

# Shaping Green Purchase Intention: How Attitude, Norms, Environmental Awareness, and Knowledge Interact

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## Abstract

*This study investigates key determinants of green purchase intention among Indonesian youth by applying an extended Theory of Planned Behaviour (TPB) that integrates attitude toward green products, subjective norms, environmental concern, and environmental knowledge. A quantitative, cross-sectional survey was administered online to purposively selected respondents in Jakarta, Bandung, and Bali (n = 210), measured using a five-point Likert scale. The indicators captured attitude (ATT1–ATT3), subjective norms (SN1–SN2), environmental concern (EC1–EC3), environmental knowledge (EK1–EK4), and green purchase intention (GP1–GP3). Data were analysed using Partial Least Squares–Structural Equation Modeling (PLS–SEM), including measurement-model evaluation (outer loadings > 0.701; AVE = 0.581–0.753; composite reliability = 0.844–0.868) and structural testing via bootstrapping. The structural results show that attitude exerts the strongest positive effect on green purchase intention ( $\beta = 0.377$ ;  $t = 5.230$ ;  $p < 0.001$ ;  $f^2 = 0.160$ ), followed by environmental concern ( $\beta = 0.280$ ;  $t = 3.610$ ;  $p < 0.001$ ;  $f^2 = 0.080$ ) and environmental knowledge ( $\beta = 0.204$ ;  $t = 2.675$ ;  $p = 0.004$ ;  $f^2 = 0.040$ ). In contrast, subjective norms are not significant ( $\beta = 0.035$ ;  $t = 0.482$ ;  $p = 0.315$ ;  $f^2 = 0.002$ ). The model explains substantial variance in green purchase intention ( $R^2 = 0.642$ ; adjusted  $R^2 = 0.635$ ). Theoretically, the findings refine extended TPB in a developing-country context by demonstrating the primacy of internal cognitive–affective drivers over social pressure for urban youth. Practically, firms and policymakers should prioritize attitude-building communication, environmental education, and credible green information to strengthen intention formation. Overall, this study highlights that strengthening consumers’ attitudes, concern, and knowledge is pivotal to accelerating sustainable purchasing intentions in Indonesia.*

**Keywords** — Theory of Planned Behaviour; PLS–SEM; Behavioural Intention; Developing Country; Strategic Management

## Abstrak

Penelitian ini bertujuan menguji faktor-faktor penentu niat beli produk ramah lingkungan (green purchase intention) pada pemuda Indonesia dengan menerapkan Theory of Planned Behaviour (TPB) yang diperluas melalui integrasi sikap terhadap produk hijau, norma subjektif, kepedulian lingkungan, dan pengetahuan lingkungan. Metode yang digunakan adalah survei kuantitatif potong lintang (cross-sectional) melalui kuesioner online kepada responden yang dipilih secara purposive di Jakarta, Bandung, dan Bali (n = 210) menggunakan skala Likert 1–5. Variabel diukur melalui indikator: sikap (ATT1–ATT3), norma subjektif (SN1–SN2), kepedulian lingkungan (EC1–EC3), pengetahuan lingkungan (EK1–EK4), dan niat beli hijau (GP1–GP3). Analisis dilakukan menggunakan PLS–SEM dengan evaluasi model pengukuran (outer loading > 0,701; AVE = 0,581–0,753; composite reliability = 0,844–0,868) dan pengujian struktural melalui bootstrapping. Hasil menunjukkan bahwa sikap berpengaruh positif paling kuat terhadap green purchase intention ( $\beta = 0,377$ ;  $t = 5,230$ ;  $p < 0,001$ ;  $f^2 = 0,160$ ), diikuti kepedulian lingkungan ( $\beta = 0,280$ ;  $t = 3,610$ ;  $p < 0,001$ ;  $f^2 = 0,080$ ) dan pengetahuan lingkungan ( $\beta = 0,204$ ;  $t = 2,675$ ;  $p = 0,004$ ;  $f^2 = 0,040$ ). Sebaliknya, norma subjektif tidak berpengaruh

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signifikan ( $\beta = 0,035$ ;  $t = 0,482$ ;  $p = 0,315$ ;  $f^2 = 0,002$ ). Model memiliki daya jelaskan yang kuat terhadap variasi niat beli hijau ( $R^2 = 0,642$ ; adjusted  $R^2 = 0,635$ ). Secara teoretis, temuan ini memperkaya TPB yang diperluas dalam konteks negara berkembang dengan menegaskan dominasi faktor kognitif-afektif internal dibanding tekanan sosial pada konsumen muda perkotaan. Secara praktis, perusahaan dan pembuat kebijakan perlu memperkuat pembentukan sikap positif, edukasi lingkungan, dan informasi hijau yang kredibel untuk meningkatkan niat beli. Dengan demikian, studi ini menegaskan bahwa penguatan sikap, kepedulian, dan pengetahuan konsumen merupakan kunci percepatan intensi pembelian berkelanjutan di Indonesia.

**Kata Kunci** — Teori Perilaku Terencana; PLS-SEM; Niat Perilaku; Negara Berkembang; Manajemen Strategis

## 1. INTRODUCTION

Green products represent a broad category of goods designed to minimize negative environmental impacts, including electric vehicles, energy-efficient household appliances, biodegradable packaging, and reusable shopping bags (Ogiemwonyi et al., 2023). These products are characterized by reduced energy consumption, recyclability, and support for waste reduction, particularly single-use plastics. In recent years, consumer interest in green products has increased significantly, especially among younger generations such as Generation Z, who tend to integrate sustainability considerations into their purchasing decisions. Prior studies indicate that trust, environmental awareness, and green values are among the key determinants of green purchase intention (Filip et al., 2025).

Despite growing awareness and favourable attitudes toward sustainability, a persistent gap remains between consumers' intentions and their actual green purchasing behaviour. This intention-behaviour gap is particularly evident in developing countries, where limited infrastructure, low environmental awareness, restricted product availability, and weak enforcement of environmental regulations continue to hinder sustainable consumption (Eunike et al., 2025). For instance, eco-friendly products that are difficult to access, poorly distributed, or unavailable through consumers' usual purchasing channels are less likely to be selected, regardless of positive attitudes toward sustainability (Lee & Hung, 2024). These conditions suggest that understanding the psychological and contextual drivers of green purchase intention is crucial for closing this gap.

The Theory of Planned Behaviour (TPB) has been widely applied to explain pro-environmental and sustainable consumption behaviours. TPB posits that behavioural intention is determined by attitude toward the behaviour, subjective norms, and perceived behavioural control. While TPB has demonstrated robust explanatory power across various contexts, previous TPB-based studies exhibit several limitations. First, many studies rely on the original TPB framework without incorporating additional context-relevant variables, thereby oversimplifying the complex decision-making processes underlying green consumption. Second, existing TPB studies often examine the effects of extended variables in isolation rather than testing an integrated extended TPB model simultaneously, which limits a holistic understanding of how psychological and social factors interact. Third, empirical evidence from developing countries—particularly among young consumers is still limited and fragmented, with prior findings showing mixed and sometimes contradictory results (Hudayah et al., 2023).

In the Indonesian context, recent studies suggest that although consumers generally express willingness to purchase environmentally friendly products, price sensitivity and accessibility remain significant barriers (Hudayah et al., 2023). Moreover, social influences play a crucial role in shaping green purchase intention. Subjective norms and peer group pressure have been shown to strengthen intention toward green products, particularly among young consumers (Yusiana et al., 2021). These

findings highlight the importance of incorporating social and environmental dimensions into behavioural models. Accordingly, several scholars have proposed extending TPB by integrating environmental concern and environmental knowledge as additional explanatory constructs. Environmental concern reflects individuals' awareness of and emotional involvement in environmental issues, while environmental knowledge provides the informational basis that shapes attitudes and normative beliefs (Chen & Tung, 2014; Sarah et al., 2019).

Empirical evidence supports the relevance of these extensions, although results remain inconsistent. A systematic review by Patiño-Toro et al. (2024) reports a generally positive relationship between environmental knowledge and green purchase intention across contexts. Similarly, environmental concern has been found to indirectly influence green purchase intention through subjective norms and perceived consumer effectiveness (Shivappa Masalvad et al., 2023). However, other studies indicate that environmental knowledge does not always exert a direct effect on intention, instead operating through mediating variables such as attitude (Sarah et al., 2019). These inconsistencies underscore the need for further research that simultaneously examines multiple TPB extensions within a single integrated model, particularly in developing-country settings.

Addressing these gaps, the present study offers two key novelties. First, it simultaneously tests an extended Theory of Planned Behaviour model, incorporating attitude toward green products, subjective norms, environmental concern, and environmental knowledge using a comprehensive structural approach. Second, it provides empirical evidence from Indonesian youth across three major cities, a population segment that is increasingly influential in shaping future consumption patterns yet remains underrepresented in TPB-based green consumption research. By focusing on this demographic, the study responds to calls for more context-sensitive and youth-oriented sustainability research in developing economies.

Therefore, this study aims to examine the determinants of green purchase intention among Indonesian youth by applying an extended TPB framework. Specifically, it seeks to analyze the effects of attitude toward green products, subjective norms, environmental concern, and environmental knowledge on green purchase intention. Based on the theoretical framework and prior empirical findings, the following hypotheses are proposed:

Based on the extended Theory of Planned Behaviour, this study proposes that consumers' psychological and social factors play a significant role in shaping green purchase intention. Specifically, a favourable attitude toward green products is expected to positively influence individuals' intention to purchase environmentally friendly products. In addition, subjective norms, reflecting perceived social pressure from important others, are hypothesized to have a positive effect on green purchase intention. Furthermore, individuals with a higher level of environmental concern are more likely to develop stronger intentions to engage in green purchasing behaviour. Finally, greater environmental knowledge is expected to enhance consumers' understanding of environmental issues and the benefits of green products, thereby positively influencing their green purchase intention.

## **2. LITERATURE REVIEW**

### **2.1. TPB (Theory of Planned Behaviour)**

The Theory of Planned Behaviour (TPB) provides a well-established framework for explaining behavioural intention through three core determinants: attitude toward the behaviour, subjective norms, and perceived behavioural control (Hudayah et al., 2023). In the context of green consumption, TPB has been widely applied to predict consumers' intentions to purchase environmentally friendly products. However, recent studies argue that the original TPB model is often insufficient to fully explain green

purchase intention, as it does not explicitly capture individuals' environmental awareness and cognitive understanding of environmental issues (Cui et al., 2024).

To address this limitation, contemporary research increasingly adopts an extended TPB framework by incorporating environmental concern and environmental knowledge. These variables help explain the so-called "green gap," where positive intentions do not always translate into actual green purchasing behaviour (Zhuang et al., 2021). Environmental concern reflects moral and affective motivation, while environmental knowledge provides the cognitive basis for evaluating green product claims and benefits. Prior studies show that integrating these constructs improves the explanatory and predictive power of TPB, particularly in youth-dominated and socially driven consumption contexts (Kamalanon et al., 2022).

Accordingly, this study adopts an extended TPB model consisting of attitude toward green products, subjective norms, environmental concern, and environmental knowledge to explain green product purchase intention.

## 2.2. Attitude Toward Green Products

Co Attitude toward green products refers to an individual's overall positive or negative evaluation of purchasing environmentally friendly products. Consumers with favorable attitudes believe that green products contribute to environmental protection while still fulfilling functional and quality expectations. Conversely, negative attitudes may arise when green products are perceived as expensive, ineffective, or associated with greenwashing practices (Ogiemwonyi et al., 2023).

Extensive empirical evidence identifies attitude as one of the strongest predictors of green purchase intention. Studies among Indonesian youth demonstrate that positive attitudes significantly enhance green purchase intention and strengthen the influence of perceived green value (Hudayah et al., 2023). Meta-analytical findings further confirm that attitude serves as a key mechanism through which external influences, such as environmental campaigns and education, affect green purchasing decisions (Zhuang et al., 2021).

Hypothesis 1 (H1): *Attitude toward green products has a positive effect on green product purchase intention.*

## 2.3. Subjective Norms

Subjective norms refer to perceived social pressure from important others, such as family members, peers, and social communities, to perform or avoid a particular behaviour. In green consumption contexts, subjective norms are especially influential among younger generations who are more sensitive to peer approval and social identity (Kamalanon et al., 2022).

Empirical studies in Indonesia show that subjective norms significantly influence purchase intention for green cosmetic and personal care products, indicating that social endorsement increases consumers' acceptance of environmentally friendly products (Widiantari & Rachmawati, 2023). Cross-national studies further demonstrate that subjective norms interact with attitudes in shaping green purchase intention, particularly in collectivist cultures where conformity and social expectations are salient (Cui et al., 2024)

Hypothesis 2 (H2): *Subjective norms have a positive effect on green product purchase intention.*

## 2.4. Environmental Concern

Environmental concern represents an individual's level of awareness, emotional involvement, and perceived responsibility toward environmental problems such as pollution and climate change (Schultz et al., 2005). Individuals with great environmental concern tend to prioritize ecological

consequences in their purchasing decisions and feel morally obligated to support sustainable consumption (Hlaváček et al., 2023)

Prior research indicates that environmental concern directly influences green purchase intention and also strengthens the impact of other TPB variables, such as attitude and perceived value (Hudayah et al., 2023). However, great concern alone does not always lead to purchasing behaviour when economic or availability barriers exist, reinforcing the importance of integrating environmental concern within a broader explanatory model (Hlaváček et al., 2023).

In this study, environmental concern is conceptualized as a direct antecedent of green purchase intention that enhances motivational readiness to engage in green consumption.

Hypothesis 3 (H3): *Environmental concern has a positive effect on green product purchase intention.*

## 2.5. Environmental Knowledge

Environmental knowledge refers to consumers' understanding of environmental issues, causes of environmental degradation, and ways to reduce negative environmental impacts through consumption choices (Cui et al., 2024). This knowledge enables consumers to evaluate green product claims critically and recognize the long-term benefits of environmentally friendly products.

Empirical evidence suggests that environmental knowledge positively influences green purchase intention by fostering more favourable attitudes and increasing confidence in green products (Lee & Hung, 2024). While some studies propose mediating or moderating roles for environmental knowledge, inconsistent findings and model complexity suggest that treating knowledge as a direct predictor provides greater theoretical clarity and empirical robustness, particularly in intention-focused models (Cooray et al., 2024; Cui et al., 2024).

Accordingly, this study conceptualizes environmental knowledge as a direct explanatory variable, rather than a mediator or moderator, influencing green purchase intention.

Hypothesis 4 (H4): *Environmental knowledge has a positive effect on green product purchase intention.*

## 2.6. Green Product Purchase Intention

Green product purchase intention refers to an individual's willingness and planned effort to purchase environmentally friendly products (Zhuang et al., 2021). Purchase intention is widely regarded as the most immediate predictor of actual purchasing behaviour, although the intention-behaviour gap remains a persistent issue in green consumption (Vironika & Maulida, 2025).

Studies on Generation Z confirm that sustainability values, trust, and social awareness significantly shape green purchase intention (Filip et al., 2025). In Indonesia, empirical findings show that attitude consistently plays a central role, often mediating the influence of environmental concern and knowledge on purchase intention (Rikky Riyanto & Pangaribuan, 2025; Ruslim et al., 2022). These findings reinforce the suitability of the extended TPB framework in explaining green purchase intention within emerging market context.

## 3. RESEARCH METHOD

This study adopted a quantitative research design using a cross-sectional survey to examine the effects of attitude toward green products, subjective norms, environmental concern, and environmental knowledge on green product purchase intention. Data were collected through an online self-administered questionnaire using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The study was conducted in three major Indonesian cities, Jakarta, Bandung, and Bali, which were selected due to their differing levels of environmental infrastructure, market accessibility

to green products, and public awareness of sustainability issues. Respondents aged 17–40 years were selected using a purposive sampling technique, as this group represents young and early middle-aged consumers who are more exposed to sustainability discourse and actively involved in consumption decision-making.

The minimum sample size was determined based on both PLS-SEM methodological guidelines and statistical power considerations. Following Hair et al. (2019), The ten-times rule indicates that the minimum sample should be ten times the largest number of structural paths pointing at an endogenous construct. In this study, green purchase intention was predicted by four latent variables, resulting in a minimum requirement of 40 respondents. To ensure adequate statistical power, effect-size logic was also applied. According to Cohen (1988), assuming a medium effect size ( $f^2 = 0.15$ ), a significance level of 5%, and a statistical power of 0.80, the minimum required sample size is approximately 129 respondents. Therefore, the final sample exceeding 150 respondents satisfied both criteria and ensured robust parameter estimation (Hair et al., 2019).

All constructs were measured using validated indicators adapted from prior studies to ensure content validity and measurement consistency (Cui et al., 2024; Hudayah et al., 2023; Zhuang et al., 2021). Data analysis was conducted using Partial Least Squares–Structural Equation Modeling (PLS-SEM), which is suitable for prediction-oriented research and complex models involving multiple constructs. The analysis followed a two-stage procedure, comprising evaluation of the measurement model and assessment of the structural model. Convergent validity was examined using indicator loadings and Average Variance Extracted (AVE), while internal consistency reliability was assessed using Composite Reliability. Discriminant validity was evaluated using the Heterotrait–Monotrait (HTMT) ratio, with all values below the recommended threshold of 0.85, indicating adequate discriminant validity among constructs (Memon et al., 2025). To detect potential multicollinearity issues, Variance Inflation Factor (VIF) values were assessed, and all VIF values were below 5.0, suggesting that multicollinearity was not a concern (Hair et al., 2019). The significance of the hypothesized relationships was tested using a bootstrapping procedure, and the explanatory power of the model was evaluated using  $R^2$  values.

Through this rigorous analytical approach, the study was able to identify key psychological and social mechanisms that shape green product purchase intention among young Indonesian consumers, ensuring both methodological rigor and theoretical relevance.

## 4. RESULT AND DISCUSSION

### 4.1. Outer Model Analysis

**Table 1. Outer Loading Result**

Variable	Indicator	Outer loading	Result
Attitude	ATT1	0.809	Valid
	ATT2	0.829	Valid
	ATT3	0.846	Valid
Environmental Concern	EC1	0.831	Valid
	EC2	0.795	Valid
	EC3	0.783	Valid
Environmental Knowledge	EK1	0.701	Valid
	EK2	0.784	Valid
	EK3	0.785	Valid
Subjective Norms	EK4	0.776	Valid
	SN1	0.813	Valid
	SN2	0.919	Valid
	GP1	0.799	Valid

Variable	Indicator	Outer loading	Result
Green Purchase	GP2	0.824	Valid
	GP3	0.781	Valid

Source: Data processed by the author, 2025

**Table 2. Average Variance Extracted Result**

	Average variance extracted (AVE)
<b>Attitude</b>	0.686
<b>Environmental Concern</b>	0.645
<b>Environmental Knowledge</b>	0.581
<b>Green Purchase</b>	0.643
<b>Subjective Norms</b>	0.753

Source: Data processed by the author, 2025

The results of the convergent validity test, as shown in the table, indicate that almost all indicators for each variable used in this study have loading values that exceed the requirements, namely 0.708. Furthermore, the results of the convergent validity test using the AVE value, with the results of this study exceeding 0.50. Thus, it can be concluded that the data used in this study generally meet the validity requirements.

**Table 3. Cross Loading Result**

	Attitude	Environmental Concern	Environmental Knowledge	Green Purchase	Subjective Norms
ATT1	0.809	0.600	0.622	0.621	0.414
ATT2	0.829	0.640	0.554	0.624	0.509
ATT3	0.846	0.587	0.543	0.600	0.408
EC1	0.614	0.831	0.586	0.601	0.371
EC2	0.607	0.795	0.555	0.616	0.499
EC3	0.548	0.783	0.601	0.521	0.510
EK1	0.386	0.454	0.701	0.374	0.561
EK2	0.525	0.480	0.784	0.462	0.534
EK3	0.510	0.539	0.785	0.529	0.639
EK4	0.632	0.669	0.776	0.663	0.385
GP1	0.602	0.520	0.535	0.799	0.385
GP2	0.600	0.595	0.577	0.824	0.432
GP3	0.585	0.623	0.547	0.781	0.466
SN1	0.370	0.417	0.477	0.364	0.813
SN2	0.537	0.555	0.669	0.539	0.919

Source: Data processed by the author, 2025

**Table 4. Fornell-Lacker Criterion Result**

	<b>Attitude</b>	<b>Environmental Concern</b>	<b>Environmental Knowledge</b>	<b>Green Purchase</b>	<b>Subjective Norms</b>
Attitude	0.828				
Environmental Concern	0.736	0.803			
Environmental Knowledge	0.692	0.721	0.762		
Green Purchase	0.743	0.724	0.690	0.802	
Subjective Norms	0.536	0.570	0.675	0.534	0.868

Source: Data processed by the author, 2025

In this study, discriminant validity testing was conducted in two ways. First, by evaluating the cross-loading value based on the table, which shows the correlation of items or measurement indicators with a construct is stronger than the correlation value with other constructs. Second, by testing discriminant validity, which is done by calculating the AVE root value or measuring the Fornell-Larcker criteria listed in Table 4.8. This ensures that the resulting AVE root value for a construct is greater than the correlation value between constructs. Thus, it can be concluded that the data have effectively met the discriminant validity criteria.

**Table 5. Reliability Test Result**

	<b>Cronbach's alpha</b>	<b>Composite reliability (rho_a)</b>	<b>Composite reliability (rho_c)</b>	<b>Result</b>
Attitude	0.771	0.771	0.868	Reliable
Environmental Concern	0.726	0.729	0.845	Reliable
Environmental Knowledge	0.766	0.786	0.847	Reliable
Green Purchase	0.722	0.722	0.844	Reliable
Subjective Norms	0.682	0.753	0.859	Reliable

Source: Data processed by the author, 2025

Based on the results of the internal consistency analysis using Cronbach's Alpha and Composite Reliability values shown in that table shows that all variables have obtained Cronbach's Alpha and Composite Reliability values above 0.6. Thus, it can be concluded that the data in this study can be said to be reliable and consistent.

## 4.2. Inner Model Analysis

**Table 6. R-Square Test Result**

	<b>R-Square</b>	<b>R-Square Adjusted</b>
<b>Green Purchase</b>	0.642	0.635

Source: Data processed by the author, 2025

The R-Square value of 0.642 indicates that 64.2% of the variance in Intention to Purchase Eco-Friendly Products can be explained by the four predictors, namely Attitude towards Eco-Friendly Products, Subjective Norm, Environmental Concern, and Environmental Knowledge. These results indicate that the model has strong predictive ability. Among these variables, Attitude is the most significant contributor to the intention to purchase eco-friendly products, followed by Subjective Norm,

while Environmental Concern and Environmental Knowledge still provide a positive contribution although with a smaller influence. These findings confirm that psychological and social factors play an important role in shaping consumers' intention to purchase eco-friendly products.

**Table 7. F-Square Test Result**

	Attitude	Environment al Concern	Environmental Knowledge	Green Purchase	Subjective Norms
Attitude				0.160	
Environment al Concern				0.080	
Environment al Knowledge				0.040	
Green Purchase					
Subjective Norms					0.002

Source: Data processed by the author, 2025

Based on the f-square ( $f^2$ ) test results in the table, each independent variable shows a different influence on Green Purchase Intention. The Attitude variable has an  $f^2$  value of 0.160 and falls into the medium influence category, making it the factor with the strongest contribution in explaining the intention to purchase environmentally friendly products. Environmental Concern ( $f^2 = 0.080$ ) and Environmental Knowledge ( $f^2 = 0.040$ ) fall into the small influence category, indicating that both have a positive but relatively small influence. Meanwhile, Subjective Norms has the lowest  $f^2$  value of 0.002, far below the minimum limit of 0.02, so it is considered to have no significant influence. Overall, these findings indicate that consumer decisions are more influenced by personal factors such as attitudes and knowledge, rather than social pressure or the views of others.

**Table 8. Hypotheses Test Result**

		Original sample (O)	T statistics	P values	Result
H1	Attitude -> Green Purchase	0.377	5.230	0.000	Supported
H2	Subjective Norms -> Green Purchase	0.035	0.482	0.315	Not Supported
H3	Environmental Concern - > Green Purchase	0.280	3.610	0.000	Supported
H4	Environmental Knowledge -> Green Purchase	0.204	2.675	0.004	Supported

Source: Data processed by the author, 2025

The results of this study demonstrate that attitude, environmental concern, and environmental knowledge have significant positive effects on green purchase intention, while subjective norms do not exhibit a significant influence. These findings partially support the extended Theory of Planned Behaviour (TPB) and highlight the dominance of internal psychological factors over external social pressures in shaping green purchasing intentions among Indonesian youth.

The strong effect of attitude on green purchase intention is consistent with both Indonesian and international studies. Prior research in Indonesia has consistently shown that attitude is one of the most influential predictors of green purchase intention, particularly among young consumers (Hudayah et al., 2023; Ruslim et al., 2022). International meta-analyses also confirm that attitude plays a central role in translating environmental awareness into purchase intention across different cultural contexts (Jain et al., 2021; Zhuang et al., 2021). This finding suggests that when consumers perceive green products as

useful, credible, and aligned with their personal values, they are more likely to express a strong intention to purchase, regardless of external pressures.

Environmental concern was also found to significantly influence green purchase intention, supporting previous empirical evidence from both developing and developed countries. Studies conducted in Indonesia indicate that individuals with higher concern for environmental issues tend to demonstrate stronger intentions to consume environmentally friendly product (Hudayah et al., 2023; Rikky Riyanto & Pangaribuan, 2025). Internationally, environmental concern has been shown to function as a moral and affective driver that enhances pro-environmental intentions, particularly in sustainability-related consumption (Patiño-Toro et al., 2024; Shivappa Masalvad et al., 2023). However, consistent with the “green gap” literature, high concern does not always translate into actual purchasing behaviour when economic and structural barriers such as price and product availability persist (Hlaváček et al., 2023).

The positive effect of environmental knowledge aligns with studies suggesting that informed consumers are more capable of evaluating environmental claims and understanding the long-term benefits of green products (Cui et al., 2024; Lee & Hung, 2024). In the Indonesian context, environmental knowledge has been found to strengthen positive attitudes toward green products and indirectly enhance purchase intention (Rikky Riyanto & Pangaribuan, 2025; Yusiana et al., 2021). International evidence further suggests that environmental knowledge often operates through attitudinal pathways rather than exerting a purely direct effect, reinforcing the importance of cognitive foundations in sustainable decision-making (Li, 2025; Sarah et al., 2019).

In contrast, subjective norms were found to have no significant effect on green purchase intention, which contrasts with several studies conducted in other cultural contexts. Research in Thailand and China, for example, indicates that subjective norms significantly influence green purchase intentions due to strong collectivist values and high sensitivity to social approval (Cui et al., 2024; Kamalanon et al., 2022). Even within Indonesia, some studies have reported significant effects of subjective norms, particularly for socially visible products such as green cosmetics (Widiantari & Rachmawati, 2023). The insignificance of subjective norms in this study may be explained by cultural and generational factors. Indonesian youth, especially Generation Z and young millennials in urban areas, tend to exhibit higher individual autonomy in consumption decisions and rely more on personal values and information obtained from digital platforms rather than direct social pressure (Filip et al., 2025). Moreover, green consumption in Indonesia has not yet fully evolved into a strong social norm, limiting the normative influence of peers or family members.

From a managerial perspective, these findings suggest several important implications. First, companies should prioritize educational strategies that enhance consumers’ environmental knowledge and strengthen positive attitudes toward green products. Transparent communication regarding environmental benefits, certifications, and life-cycle impacts can increase consumer trust and perceived value. Second, pricing strategies remain crucial. Although environmental concern is high, consumers are still sensitive to price differences between green and conventional products, as shown in previous Indonesian studies (Hudayah et al., 2023). Competitive pricing or incentive-based promotions may therefore help reduce the intention–behaviour gap. Third, improving product accessibility is essential. Limited availability and distribution channels can undermine even strong purchase intentions, particularly in developing-country contexts (Lee & Hung, 2024). Expanding distribution through online platforms and mainstream retail outlets can enhance the likelihood that intentions translate into actual purchases.

Overall, this study contributes to the literature by demonstrating that, in the context of Indonesian youth across multiple cities, green purchase intention is primarily driven by internal cognitive and affective factors rather than social pressure. This finding highlights the importance of contextualizing

TPB-based models and cautions against assuming uniform effects of subjective norms across cultures and generations.

## 5. CONCLUSION

This study examined the effects of attitude, subjective norm, environmental concern, and environmental knowledge on green purchase intention among consumers in Jakarta, Bandung, and Bali using PLS-SEM. The findings show that attitude toward green products is the strongest predictor of green purchase intention, followed by environmental concern and environmental knowledge. In contrast, subjective norms do not significantly influence purchase intention, indicating that internal psychological factors are more influential than social pressure among young Indonesian consumers. The model explains 64.2% of the variance in green purchase intention ( $R^2 = 0.642$ ), demonstrating strong explanatory power.

Theoretically, this study extends the Theory of Planned Behaviour by validating an expanded model in a developing-country context and highlighting the dominant role of individual cognition and environmental awareness over normative influence. Practically, the results suggest that policymakers and firms should focus on strengthening environmental education, improving product accessibility, and maintaining affordable pricing to encourage green consumption.

This study has several limitations. The cross-sectional design limits causal inference, and the use of self-reported data may introduce response bias. Additionally, the focus on purchase intention rather than actual behaviour does not fully capture the intention-behaviour gap. Future research should employ longitudinal or experimental designs, incorporate actual purchase behaviour, and examine additional contextual factors such as price sensitivity, product availability, and policy support to further explain sustainable consumption behaviour.

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