Management Studies and Entrepreneurship Journal
Vol 7(3) 2026: 1574-1586

Revealing How to Analyze Public Purchase Intentions Toward Green Products in Emerging Markets in the Jakarta Region

Vionyka Amanda Erditia[1], Debbie Aryani Tribudhi[2]
Program Studi Manajemen, Fakultas Ekonomi dan Bisnis, Universitas Trisakti
Email: amandavionyka@gmail.com[1], debbie.aryani@trisakti.ac.id[2]

**Coresponding Author: debbie.aryani@trisakti.ac.id*

ABSTRACT
This study investigates the effects of environmental concern, green attitude, subjective norms, and perceived behavioral control on the intention to purchase green products, with environmental knowledge as a moderating variable. Using survey data from 190 Indonesian participants, the findings indicate that environmental concern positively shapes green attitude, subjective norms, and perceived control. Subjective norms also contribute significantly to both perceived control and green purchase intention. However, green attitude and perceived control do not directly influence intention. Environmental knowledge enhances the relationship between attitude and intention. The confirmed hypotheses support the overall model framework.
Keywords: Green Purchase Intention; Environmental Concern; Subjective Norms; Environmental Knowledge; Theory of Planned Behavior.

1. Introduction

The rapid increase in global plastic consumption has intensified concerns regarding environmental sustainability. Each year, approximately 100 million tons of plastic are produced, and due to their highly durable properties, plastic materials require between 100 and 500 years to decompose (Andriastuti et al., 2016). This long degradation period exacerbates ecological pressures, particularly in marine ecosystems. Indonesia has been identified as the world's second-largest contributor to ocean-bound plastic waste, with an estimated 187.2 million tons entering the seas annually (Jambeck et al., 2015). A significant portion of this waste originates from household consumption, where plastic continues to dominate due to its practicality and low cost (Andriastuti et al., 2016; Humairoh et al., 2024)

As plastic pollution escalates, consumers and industries face growing pressure to adopt sustainable practices. Although awareness of environmental issues has increased globally, studies consistently reveal a persistent gap between consumers' environmental attitudes and their actual behavior (Laroche et al., 2001). This attitude behavior inconsistency is especially evident in the continued use of single-use plastics, despite widespread knowledge of their harmful environmental impacts (Czinkota et al., 2021). This disconnect underscores the need to understand not only what consumers know but how such knowledge translates or fails to translate into concrete environmentally responsible behaviors.

In response to sustainability demands, various industries have begun implementing eco-friendly strategies. The cosmetics industry, for example, is responsible for more than 120 million units of packaging waste annually and has increasingly turned toward biodegradable, refillable, or recyclable packaging alternatives (Gatt & Refalo, 2022). However, despite the rise of green innovation, actual consumer intention to purchase eco-friendly products remains relatively low (Moslehpour et al., 2021). Regulatory measures, such as plastic bag bans and environmental taxes, have been introduced to mitigate the issue (Adeyanju et al., 2021), yet their effectiveness depends heavily on consumers' willingness to adjust their purchasing patterns.

To better understand the behavioral mechanisms that drive sustainable consumption choices, this study draws on the Theory of Planned Behavior (TPB). Ajzen (1991) argues that behavioral intention, the most immediate predictor of actual behaviorm is shaped by three

central components: attitudes toward the behavior, subjective norms, and perceived behavioral control. In the context of green purchasing, these determinants are crucial for explaining why some individuals adopt eco-friendly consumption habits while others do not. Prior empirical work indicates that green attitudes, social influence, and perceived ease or difficulty of performing green behaviors significantly affect green purchase intentions (Lavuri et al., 2023)

However, the strength and nature of these relationships are not uniform across countries. In emerging markets, including Indonesia, consumer decisions are shaped not only by attitudes and norms but also by structural and contextual barriers, such as limited product availability, affordability concerns, and skepticism toward green claims (Ekawati, 2020; Jain et al., 2017). These constraints may weaken the predictive power of TPB variables and influence how consumers assess and respond to eco-friendly products.

Given the significant environmental challenges posed by plastic waste and the inconsistent results reported across regions, further investigation is necessary to understand how internal psychological factors and external barriers jointly shape green purchase intention in Indonesia. This study expands existing literature by examining the roles of environmental concern, subjective norms, perceived behavioral control, and green attitude in influencing green purchase intention. Additionally, it explores the moderating role of environmental knowledge, which is theorized to strengthen or potentially weaken the link between psychological determinants and green purchasing behavior.

By integrating TPB with the moderating effect of environmental knowledge, this study contributes to a more comprehensive understanding of sustainable consumer behavior within Indonesia's socio-cultural and environmental context. The findings aim to support policymakers, marketers, and civil society organizations in designing more effective interventions to reduce plastic waste and promote greener consumption practices aligned with national environmental objectives.

2. Literature Review

This study develops an extended Theory of Planned Behavior (TPB) framework to explain green purchase intention by integrating key psychological and contextual determinants of sustainable consumption. Within this model, environmental concern, subjective norms, perceived behavioral control, and green attitude function as primary antecedents that shape individuals' intention to purchase eco-friendly products. In the green purchasing, internal drivers such as environmental concern and green attitude are complemented by external influences like subjective norms and eco-labels. The integration of environmental knowledge as a moderating factor further strengthens the model by accounting for differences in individual comprehension of environmental issues (Ajzen, 1991; Lavuri et al., 2023; X. Wang et al., 2022).

Green Purchase Intention (GPI)

Green purchase intention refers to a consumer's willingness or deliberate plan to buy environmentally friendly products. It serves as the strongest predictor of actual green behavior and is shaped by cognitive evaluations, ethical considerations, emotional involvement, and social influences (Nekmahmud & Fekete-Farkas, 2020). Individuals with stronger GPI tend to demonstrate heightened commitment to sustainability, formed through prior beliefs, personal values, and perceived social expectations (Kour et al., 2022; Lavuri et al., 2023).

Environmental Concern (EC)

Environmental concern captures the degree of awareness, emotional attachment, and readiness to act toward addressing environmental issues (Ruslim et al., 2022; Rusyani et al.,

2021). It reflects moral and ethical values that motivate individuals to engage in sustainable consumption (Nekmahmud & Fekete-Farkas, 2020). EC influences both attitudes and purchase intentions, making it a central driver in pro-environmental behavior (Shalender & Sharma, 2021). Consumers with high EC are more inclined to avoid products perceived as harmful and choose environmentally responsible alternatives.

Subjective Norms (SN)

Subjective norms represent perceived social pressures to perform or avoid certain behaviors (Ajzen, 1991)). These norms arise from family members, peers, social groups, cultural norms, and broader societal expectations (Lavuri et al., 2023). In the context of green purchasing, SN play a crucial role in influencing environmentally responsible behavior, especially in collectivistic cultures like Indonesia, where social approval and group conformity significantly shape consumer choices (Rusyani et al., 2021; Xu et al., 2022; Zhuo et al., 2022).

Perceived Behavioral Control (PBC)

Perceived behavioral control reflects a consumer's perceived capability and confidence to engage in sustainable purchasing, considering available resources, accessibility, price, and perceived difficulty (Ajzen, 1991). High Perceived Behavioral Control indicates that consumers feel empowered to make green choices, while low Perceived Behavioral Control suggests the presence of barriers such as cost, limited product availability, or habit-driven routines (Wei et al., 2023). Perceived Behavioral Control directly influences both intention and behavior, especially when environmental alternatives are accessible and affordable.

Green Attitude (GA)

Green attitude refers to a consumer's positive or negative evaluation of environmentally friendly products, influenced by ecological beliefs, emotions, and past experiences (Lavuri et al., 2023; X. Wang et al., 2022). Favorable attitudes enhance the likelihood of green purchasing and mediate the relationship between environmental concern and green intention (Kour et al., 2022; Rambabu et al., 2023). Consumers with strong green attitudes prioritize sustainability and are more responsive to environmental messaging and eco-labels (Widyawati, 2023; Yadav & Pathak, 2016).

Environmental Knowledge (EK)

Environmental knowledge describes a consumer's understanding of environmental issues, sustainable solutions, and eco-product attributes (X. Wang et al., 2022). EK enables individuals to assess product claims critically, identify misleading information, and recognize environmental benefits. Prior studies confirm that EK enhances attitude–intention consistency by strengthening consumer confidence in making eco-friendly choices (Liobikienė & Poškus, 2019). As a moderator, EK amplifies the effect of GA, SN, and PBC on purchase intention, making it a vital construct in extended TPB models.

This study adopts an extended TPB framework by integrating environmental concern, green attitude, subjective norms, and perceived behavioral control to explain green purchase intention. Environmental knowledge is added as a moderator to enhance explanatory power (Ajzen, 1991; Lavuri et al., 2023; X. Wang et al., 2022).

Consistent with the extended TPB approach, this study incorporates environmental concern, subjective norms, perceived behavioral control, and green attitude as antecedents of green purchase intention, while environmental knowledge functions as a moderating variable that strengthens the predictive relationships within the model. Figure 1 presents the modified research model, synthesizing insights from prior literature.

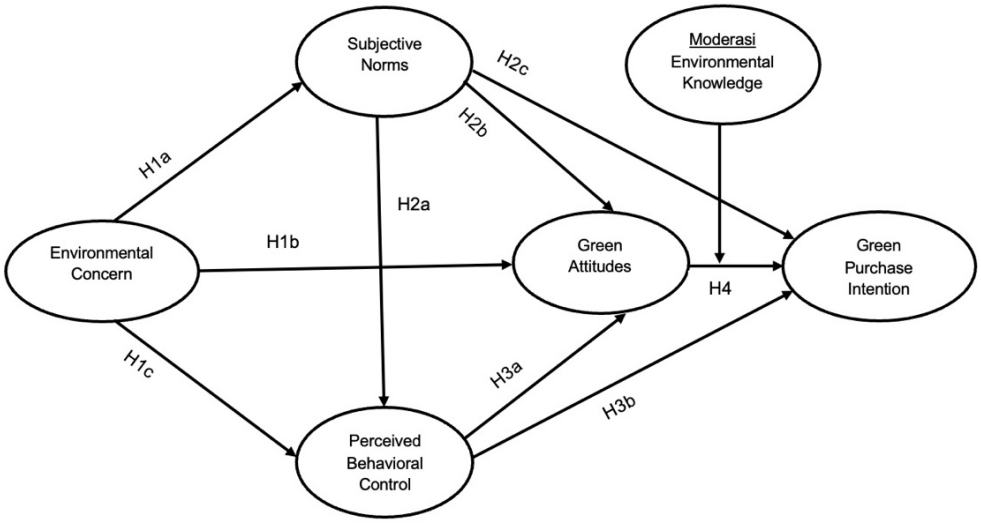


Figure 1. Conceptual Framework Model

The proposed model aims to clarify both the direct and mediated effects of environmental concern, subjective norms, perceived behavioral control, and green attitude on consumers' intention to engage in green purchasing. In this framework, environmental knowledge is posited as a moderating variable that enhances the strength of the relationship between green attitude and green purchase intention. The hypotheses formulated for testing in this study are as follows:

1. H1a: There is a positive relationship between Environmental Concern and Subjective Norms.
   Greater environmental concern encourages favorable social expectations toward green behavior (B. Wang et al., 2019). This relationship is often mediated by environmental awareness. Moreover, environmental values shape social views, while social norms and marketing efforts also guide environmental concern.
2. H1b: There is a positive relationship between Environmental Concern and Green Attitude.
   Individuals concerned about the environment tend to hold stronger green attitudes (Ogiemwonyi et al., 2020; Saifulina et al., 2022; Ting et al., 2019). Environmental awareness mediates this effect (Song et al., 2019), and other studies confirm a direct link between concern and positive green attitudes (Batool et al., 2023; Kaur, 2023; Riyanto, 2023; Woo & Kim, 2019).
3. H1c: There is a positive relationship between Environmental Concern and Perceived Behavioral Control.
   People with high environmental concern feel more empowered to behave sustainably (Shatnawi & Chin, 2019). This concern strengthens perceived control over green behaviors, including consumption and tourism (Lavuri et al., 2023; Wei et al., 2023), and is also relevant in sustainable travel decisions (Gelaidan et al., 2023).
4. H2a: There is a positive relationship between Subjective Norms and Perceived Behavioral Control.
   Supportive social environments enhance perceived behavioral control (Yaghmaei et al., 2015). Peer influence can increase consumers' confidence in acting sustainably (Matharu et al., 2020), and social encouragement boosts feelings of behavioral control (Soheili et al., 2017).
5. H2b: There is a positive relationship between Subjective Norms and Green Attitude.

Social pressure and expectations shape individuals' green attitudes (Lavuri et al., 2023; Wang et al., 2023). In collectivist cultures, these norms exert both direct and indirect influence on environmental attitudes (Fang et al., 2017; Khare, 2014).

6. H2c: There is a positive relationship between Subjective Norms and Green Purchase Intention.
   Descriptive and injunctive norms increase the intention to buy green products (Xu et al., 2022). While this influence is generally smaller than attitude or perceived control, it remains significant (Maichum et al., 2016). Moral and health-related norms, mediated by subjective norms, also affect green purchase intention (Liu et al., 2020; Lius, 2024).
7. H3a: There is a positive relationship between Perceived Behavioral Control and Green Attitude.
   Individuals who believe they can perform green behaviors tend to develop stronger green attitudes (Li et al., 2023; Maichum et al., 2016). Perceived control is thus a key factor in attitude formation within the TPB framework (Lavuri et al., 2023; Wilson et al., 2018).
8. H3b: There is a positive relationship between Perceived Behavioral Control and Green Purchase Intention.
   A strong sense of control over sustainable actions increases green purchase intention (Maichum et al., 2016; Wei et al., 2017). This effect is observed across industries such as cosmetics and eco-friendly products (Chang et al., 2019; Wilson et al., 2018).
9. H4: There is a positive relationship between Green Attitude and Green Purchase Intention.
   A favorable green attitude is a strong predictor of green purchase intention (Suki, 2016; Zhuo et al., 2022). Emotional attachment to green products also enhances this intention (Tanner & Kast, 2003).
10. H5: Environmental Knowledge moderates the relationship between Green Attitude and Green Purchase Intention.
    Knowledge enhances the impact of green attitudes on purchase intention (Lavuri et al., 2023). Informed consumers are more likely to turn attitudes into actions (Kamalanon et al., 2022; Shimul et al., 2021).

3. Method

Research Design

This study employed a quantitative, cross-sectional, and hypothesis-testing research design to examine the behavioral determinants of green purchase intention within the extended Theory of Planned Behavior (TPB). Aligned with the positivist paradigm, this approach enables objective measurement of causal relationships among Environmental Concern (EC), Subjective Norms (SN), Perceived Behavioral Control (PBC), Green Attitude (GA), Environmental Knowledge (EK), and Green Purchase Intention (GPI). A correlational design was selected because it is effective in assessing associations among multiple psychological constructs without manipulating variables or altering respondents' natural behavior (Maison et al., 2021; Jufrida et al., 2019). The study employed minimal researcher interference, allowing respondents to independently complete the questionnaire in their natural settings. Data were gathered at a single point in time using a cross-sectional approach (Sekaran & Bougie, 2016), making the design suitable for capturing current consumer perceptions and attitudes toward green purchasing behavior.

Data Collection

This study employed a non-probability sampling strategy using purposive sampling to target respondents who were familiar with or had previously purchased organic or eco-friendly products. Purposive sampling allows researchers to collect data from individuals who meet specific, relevant criteria (Sekaran & Bougie, 2016). Primary data were collected via an online

questionnaire distributed through Google Forms and shared across social media channels such as WhatsApp and Instagram.

Sample size determination followed Hair et al. (2019), who recommend a minimum of 10 respondents per indicator. With 18 indicators, the minimum required sample size was 180 respondents. After screening for incomplete or invalid responses, the final sample met the required threshold. All respondents voluntarily participated and completed the survey independently, reinforcing the naturalistic and non-intrusive nature of the data collection process.

Research Instrument

The research instrument used in this study is a structured questionnaire consisting of three main sections to capture respondents' demographic information, purchasing behavior, and psychological constructs related to green consumption.

1. The first section covers demographic characteristics, including gender, age, education level, occupation, and monthly income/spending.
2. The second section investigates respondents' purchasing behavior related to eco-friendly products, particularly their habits in reducing plastic usage and adopting green alternatives.
3. The third section consists of construct-related measurement items assessing six key variables: Environmental Concern (EC), Subjective Norms (SN), Perceived Behavioral Control (PBC), Green Attitude (GA), Environmental Knowledge (EK), and Green Purchase Intention (GPI). All items were adapted from validated scales in prior studies and measured using a five-point Likert scale (1 = Strongly Agree to 5 = Strongly Disagree).

Table 1. Variables Used in the Research

Latent Variable		**Observed Variable**
Environmental Concern	EC1	Green products help create a more sustainable environment
	EC2	I feel it is my responsibility to protect the environment
	EC3	Green products help reduce waste and are easy to recycle
Subjective Norms	SN1	My family believes that buying green products is good.
	SN2	Positive support from my friends makes me more interested in buying environmentally friendly products
	SN3	I prefer to buy green products from people that I trust
Perceived Behavioral Control	PBC1	I plan to buy green products
	PBC2	I help the environment by buying eco-friendly products
	PBC3	I feel I have the time, money, and desire to buy eco-friendly products
Green Attitudes	GA1	Green products use fewer chemicals
	GA2	Green products usually have environmentally friendly packaging, branding, and labelling
	GA3	Green products are safer and healthier for everyone
Environmental Knowledge	EK1	Green products help maintain the balance of nature
	EK2	Green products are biodegradable
	EK3	Green products are environmentally friendly and recyclable
Green Purchase Intention	GPI1	I will consider buying green products because they pollute the environment less in the future.
	GPI2	I will find out more about environmentally friendly products.
	GPI3	I prefer to spend more money on environmentally friendly and sustainable goods.

Method of Data Analysis

Data were analyzed using Structural Equation Modeling (SEM) with IBM SPSS Statistics 23. SEM was selected because it is capable of simultaneously assessing the measurement model and the structural relationships among latent variables. The analysis procedures included:

1. Data screening (missing values, outliers, normality).
2. Descriptive analysis of respondent profiles.
3. Assessment of reliability and validity using Cronbach's Alpha and factor analysis.
4. Testing the structural model to evaluate the hypothesized relationships among EC, SN, PBC, GA, EK, and GPI.

4. Result and Discussion

Demographic Profile

Table 1 presents the demographic characteristics and green product purchasing patterns of the respondents. Most respondents reported buying green products 1–5 times in the past year (72.1%), while 27.9% purchased them more than five times. More than half of the respondents (55.8%) had experience purchasing green products through online platforms. The sample consisted of 52.1% males and 47.9% females, with the majority aged 18–25 years (45.8%), followed by 26–35 years (18.9%) and above 45 years (14.7%). In terms of education, most participants had completed high school (50.5%), while 31.6% held a bachelor's degree. Regarding occupation, students made up the largest group (41.1%), followed by private employees (18.9%) and entrepreneurs (14.7%). Monthly income varied considerably, with 43.2% earning below Rp 3,000,000 and 23.7% earning Rp 3,000,000–Rp 5,000,000, reflecting a predominantly young and economically diverse consumer group.

Table 2. Demographic characteristics of survey participants

Respondents Status		**Frequency**	**Percent %**
Frequency of purchasing green products in the past year	1- 2 times	69	36.3
	3 - 5 times	68	35.8
	> 5 times	53	27.9
Buying green products through online platforms	Yes	106	55.8
	No	84	44.2
Gender	Male	99	52.1
	Female	91	47.9
Age	< 18 years	18	9.5
	18 - 25 years	87	45.8
	26 - 35 years	36	18.9
	36 - 45 years	21	11.1
	> 45 years	28	14.7
Education	High School	96	50.5
	Diploma	18	9.5
	Bachelor	60	31.6
	Master/ Doctorate	16	8.4
Occupation	Students	78	41.1
	Private Employees	36	18.9
	Entrepreneurs	28	14.7
	Freelancers	18	9.5
	Housewives	24	12.6
	Others	6	3.2
Monthly Income (Rp)	< Rp 3.000.000	82	43.2

	Rp 3.000.000 – Rp 5.000.000	45	23.7
	Rp 5.000.001 – Rp 10.000.000	36	18.9
	> Rp 10.000.000	27	14.2

Sources: SPSS Version 22

Descriptive Statistical Analysis

Descriptive statistics summarize the respondents' perceptions across the six latent variables. Green Attitude shows the highest mean (3.944), indicating generally positive evaluations of green products. Perceived Behavioral Control and Green Purchase Intention also show relatively high means (both 3.879), suggesting moderate-to-strong willingness to engage in green consumption. Environmental Concern (3.802), Subjective Norms (3.819), and Environmental Knowledge (3.777) demonstrate moderate levels among respondents. Overall, the descriptive data indicate that consumers hold positive environmental orientations.

Table 3. Descriptive Statistical Analysis

Variable	Mean	Std. Deviation
Environmental Concern	3.802	1.3292
Subjective Norms	3.819	1.2603
Perceived Behavior control	3.879	1.2823
Green Attitude	3.944	1.2460
Environmental Knowledge	3.777	1.3215
Green Purchase Intention	3.879	1.2980

Sources: SPSS Version 22

Measurement Model Analysis

Table 3 shows summarizes the validity and reliability of all observed variables. All indicators show factor loadings > 0.45, indicating that each item validly measures the intended construct. Furthermore, all constructs have Cronbach's Alpha > 0.60, meaning each variable demonstrates good internal consistency. Therefore, the measurement model is confirmed to be both valid and reliable, allowing further structural analysis to proceed.

Table 4. Validity and Reliability Testing

Variabel/Indicator	Factor Loading	Cronbach's Alpha	Conclusion
Environmental Concern (EC)		0.734	Valid and Reliable
EC1	0.609		
EC2	0.678		
EC3	0.779		
Subjective Norms (SN)		0.789	Valid and Reliable
SN1	0.733		
SN2	0.759		
SN3	0.736		
Perceived Behavior Control		0.779	Valid and Reliable
PBC1	0.781		
PBC2	0.745		
PBC3	0.676		
Green Attitude (GA)		0.777	Valid and Reliable
GA1	0.744		
GA2	0.690		
GA3	0.758		

Variabel/Indicator	Factor Loading	Cronbach's Alpha	Conclusion
Environmental Knowledge (EK)		0.805	Valid and Reliable
EK1	0.852		
EK2	0.819		
EK3	0.874		
Green Purchase Intention (GPI)		0.780	Valid and Reliable
GPI1	0.748		
GPI2	0.743		
GPI3	0.719		

Sources: AMOS Version 22

Overall Measurement Model

The Goodness-of-Fit (GoF) results indicate that the structural model achieves an acceptable level of fit. Although several absolute fit indices (e.g., p-value and RMSEA) fall within the marginal or poor fit range, the incremental fit measures (IFI = 0.933, TLI = 0.912, CFI = 0.932) meet recommended thresholds, demonstrating overall good model fitness. Additionally, the parsimonious fit indices such as CMIN/DF (2.229) fall within the ideal range of 1–5, supporting the suitability of the model. Therefore, the analysis can proceed to the next stage, namely hypothesis testing, as the research framework is considered appropriate and feasible to be studied.

Table 5. Goodness of Fit

Type of Measurement	Measurement	Value	Recommended Acceptance Limit	Decision
Absolute Fit Measures	P-value	0.000	≥ 0.05	Poor of Fit
	GFI	0.890	≥ 0.90 or approaching 1	Marginal of Fit
	RMSEA	0.081	≤ 0.08	Poor of Fit
Incremental Fit Measures	IFI	0.933	≥ 0.90 or approaching 1	Goodness of Fit
	TLI	0.912	≥ 0.90 or approaching 1	Goodness of Fit
	CFI	0.932	≥ 0.90 or approaching 1	Goodness of Fit
	NFI	0.885	≥ 0.90 or approaching 1	Marginal of Fit
	RFI	0.851	≥ 0.90 or approaching 1	Marginal of fit
Parsimonius Fit Measures	AGFI	0.837	≤ GFI value	Goodness of Fit
	CMIN/DF	2.229	Lower limit 1 or upper limit 5	Goodness of Fit

Sources: AMOS Version 22

Summary of Hypotheses

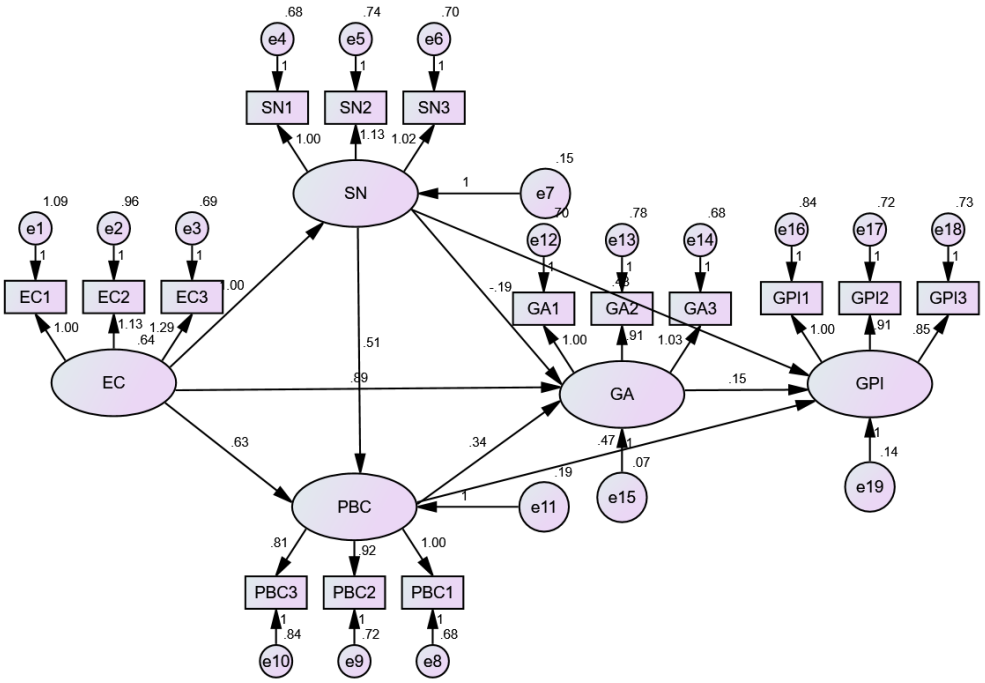
This chapter examines the relationship between the independent and dependent variables, with the moderating variable serving as a connector. The decision criteria are based on the p-value: if the p-value is ≥ 0.05, then H_o is accepted and H_a is rejected, indicating no significant effect. Conversely, if the p-value is < 0.05, then H_o is rejected and H_a is accepted, indicating a significant effect. The results of the hypothesis testing are presented in the attached table.

Table 6. Hypotheses test summary

Hypotheses	Estimate	P-value	Conclusion
H1a: Environmental Concern →Subjective Norms	0.901	0.000	**Accepted**
H1b: Environmental Concern → Green Attitude	0.768	0.0155	**Accepted**
H1c: Environmental Concern → Perceived Behavior Control	0.491	0.035	**Accepted**

H2a: Subjective Norms → Perceived Behavior Control	0.439	0.0495	**Accepted**
H2b: Subjective Norms → Green Attitude	-0.180	0.2785	**Rejected**
H2c: Subjective Norms → Green Purchase Intention	0.366	0.034	**Accepted**
H3a: Perceived Behavior Control → Green Attitude	0.382	0.0675	**Rejected**
H3b: Perceived Behavior Control → Green Purchase Intention	0.468	0.050	**Rejected**
H4: Green Attitude → Green Purchase Intention	0.134	0.2835	**Rejected**
H5: Green Attitude →Environmental Knowledge → Green Purchase Intention	0.835	0.000	**Accepted**

Sources: AMOS Version 22



Sources: AMOS Version 22

Discussion

The results of this study demonstrate that environmental concern is the strongest and most consistent predictor across the model, exerting a significant positive influence on subjective norms, green attitudes, and perceived behavioral control. This finding reinforces previous research suggesting that individuals who care deeply about environmental issues tend to internalize stronger values, experience moral responsibility, and develop higher confidence in performing sustainable behaviors (Lavuri et al., 2023; Ting et al., 2019). The study also shows that subjective norms significantly enhance perceived behavioral control and green purchase intention, confirming that social expectations and peer influence play a crucial role in motivating sustainable choices, particularly within collectivist societies like Indonesia where social approval strongly shapes consumption behavior (Xu et al., 2022).

Contrary to many studies grounded in the Theory of Planned Behavior (Ajzen, 1991; Maichum et al., 2016), green attitude and perceived behavioral control did not significantly affect green purchase intention. This suggests the existence of an attitude–intention gap, where positive environmental attitudes do not necessarily translate into purchase decisions. This gap may arise from contextual barriers such as higher prices of eco-friendly products,

limited product accessibility, or consumer uncertainty regarding the effectiveness of green alternatives.

Importantly, the findings highlight a strong and significant moderating role of environmental knowledge on the relationship between green attitude and green purchase intention. This indicates that consumers with greater environmental knowledge are better able to convert their attitudes into behavioral intentions because they possess clearer understanding, stronger confidence, and reduced skepticism toward green products (Shimul et al., 2021; Darpito, 2023). In other words, knowledge serves as an enabling factor that bridges the attitude–intention gap by empowering consumers to make informed and responsible purchase decisions.

5. Conclusion

Practical Implications

For businesses, this study suggests that marketing strategies should not only highlight product sustainability but also leverage social influence through peer reviews, testimonials, or influencers to strengthen subjective norms. Providing clear and credible information on environmental benefits through eco-labels and educational content can help increase consumer knowledge and intention to buy green products (Wang et al., 2023).

Educators and NGOs should incorporate environmental literacy programs to bridge the gap between intention and action. Public campaigns, workshops, and school-based sustainability education can improve not just concern but also actionable knowledge. Policymakers are also encouraged to support behavior change through combined efforts: implementing environmental regulations (e.g., plastic bans), enhancing access to affordable green alternatives, and running campaigns that normalize eco-conscious behavior within society (Jaiswal & Kant, 2018).

Research Limitations and Future Research Directions

This study is not without limitations, which open pathways for future research. The sample was largely composed of young adults and students, which limits the generalizability of the findings to older individuals or populations in rural areas. To improve representativeness, future studies should incorporate more diverse demographic segments that reflect the broader Indonesian population. The cross-sectional design of this research also restricts the ability to draw causal inferences or observe behavioral changes over time; thus, longitudinal or experimental approaches are recommended for future work. Additionally, the reliance on self-reported data introduces potential bias due to social desirability, especially in responses concerning environmental concern or sustainability. Another limitation is that this study assessed only behavioral intention, not actual purchasing behavior. Incorporating real purchase data such as transaction records or observed behaviors would help validate the intention behavior relationship. Conceptually, future studies should consider integrating additional factors such as moral obligation, perceived affordability, product availability, and green skepticism to enhance the explanatory power of the TPB framework. Finally, further exploration is needed to determine the types and levels of environmental knowledge particularly the distinction between objective and perceived knowledge that most effectively support consumers' sustainable purchasing decisions (Wang & Li, 2022).

References

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*(2), 179–211. https://doi.org/https://doi.org/10.1016/0749-5978(91)90020-T

Andriastuti, E. A., Kumar, Jambeck, Purwaningrum, Utami, Rahman, Yustikarini, E. A., Asih,

Fitriani, Statistik, B. P., & Kepolorejo, K. K. (2016). *Ecobrick sebagai Solusi dalam Mengurangi Timbulan Sampah Plastik di Kelurahan Kepolorejo, Kecamatan Magetan, Kabupaten Magetan*.

Czinkota, M., Kotabe, M., Vrontis, D., & Shams, R. (2021). *Understanding the Market Environment and the Competition* (pp. 91–134). https://doi.org/10.1007/978-3-030-66916-4_3

Ekawati, T. (2020). Kajian Etika-Faktor yang mempengaruhi niat beli produk etika. *Journal of Business and Information Systems*, *2*(1), 32–45. https://doi.org/10.36067/jbis.v2i1.35

Gatt, I., & Refalo, P. (2022). Reusability and Recyclability of Plastic Cosmetic Packaging: A Life Cycle Assessment. *Resources, Conservation & Recycling Advances*, *15*, 200098. https://doi.org/10.1016/j.rcradv.2022.200098

Humairoh, H., Atikah, N. A., & Bintoro, N. S. C. (2024). Sosialisasi Penggunaan Kantong Belanja Ramah Lingkungan (Reusable) untuk Meminimalisir Sampah Plastik pada Ibu-Ibu TP-PKK di Kelurahan Bugel Kota Tangerang. *ABDISOSHUM Jurnal Pengabdian Masyarakat Bidang Sosial Dan Humaniora*, *3*(3), 209–215. https://doi.org/10.55123/abdisoshum.v3i3.4119

Jain, S., Khan, M. N., & Mishra, S. (2017). Understanding Consumer Behavior Regarding Luxury Fashion Goods. *Journal of Asia Business Studies*, *11*(1), 4–21. https://doi.org/10.1108/jabs-08-2015-0118

Jambeck, J. R., Geyer, R., Wilcox, C., Siegler, T. R., Perryman, M., Andrady, A., Narayan, R., & Law, K. L. (2015). Plastic waste inputs from land into the ocean. *Sciencemag.Org*, *347*(6223).

Kamalanon, P., Chen, J., & Le, T. (2022). Why Do We Buy Green Products? *Sustainability*, *14*(2), 689. https://doi.org/10.3390/su14020689

Kour, M., Kaur, R., & Sharma, A. (2022). Antecedents of Green Purchase Behavior: A Study of Consumers in Northern India. *ECS Transactions*, *107*(1), 7143–7151. https://doi.org/10.1149/10701.7143ecst

Laroche, M., Bergeron, J., & Barbaro-Forleo, G. (2001). Targeting consumers who are willing to pay more for environmentally friendly products. *Journal of Consumer Marketing*, *18*(6), 503–520. https://doi.org/10.1108/EUM0000000006155

Lavuri, R., Parida, R., & Singh, S. (2023). Unveiling Ways to Examine the Purchase Intention of Green Products in Emerging Markets. *Benchmarking: An International Journal*, *31*(5), 1385–1401. https://doi.org/10.1108/bij-06-2022-0379

Liobikienė, G., & Poškus, M. S. (2019). The Importance of Environmental Knowledge for Private and Public Sphere Pro-Environmental Behavior: Modifying the Value-Belief-Norm Theory. In *Sustainability* (Vol. 11, Issue 12, p. 3324). https://doi.org/10.3390/su11123324

Nekmahmud, M., & Fekete-Farkas, M. (2020). Why Not Green Marketing? Determinates of Consumers' Intention to Green Purchase Decision in a New Developing Nation. In *Sustainability* (Vol. 12, Issue 19, p. 7880). https://doi.org/10.3390/su12197880

Ruslim, T. S., Kartika, Y., & Hapsari, C. G. (2022). Effect of Environmental Concern, Attitude, Subjective Norms, Perceived Behavioral Control on Purchase of Green Skincare Products. *Jurnal Ilmiah Manajemen Dan Bisnis*, *8*(1), 120. https://doi.org/10.22441/jimb.v8i1.14499

Rusyani, E., Lavuri, R., & Gunardi, A. (2021). Purchasing Eco-Sustainable Products: Interrelationship Between Environmental Knowledge, Environmental Concern, Green Attitude, and Perceived Behavior. *Sustainability*, *13*(9), 4601. https://doi.org/10.3390/su13094601

Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*. Wiley. https://books.google.co.id/books?id=Ko6bCgAAQBAJ

Shalender, K., & Sharma, N. (2021). Using extended theory of planned behaviour (TPB) to predict adoption intention of electric vehicles in India. *Environment, Development and Sustainability*, *23*(1), 665–681. https://doi.org/10.1007/s10668-020-00602-7

Shatnawi, Y., & Chin, T. (2019). Bird's-Eye View of Environmental Attitude Types in the Sustainable Consumption Context. *Environmental Quality Management*. https://doi.org/10.1002/tqem.21638

Shimul, A., Cheah, I., & Khan, B. (2021). Investigating Female Shoppers' Attitude and Purchase Intention Toward Green Cosmetics. *Journal of Global Marketing*, *35*(1), 37–56. https://doi.org/10.1080/08911762.2021.1934770

Suki, N. (2016). Green Product Purchase Intention: Impact of Green Brands, Attitude, and Knowledge. *British Food Journal*, *118*(12), 2893–2910. https://doi.org/10.1108/bfj-06-2016-0295

Tanner, C., & Kast, S. (2003). Promoting Sustainable Consumption: Determinants of Green Purchases by Swiss Consumers. *Psychology and Marketing*, *20*(10), 883–902. https://doi.org/10.1002/mar.10101

Wang, B., Li, J., Sun, A., Wang, Y., & Dian-ting, W. (2019). Residents' Green Purchasing Intentions in a Developing-Country Context. *Sustainability*, *12*(1), 30. https://doi.org/10.3390/su12010030

Wang, X., Gu, Y., Xin, H., Qiu, P., & Wang, J. (2022). Product Cues and Regulatory Focus in Consumers' Response to Green Products. *Frontiers in Psychology*, *13*. https://doi.org/10.3389/fpsyg.2022.918248

Wei, Z., Qiu, H., & Morrison, A. (2023). Predicting Tourist Resource-Saving Behavioral Intentions. *International Journal of Environmental Research and Public Health*, *20*(2), 1349. https://doi.org/10.3390/ijerph20021349

Widyawati, S. (2023). The Influence of Green Consumers on Green Decisions. *Indonesian Journal of Business and Entrepreneurship*, *9*(3), 457. https://doi.org/10.17358/ijbe.9.3.457

Xu, Y., Du, J., Khan, M. A. S., Jin, S., Altaf, M., Anwar, F., & Sharif, I. (2022). Effects of Subjective Norms and Environmental Mechanism on Green Purchase Behavior. *Frontiers in Environmental Science*, *10*. https://doi.org/10.3389/fenvs.2022.779629

Yadav, R., & Pathak, G. (2016). Young Consumers' Intention Towards Buying Green Products in a Developing Nation. *Journal of Cleaner Production*, *135*, 732–739. https://doi.org/10.1016/j.jclepro.2016.06.120

Zhuo, Z., Zheng, R., & Zhang, Z. (2022). Attitude–Behavior Gap in Green Consumption Behavior. *Journal of Economics Management and Trade*, 12–28. https://doi.org/10.9734/jemt/2022/v28i121065