zhang, and Li 2023). The impact of plastic use on sustainability is enormous and requires action to reduce its negative impact on the environment and human health [4]. The overuse of plastic has become a significant environmental issue due to its negative impact on the environment and human health. Plastic accounts for about 10% of the mass of human trash on land and 60-80% of litter in the seas [5]. The problem is exacerbated by inefficient waste management systems and the increasing use of single-use plastics, especially during the COVID-19 pandemic [6]. Plastic pollution affects land, water, and air. Discarded plastic items end up in canals, drainage systems, and city streets, causing flooding and posing challenges in

agriculture, health, and sanitation [5]. Plastic pollution can be lethal to animals, as they may ingest or become entangled in plastic debris [5]. Microplastics can enter the human body through ingestion or inhalation, leading to various health issues, including cancer and cardiovascular diseases [5]. Nanoplastics, which are even smaller particles, can also accumulate in the environment and pose risks to human health [7].

In recent years, many studies have been conducted to determine the impact of plastic use on the environment and human health [4]. One of the biggest impacts of plastic use is environmental contamination [8]. Plastic that is discarded carelessly can contaminate the environment, such as water and soil [9]. According to research conducted by [10], excessive use of plastic bags can cause damage to the environment and trigger flooding. According to research conducted by the United Nations Environment Programme (UNEP), "at least 8 million tons of plastic enter the ocean each year, and if this trend continues, then by 2050, there will be more plastic than fish in the ocean". In addition, plastic production has increased dramatically worldwide over the past 60 years. It is now recognized as a severe environmental threat due to its non-biodegradable nature that can persist in the background for a long time [11].

The overuse of plastics has become an increasing global problem at the moment. Therefore, it is inevitable that plastic items are easily found. Many people use plastic daily, be it in shopping bags, beverage bottles, food containers, and many more [12]. Although plastic is an efficient and versatile material, its excessive use can hurt the environment and human health. In addition to global problems, plastic waste is a major problem in Indonesia that has become the focus of public and government attention [13]. Handling plastic waste is becoming increasingly important because the volume in Indonesia continues to increase over time [14]. Various efforts have been made to deal with the problem of plastic waste, but many obstacles must be overcome [15].

The Indonesian government has issued several policies to reduce the use of plastic, including a ban on single-use plastic bags in several regions [16]. However, implementing these policies still faces many challenges and requires more significant efforts to significantly reduce plastic use [17].

The National Action Plan for Waste Management 2020-2024, published by the Ministry of Environment and Forestry, is the government's effort to address the plastic waste problem. This action plan aims to improve plastic waste management and reduce the volume of plastic waste entering the environment.

Although the Indonesian government has issued several policies to reduce plastic use, such as the ban on single-use plastic bags in some regions, there are still many challenges in reducing plastic consumption in Indonesia [18]. Some of the influencing factors include the high dependence on plastic in daily life, lack of public awareness of the importance of protecting the environment [19]. In addition, the community also needs to play an active role in overcoming the plastic waste problem [20]. The importance of the community's role in reducing the plastic waste problem. One way is to change the habit of using disposable plastic products to products that can be used repeatedly or switch to using paper bags [21].

The use of plastic as a wrapping material or shopping bag has become a common habit for people around the world. Paper bags are made from recyclable paper and are more environmentally friendly than plastic [22]. To reduce this negative impact, paper bags as an alternative to plastic has been proposed and implemented in many places worldwide [23]. However, despite the widespread use of paper bags, there is still a lack in consumer awareness about the benefits and importance of using paper bags[24]. In addition, it takes time to promote using paper bags as a replacement for plastic bags[25]. Therefore, research on alternatives to using paper bags as a replacement for plastic bags can provide helpful information in reducing the use of plastic bags and encouraging more environmentally friendly consumer behavior. Growing global concerns regarding environmental degradation and the adverse

impacts of plastic waste have pushed sustainable consumer behavior to the forefront of discussions across industry, government, and civil society. As the negative effects of single-use plastics become more apparent, the need for everyone to adopt environmentally responsible practices becomes more urgent. In this context, the shift from plastic bags to more sustainable alternatives, such as paper bags, has gained significant attention due to its potential to reduce the ecological impact of plastic waste. With its diverse population and growing economy, Indonesia is an essential focal point in efforts to understand and promote environmentally conscious consumer behavior. As one of the largest archipelagic countries in the world, Indonesia has a rich biodiversity but also faces the daunting challenge of plastic pollution due to its high reliance on single-use plastics. This unique situation makes Indonesia an ideal context to investigate the factors that drive consumers to choose paper bags, exploring the role of habit, consumer awareness, and sustainability considerations in shaping these choices.

2. LITERATURE REVIEW

2.1 Environmental Awareness and Behavior

Sustainability is affected by consumer awareness in various aspects, including consumer vulnerability awareness, community consumer instrumentality awareness, personal consumer instrumentality awareness, and habits. Consumer awareness can influence responsible consumer behavior, purchase intentions, and consumption attitudes toward sustainable products [26], [27]. For example, increased awareness of food waste issues may positively influence purchase intentions for "bad food" [26]. Similarly, as consumer awareness of ethnic foods increases, consumption attitudes toward such foods also improve, which can contribute to sustainability [27]. In the context of the fast-fashion clothing industry, the level of environmental awareness among consumers can influence their purchasing decisions and consumption behavior, which in turn affects the strategic competitiveness of the business [28]. In addition, the COVID-19 pandemic has raised questions about whether society will continue to raise awareness of sustainable consumption or focus more on individual needs [29]. Research conducted during the pandemic showed that ecological, social and voluntary simplicity awareness deteriorated among sustainability-conscious consumers, which impacted their willingness to shop sustainably and their shopping affinities [29]. In summary, consumer awareness is vital in influencing sustainability by affecting responsible consumer behavior, purchase intentions, and consumption attitudes. Increased awareness can contribute to more sustainable choices and practices among consumers.

2.2 Responsible Consumer Behavior is essential for sustainability

Responsible Consumer Behavior is indeed essential for sustainability. Consumers are critical in driving sustainable development, and their choices can significantly impact the environment and society. Research has shown that consumer awareness and a sustainability-focused value orientation are drivers of responsible consumer behavior [30]. This behavior comprises both societal and individual dimensions, emphasizing the importance of considering the broader implications of consumption choices. In fast food restaurants, environmentally responsible consumer behavior could be more consistent, with consumers prioritizing their needs first and demonstrating environmentally responsible actions only after they are

met [31]. However, consumers are intensely aware of the importance of maintaining a clean environment and taking responsibility for waste management after consumption. Research on smartphone sustainability also highlights the need to encourage environmentally responsible consumer behavior, such as the willingness to recycle smartphones [32]. Factors such as environmental concern, knowledge and trust play an important role in shaping green consumption behavior [32]. Socially Responsible Consumer Behavior (SRCB) has been a fragmented field of study. Still, in recent years, SRCB has developed into a more distinct entity [33]. Research has focused on various aspects of SRCB, including corporate social responsibility (CSR) and the ethical side of consumption [33]. Research has also explored the relationship between utilitarian and hedonic consumer behavior and socially responsible consumption, showing that hedonic consumer behavior has a greater impact on socially accountable consumption than practical consumer behavior [34]. In conclusion, responsible consumer behavior is essential for sustainability, and understanding the factors that drive such behavior can help promote more sustainable consumption choices. By being aware of the environmental and social implications of their decisions, consumers can contribute to a more sustainable future.

2.3 Cultural Factors and Developing Countries

Culture plays a significant role in shaping consumer behavior, particularly in developing countries like Indonesia. Cultural norms, traditions, and economic realities influence consumption patterns and sustainability. Consumer awareness can be categorized into four aspects: Customer Susceptibility Awareness, Societal Consumer Instrumentality Awareness, Personal Consumer Instrumentality Awareness, and Habit with Responsible Consumer Behavior [35]–[37]. The interplay between Islamic values and local traditions in Indonesia has led to harmonizing cultural practices, such as the Caramseguguk tradition in South Sumatera [36]. This blending of religious and cultural values contributes to the formation of unique consumption patterns in the country. Additionally, food security and consumption patterns in Indonesia are influenced by income, price, individual tastes, beliefs, and socioeconomic aspects [37], [38]. Sustainability in consumer behavior can be influenced by factors such as consumer awareness and sustainability-focused value orientation [30]. In the context of developing countries, it is essential to understand the impact of cultural norms, traditions, and economic realities on consumption patterns to promote sustainable practices. By raising awareness and promoting responsible consumer behavior, it is possible to foster sustainable consumption patterns that align with a particular region's cultural values and traditions.

2.4 Research Gaps and Emerging Trends

Research addressing consumer behavior and sustainability in the Indonesian context, specifically the choice between paper and plastic bags, is limited. However, a study conducted in Indonesia analyzed consumer behavior in the plastic bag diet and examined people's awareness of bag use related to economic, environmental, or lifestyle motives [39]. While this study did not directly compare paper and plastic bags, it provides insight into consumer behavior and awareness regarding plastic bag use in

Indonesia. The interplay between habit, awareness, and sustainability as drivers of consumer behavior is an area that requires further exploration. A study conducted in the context of food waste reduction behavior found that habits, waste reduction intentions, and facilitating conditions significantly influence consumer behavior ,[40]. This suggests thatpracticess are essential in shaping consumer behavior towards sustainability. Although these studies do not specifically address the Indonesian context regarding paper and plastic bag choice, they provide valuable insights into the factors influencing consumer behavior towards sustainability. This research seeks to fill the gap needed to explore the interaction between habits, awareness, and sustainability in the Indonesian context and better understand the factors that drive consumers to choose between paper and plastic bags.

2.5 Theoretical Framework and Hypothesis

This study draws on the Theory of Planned Behavior [41] and the Habit Formation Model [42]. The Theory of Planned Behavior states that attitudes, subjective norms, and perceived behavioral control influence behavioral intentions and actual behavior. As postulated by the Habit Formation Model, Habits can independently influence behavior and interact with choices. The hypotheses presented below are designed to test the relationship between sustainability, various dimensions of consumer awareness, habits, and their collective impact on environmentally responsible consumer behavior in Indonesia's bag choice context. A conceptual framework built on existing theory and literature guides investigating these relationships.

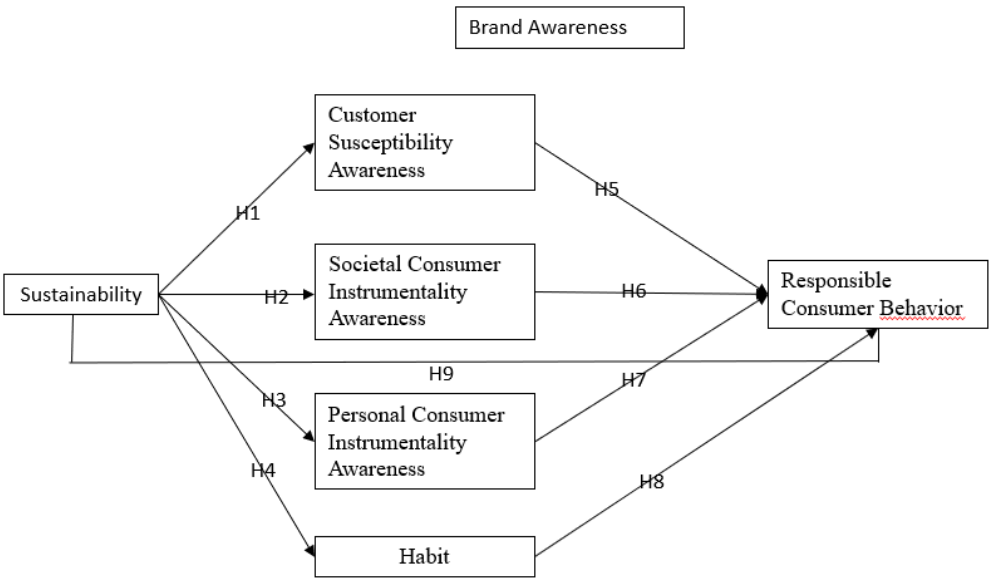

Figure 1. Conceptual Framework and Hypothesis

The hypotheses above reflect the complex relationships between sustainability, consumer awareness, habits, and environmentally responsible consumer behavior. By examining these relationships in the context of bag choice in Indonesia, this study aims to contribute to understanding the drivers behind consumers' preference for paper bags

over plastic bags. Subsequent empirical analysis will test these hypotheses, providing insights that can guide businesses, policymakers, and environmental advocates in promoting sustainable consumption patterns.

3. METHODS

This study adopts a quantitative research design to assess the relationships between sustainability, consumer awareness dimensions, habit, and environmentally responsible consumer behavior. The primary goal is to quantify these relationships and understand the extent to which each factor contributes to the preference for paper bags. The research employs a survey-based quantitative approach to gather data from a diverse sample of Indonesian consumers. The survey is structured to measure variables related to sustainability, consumer awareness, habit, and responsible consumer behavior.

3.1 Sample Selection

The sample was selected using a stratified random sampling technique to ensure representation from different regions in Indonesia. The population was grouped based on predetermined criteria, including the habit of shopping at Traditional Markets, Shopping Centers, e-commerce, and Modern Stores. The questionnaire was distributed to 300 customers, and the questionnaire returned and met the criteria as many as 252, meaning that 80% of the questionnaires distributed were returned.

3.2 Data Collection

Data is collected through a self-administered online survey using a reputable survey platform. The survey consists of multiple sections, each corresponding to the research constructs: sustainability (SUS), customer susceptibility awareness (CSA), societal consumer instrumentality awareness (CSIA), personal consumer instrumentality awareness (PCIA), habit (HBT), and responsible consumer behavior (RCB). Each section includes items measured on a Likert scale.

3.3 Data Analysis

The Partial Least Squares Structural Equation Modeling (PLS-SEM) method and Smart-PLS 4 software were used to evaluate the gathered data. For this investigation, PLS-SEM is appropriate because it enables the examination of intricate correlations between latent variables and manifest variables, even when sample numbers are small [43].

a. The analysis involves two main steps:

Step 1: Measurement Model Analysis

Evaluation of the measurement model's reliability and validity: According to criteria like factor loadings, Cronbach's alpha, composite reliability, and average variance extracted (AVE), the validity and reliability of survey items for each concept were assessed [44].

Heterotrait - Monotriat Ratio of Correlations (HTMT) and the Fornell - Larcker criterion are used to evaluate the discriminant validity of different constructs [45].

Step 2: Structural Model Analysis

Evaluation of the structural model: Path analysis will evaluate the connections between sustainability, consumer susceptibility awareness, societal consumer instrumentality awareness, personal consumer instrumentality awareness, habit, and responsible consumer behavior.

Testing of hypotheses: The strength and direction of the links between the constructs are assessed by evaluating the

significance of the routes connecting them.

Model fit evaluation: The predictive power and fit of the model are assessed using model fit metrics like R2 (coefficient of determination) and Q2 (predictive relevance) [46].

4. RESULTS AND DISCUSSION

4.1 Demographic Information

The age of respondents varied across the spectrum, with the majority being in the 25-34 age group (42.9%), followed by the 35-44 age group (29.4%). This distribution also included participants aged 18-24 (18.3%) and 45 and above (9.4%). The sample was relatively balanced in gender, with 50.8% identifying as female and 49.2% as male. Respondents' education levels showed diversity, with 33.7% having completed high school, 41.3% having a bachelor's degree, and 25.0% having a master's degree. Income distribution varied, with 28.2% of respondents belonging to the low-income group, 40.1% in the middle-income group, and 31.7% in the high-income group.

Respondents showed diverse shopping habits, with 24.6% shopping daily, 42.5% shopping weekly, 26.2% shopping monthly, and 6.7% shopping less frequently. Regarding bag choice when shopping, 39.3% of participants preferred paper bags, while 30.6% chose reusable bags, 24.6% used plastic bags, and 5.5% chose other alternatives. Participants expressed a strong inclination towards sustainability, with 64.7% indicating that sustainability is important or extremely important in consumer choices. Respondents showed a high level of concern for environmental issues, with 78.6% expressing a moderate to increased respect for plastic pollution and its impacts.

Table 1. Descriptive Statistics

Variable	Mean	S.D	Min	Max
Sustainability	3.32	1.09	1.00	5.00
Customer Susceptibility Awareness	4.11	1.05	2.00	5.00
Societal Consumer Instrumentality Awareness	4.46	1.14	2.00	5.00
Personal Consumer Instrumentality Awareness	4.81	1.22	2.00	5.00
Habit	4.77	1.18	2.00	5.00
Responsible Consumer Behavior	4.54	1.15	2.00	5.00

Source: Data Processing Results (2023)

The descriptive statistics in Table 1 provide valuable insights into the distribution and characteristics of the variables under study. The means, standard deviations, and ranges comprehensively understand the respondents' perspectives and behaviors related to sustainability, awareness, habit, and responsible consumer behavior. These statistics serve as a foundation for the subsequent quantitative analysis, aiding in interpreting the relationships between the variables and their implications.

4.2 Measurement Model Analysis

Partial Least Squares Structural Equation Modeling (PLS-SEM) with Smart-PLS 4 software will be used to determine the validity and dependability of the measurement model. Each construction will examine each factor, Cronbach's alpha, composite reliability, and average variance extracted (AVE).

Table 2. Measurement Model

Variable	Items	Loading Factor	Cronbach's Alpha	rho_C	AVE
Sustainability (SUS)	SUS.1	0.845	0.893	0.919	0.654
	SUS.2	0.841			
	SUS.3	0.804			
	SUS.4	0.842			
	SUS.5	0.735			
	SUS.6	0.777			
Consumer Susceptibility Awareness (CSA)	CSA.1	0.828	0.825	0.896	0.741
	CSA.2	0.886			
	CSA.3	0.869			
Societal Consumer Instrumentality Awareness (SCIA)	SCIA.1	0.802	0.848	0.898	0.687
	SCIA.2	0.862			
	SCIA.3	0.841			
	SCIA.4	0.808			
Personal Consumer Instrumentality Awareness (PCIA)	PCIA.1	0.884	0.907	0.935	0.781
	PCIA.2	0.859			
	PCIA.3	0.926			
	PCIA.4	0.866			
Habit (HBT)	HBT.1	0.765	0.832	0.889	0.667
	HBT.2	0.851			
	HBT.3	0.884			
	HBT.4	0.761			
Responsible Consumer Behavior (RCB)	RCB.1	0.860	0.902	0.923	0.632
	RCB.2	0.735			
	RCB.3	0.811			
	RCB.4	0.813			
	RCB.5	0.715			
	RCB.6	0.835			
	RCB.7	0.784			

Source: Data Processing Results (2023)

All indicators' factor loadings were discovered to be greater than 0.7, indicating acceptable convergent validity. Each construct had factor scores and Cronbach's alpha values greater than 0.7, indicating strong internal consistency. Additionally, over 0.8, the composite reliability ratings showed reliable readings for each construct. All constructs also exceeded the AVE cutoff 0.5, indicating acceptable convergence validity.

4.3 Discriminant Validity

Table 3. Discriminant Validity

Variable	CSA	SCIA	PCIA	HBT	SUS	RCB
CSA						
SCIA	0.744					
PCIA	0.331	0.194				
HBT	0.429	0.226	0.326			
SUS	0.613	0.157	0.243	0.174		
RCB	0.319	0.119	0.451	0.301	0.201	

Source: Data Processing Results (2023)

The Heterotrait-Monotrait Value (HTMT) is used to assess the discriminant validity of the instrument. The HTMT ratio is a more reliable indicator of discriminant validity in PLS-SEM analysis. For the instrument to be regarded as valid, the HTMT ratio result must be less than 0.90 (Hair et al., 2017). Every HTMT ratio value for each latent variable is less than 0.90, as shown in Table 3, demonstrating the validity of this research instrument to assess the model developed.

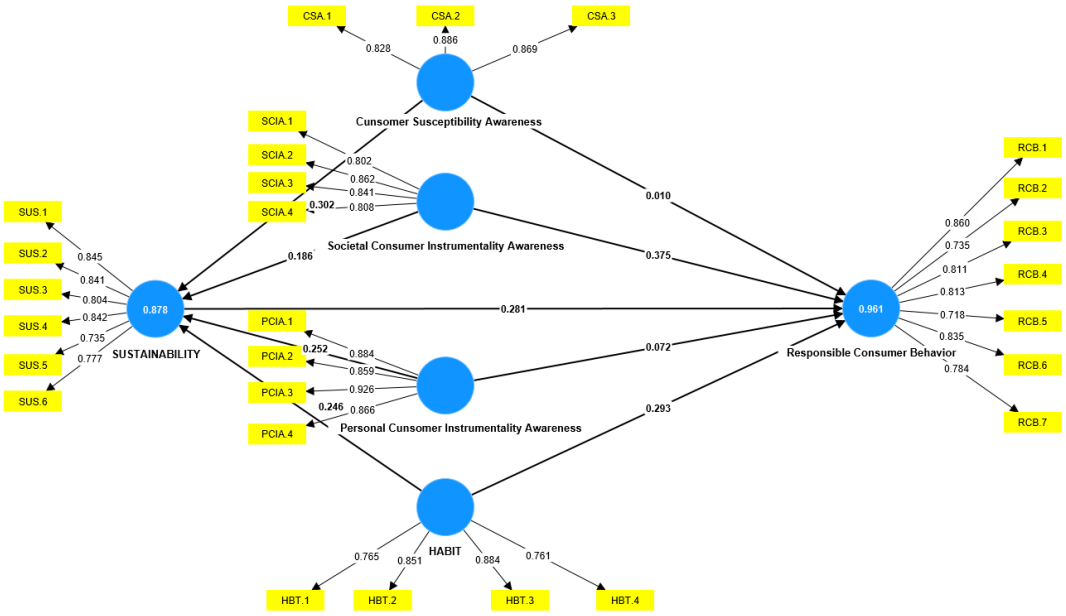

Figure 2. Model Fit

4.4 *Structural Model Analysis*

The structural model is then analyzed to test the hypothesized relationships between the constructs. Bootstrapping techniques are employed to generate t-values and p-values, indicating the significance of the relationships. The results of the path analysis provide insights into the strength and direction of the relationships.

a. Hypothesis Testing

The findings of the structural model analysis will be used to test the hypotheses developed by the research goals. We'll examine the importance of the connections between the constructs to see if the suggested links hold up.

To statistically test hypotheses, researchers employ the bootstrap approach in PLS-SEM, defined by [43]. To verify the level of data relevance and assess the significance of the structural model, this study used 5,000 sub-samples (J. J. Hair et al., 2017). For this experiment, the significance level was established at 5%. The SmartPLS-4 bootstrap program was used to achieve the findings given below.

Table 4. Hypothesis Testing

Hypothesis	Original Sample	Sample Mean	STDEV	T-statistic	p-Values
CSA -> RCB	0.246	0.250	0.066	3.721	0.000
CSA -> SUS	0.302	0.274	0.112	2.693	0.004

CSIA -> RCB	0.293	0.296	0.060	4.875	0.000
CSIA -> SUS	0.246	0.251	0.091	2.698	0.003
PCIA -> RCB	0.244	0.249	0.066	3.220	0.000
PCIA -> SUS	0.252	0.268	0.112	2.246	0.002
HBT -> RCB	0.375	0.381	0.055	5.698	0.000
HBT -> SUS	0.186	0.192	0.085	2.194	0.000
SUS-> RCB	0.281	0.274	0.045	6.201	0.000

Source: Data Processing Results (2023)

The results of this study underscore the importance of sustainability values, consumer awareness, and habits in shaping environmentally responsible consumer behavior in Indonesia. The positive relationships identified contribute to theoretical understanding and practical applications. Companies and policymakers can drive positive environmental change by aligning consumer preferences with sustainability. As consumer behavior plays a vital role in global sustainability efforts, understanding the motivations behind responsible choices remains crucial for a more environmentally conscious future. The results presented confirm the hypothesized relationships between various constructs and variables. The findings provide valuable insights into the complex interactions between sustainability, awareness dimensions, habits, and responsible consumer behavior. The statistically significant relationships underscore the importance of sustainability values, consumer awareness, and habits in shaping environmentally responsible choices among Indonesian consumers. Nine hypotheses have t-statistic values above 1.96, based on the t-statistic test findings. Conclusion: The above findings conclude that ***H1, H2, H3, H4, H5, H6, H7, H8, H9 are accepted.***

4.5 Model Fit Assessment

The SmartPLS-4 study revealed a model that was appropriate for this project.

Table 5. Model Fit Results Test

	Saturated Model	**Estimated Model**
SRMR	0.2081	0.4592
d_ULS	1.2265	1.4280
d_G	0.2302	0.3162
Chi-square	221.378	247.577
NFI	0.6841	0.8643

Source: Data Processing Results (2023)

Model fit is evaluated using goodness-of-fit metrics like R2 (coefficient of determination) and Q2 (predictive relevance). R2 denotes the percentage of variation in the exogenous constructs (consumer vulnerability awareness, societal consumer instrumentality awareness, individual consumer instrumentality awareness, and habit) that can be explained by the endogenous constructs (consumer responsibility and sustainability). The model's predictive significance, or how well it predicts the endogenous constructs, is indicated by Q2.

Table 6. Coefficient Model

	R-square	Q2
Sustainability	0.682	0.364
Responsible Consumer Behavior	0.591	

Source: Data Processing Results (2023)

The R-square value of 0.682 for Sustainability implies that about 68.2% of the variability in sustainability can be explained by the predictors (e.g., consumer vulnerability awareness, social consumer instrumentality awareness, personal consumer instrumentality awareness, habits). This is a relatively high R-square value, indicating that the predictors in your model substantially influence why consumers in Indonesia prioritize sustainability. The R-square value of 0.591 for Responsible Consumer Behavior suggests that about 59.1% of the variability in responsible consumer behavior can be explained by the predictors (e.g., sustainability, awareness of consumer vulnerability, awareness of social consumer instrumentality, awareness of personal consumer instrumentality, habits). This value indicates that these predictors significantly impact understanding the factors that drive responsible consumer behavior among Indonesian consumers. In addition, the Q2 values for sustainability and responsible consumer behavior impact were above zero, indicating that the model has predictive relevance.

4.6 Discussion

The results of this study provide substantial insight into the factors that drive Indonesian consumers to prefer paper bags over plastic bags and responsible consumer behavior. The findings align with existing literature, emphasizing the importance of sustainability values, awareness dimensions, and habits in shaping consumer choices.

The positive relationship between sustainability and various dimensions of mindfulness, such as consumer vulnerability awareness, community consumer instrumentality awareness, and personal consumer instrumentality awareness, highlights the significance of mindfulness in promoting environmentally responsible behavior. This aligns with the idea that a high understanding of environmental challenges will encourage pro-environmental attitudes, particularly in using paper bags in consumer shopping behavior. Research has shown that ecological knowledge, personal belief, and social influence can significantly affect consumers' attitudes towards environmentally responsible behaviors, such as purchasing reusable shopping bags [47]. Additionally, mindfulness can help consumers become more aware of waste problems and develop a sense of caring for others, their communities, and the environment [48]. This increased awareness and understanding of responsibility can lead to more sustainable consumption patterns and environmentally friendly practices.

Mindfulness is crucial in promoting environmentally responsible behavior by increasing awareness of environmental challenges and fostering pro-environmental attitudes. Encouraging mindful practices among consumers can lead to more sustainable consumption patterns and a greener future.

The role of habits in driving responsible consumer behavior and

sustainability is crucial, as established habits significantly influence consistent green choices. The relationship between personal consumer instrumentality awareness and accountable consumer behavior highlights the role of individual agency in driving environmentally conscious preferences, such as reducing plastic use and switching to paper bags.

Research shows that attitudes, norms, and awareness play a role in predicting the intention to engage in environmentally responsible behaviors, such as post-consumer plastic packaging activity [49]. Social media also impacts millennials' and Generation Z's green purchasing habits. Social Learning Theory suggests that individuals learn and adopt new behaviors by observing others, including those they follow on social media [50]. Norm Activation Theory states that individuals are more likely to engage in environmentally responsible behaviors when they believe such behaviors are the social norm and are supported by their peers and social media influencers [50]. Place-conscious pedagogy, which uses the local community and environment as focal points for teaching, can also enhance student agency, encompassing self-motivated curricular learning, self-determination in successfully attaining personal objectives, and an increased willingness to address societal issues [51]. Students who actively participate in understanding and shaping the world around them learn to recognize their potential as agents of personal and social transformation [51].

The mutual reinforcement between sustainability and ethical consumer behavior that has been seen further supports the relationship between these variables. Consumers prioritizing sustainability are more likely to consistently make environmentall. Ons helps promote more sustainable purchasing habits [32], [52], [53].

4.7 Implications

The study's conclusions have applications for organizations, decision-makers, and environmentalists who wish to encourage environmentally conscious consumer behavior:

a) Businesses: Companies can use the positive correlation between sustainability ideals and responsible conduct by adjusting marketing strategies to coincide with consumers' sustainability values. This might lead to a rise in demand for green goods and services.
b) Decision-makers: The study underlines the significance of awareness campaigns that highlight habit formation and personal and social repercussions. Policies supporting consumer education and rewarding sustainable behavior can influence responsible consumer decisions.
c) Environmental activists can focus their lobbying efforts by knowing what motivates responsible consumer behavior. Advocates can influence favorable environmental outcomes by highlighting the connections between sustainability beliefs, awareness, and behaviors.

4.8 Limitations of the Study and Future Research

There are various restrictions to this study to be aware of:

a) Cross-Sectional Design: This design type restricts the ability to establish causal connections. To capture temporal dynamics, future studies could investigate this association longitudinally.

b) Self-Reported Data: Because the study used self-reported data, there may have been some response bias. Self-report and scientific measures can be combined to improve the validity of the results.
c) Cultural Nuances: This study needs to go into better detail regarding how culture affects consumer behavior. A qualitative study can explain more in-depth how culture affects sustainable lifestyle choices.

Future research directions can include:

a) Look into strategies to replace unsustainable behaviors with sustainable ones.
b) Assess the influence of customer behavior on awareness and education programs.

Examine how cultural and socioeconomic elements can promote environmentally friendly behavior.

5. CONCLUSION

This study highlights the complex factors that drive Indonesian consumers to prefer paper bags over plastic bags and responsible consumer behavior. The findings derived from this comprehensive analysis of sustainability values, dimensions of awareness, habits, and green choices contribute to a broader understanding of environmentally conscious consumer behavior. The confirmed positive relationships underscore the interconnectedness of these factors, emphasizing the role of awareness, personal agency, and habit patterns in promoting responsible choices. The results of this study have practical implications for various stakeholders. Companies can adjust their strategies to align with consumers' sustainability values, while policymakers can design effective awareness campaigns and incentives. Environmental advocates can leverage these findings to drive positive change by emphasizing the interaction between sustainability values, awareness, and habits. While this study provides valuable insights, it is essential to recognize its limitations, including the cross-sectional design and reliance on self-reported data. Future research could explore these relationships longitudinally and incorporate objective measures. This study contributes to ongoing efforts to encourage sustainable consumer behavior and promote a more environmentally conscious future.

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