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Integrating Social Influence Theory and the Theory of Planned Behavior to Explain Green Drinkware Purchase Intention among Jakarta's Emerging Adults: The Moderating Role of Economic Constraints

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ABSTRACT

This study investigated how digital social influence shaped green drinkware purchase intentions among emerging adults in Jakarta by integrating Social Influence Theory (SIT) and the Theory of Planned Behavior (TPB). A quantitative survey was conducted among 400 Jakarta residents aged 20–29 who were familiar with green drinkware and had previously used or purchased such products. The collected data were analyzed using partial least squares structural equation modeling (PLS-SEM). The findings revealed that social media engagement positively influenced attitudes and subjective norms, with the relationship between social media engagement and subjective norms exhibiting the strongest path coefficient. Both attitudes and subjective norms positively influenced green label awareness, which, in turn, strengthened green brand trust. Green brand trust subsequently had a positive effect on green purchase intention. Although economic constraints exhibited a negative moderating effect, this relationship was not statistically significant. These findings indicated that social media served not merely as an information dissemination channel but also as a normative environment that shaped consumers' perceptions, attitudes, and behavioral intentions. Furthermore, green purchase intention emerged through a multistage process involving social influence, psychological responses, environmental information awareness, and brand trust. The study contributed to the integration of SIT and TPB by demonstrating the interconnected mechanisms underlying environmentally responsible purchasing intentions. From a practical perspective, the findings highlighted the importance of leveraging social proof in marketing communications, providing credible environmental labeling information, strengthening consumer trust in green brands, and developing affordability-oriented marketing strategies to encourage sustainable consumption among emerging adults.

INTRODUCTION

This study was conducted in the context of persistent plastic waste management challenges and the gap between environmental awareness and actual sustainable purchasing behavior, with reusable drinkware representing a practical alternative to single-use beverage containers (Lehmann & Sheffi, 2020; Nadya et al., 2025; Oktavia et al., 2025; Prabawati & Frimawaty, 2025; World Bank, 2021). The research aimed to explain green drinkware purchase intentions among emerging adults in Jakarta by integrating Social Influence Theory (SIT) and

the Theory of Planned Behavior (TPB). Specifically, the study examined a sequential mechanism through which social media engagement influenced attitudes and subjective norms, which subsequently shaped green label awareness, strengthened green brand trust, and ultimately contributed to green purchase intention. Economic constraints were investigated as a potential moderating factor in the relationship between green brand trust and purchase intention. Furthermore, the study explored the theoretical and managerial implications of this integrated framework for sustainable consumption, green drinkware businesses, and environmentally oriented public communication strategies (Nguyen & Mogaji, 2022).

The final sample comprised 400 respondents, including 278 women (69.50%) and 122 men (30.50%). The age distribution was relatively balanced, with 205 respondents (51.25%) aged 20–24 years and 195 respondents (48.75%) aged 25–29 years. Geographically, South Jakarta accounted for the largest proportion of respondents (173; 43.25%), followed by West Jakarta (101; 25.25%), East Jakarta (66; 16.50%), Central Jakarta (52; 13.00%), and North Jakarta and the Thousand Islands combined (8; 2.00%). Regarding educational attainment, most respondents held bachelor's degrees (259; 64.75%), followed by senior high school or equivalent qualifications (98; 24.50%), diplomas (35; 8.75%), and master's or doctoral degrees (8; 2.00%). In terms of employment, 161 respondents (40.25%) were private-sector employees, 59 (14.75%) were freelancers, 57 (14.25%) were entrepreneurs or business owners, and 53 (13.25%) were students. Monthly expenditure data indicated that 235 respondents (58.75%) spent less than IDR 5,000,000, while 156 (39.00%) reported expenditures of IDR 5,000,001–12,000,000, and 9 (2.25%) spent IDR 12,000,001–25,000,000. Regarding reusable drinkware preferences, tumblers were the most frequently reported product category (278; 69.50%), followed by bottles (72; 18.00%), mugs (23; 5.75%), glasses (17; 4.25%), and cups (10; 2.50%). The brands most frequently identified by respondents included Starbucks, IKEA, and LocknLock.

The research instrument assessed seven constructs: Social Media Engagement (SME), Attitude toward Green Drinkware (ATT), Subjective Norms (SNO), Green Label Awareness (GLA), Green Brand Trust (GBT), Economic Constraints (ECO), and Green Purchase Intention (GPI). The initial questionnaire comprised five measurement items for each construct, resulting in 35 items. Responses were measured using a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). This response format was selected to minimize neutral responses and encourage respondents to express clearer attitudinal preferences.

The conceptualization and operationalization of the research constructs were informed by established theoretical frameworks and previously validated measurement instruments. Attitude toward green drinkware encompassed environmental evaluations, product assessments, perceived compatibility, sustainability perceptions, and preferences for environmentally friendly products. Subjective norms incorporated injunctive norms, descriptive norms, and environmentally oriented social influences. Green label awareness included perceived informational value, label credibility, environmental commitment, label recognition, and knowledge of environmental 10285abelling. Green brand trust reflected perceptions of positive environmental impact, brand credibility, trustworthiness, corporate responsibility, and product safety. Social media engagement was conceptualized in relation to the social influence processes of compliance, identification, and internalization. Economic constraints encompassed financial pressure, recurring expenses, price sensitivity, concerns

regarding price premiums, and competing budgetary priorities. Green purchase intention reflected consumers' willingness to purchase environmentally friendly drinkware, preferences for sustainable products, environmental commitment, and responsiveness to brands' environmental initiatives. These operational definitions and measurement dimensions were adapted from previous studies (Carrión-Bósquez et al., 2024; Mihuț et al., 2025; Siraj et al., 2022; Tian et al., 2022; Wang et al., 2022).

The primary objective of this study was to explain the formation of green drinkware purchase intentions among emerging adults in Jakarta through the integration of SIT and TPB, while examining the moderating role of economic constraints in the relationship between green brand trust and purchase intention. The research sought to contribute to the theoretical development of an integrated social influence and planned behavior framework within the context of sustainable consumption. From a practical perspective, the study aimed to provide insights for green drinkware businesses, policymakers, and educational institutions in developing communication strategies and interventions that encourage environmentally responsible purchasing decisions among emerging adults.

Overall, this research sought to advance the understanding of the social, psychological, informational, and trust-related mechanisms underlying green purchase intention while providing practical insights into strategies for promoting reusable drinkware as an alternative to single-use plastic products. By examining the relationships among social media engagement, attitudes, subjective norms, green label awareness, brand trust, and economic constraints, the study provided a framework for developing more targeted sustainability interventions. These interventions could include leveraging social proof in marketing communications, improving the credibility and accessibility of environmental 10286abelling information, strengthening consumer trust in environmentally responsible brands, and developing affordability-oriented product and pricing strategies. Such approaches may contribute to encouraging sustainable purchasing intentions and supporting broader efforts to reduce reliance on single-use plastic beverage containers.

METHOD

Research design, respondent criteria and data collection

The study employed a cross-sectional quantitative research design using a self-administered online questionnaire. Preliminary exploratory interviews were conducted to provide contextual insights before the main survey; however, hypothesis testing was based exclusively on quantitative survey data. The target population comprised emerging adults aged 20–29 years residing in Jakarta. Purposive sampling was employed to recruit respondents who met predefined eligibility criteria relevant to the research objectives (Sugiyono, 2013).

Eligible participants were required to be between 20 and 29 years old, reside in Jakarta, be familiar with at least one environmentally friendly drinkware brand, have previously used or purchased reusable drinkware, and have been exposed to social media content related to green products or environmental sustainability. These inclusion criteria were established to ensure that participants had sufficient familiarity and experience to evaluate the research constructs within the context of sustainable drinkware consumption.

Data were collected in June 2026 using a Google Forms questionnaire distributed through WhatsApp, Instagram, and Telegram. During the screening process, 46 responses were

excluded because they did not meet the predefined eligibility criteria. Additional responses were subsequently collected to achieve the target sample size, resulting in a final dataset of 400 complete and eligible responses for statistical analysis.

Theoretical framework and hypotheses

TPB conceptualizes intention as the immediate motivational antecedent of behavior and emphasizes attitude, subjective norms, and perceived behavioral control as central predictors (Ajzen, 1991). In a green-consumption context, attitude reflects whether consumers evaluate environmentally friendly products positively, whereas subjective norms reflect perceived expectations from important others. This study does not operationalize perceived behavioral control as a separate TPB construct in the final structural chain; instead, Economic Constraints are introduced as a context-specific financial boundary condition. This adaptation focuses the model on the social and evaluative components of TPB while explicitly testing affordability-related limitations at the point closest to purchase intention.

SIT explains attitude change and behavior through compliance, identification, and internalization (Kelman, 1958). Compliance occurs when individuals respond to social expectations to obtain approval or avoid disapproval. Identification occurs when individuals adopt behaviors associated with people or groups they value. Internalization occurs when external values become consistent with one's own beliefs. Social-media engagement provides a setting in which all three processes may occur. Users observe peers and influencers, interact with sustainability content, receive visible approval signals, and repeatedly encounter environmental norms. These processes can shape both private evaluations and perceptions of what significant others expect (Xie & Madni, 2023; Yang et al., 2021).

The integration proposed here therefore connects SIT to TPB at two points. Internalization contributes to favorable attitudes toward green drinkware, while compliance and identification contribute to subjective norms. The model then extends beyond classical TPB by arguing that these social-psychological responses guide attention to eco-labels and other green product information. In this way, the integrated model explains not only whether consumers evaluate green consumption positively, but also how those evaluations become informational scrutiny, brand credibility, and ultimately purchase intention.

Social media engagement captures consumers' cognitive, emotional, and behavioral involvement with digital sustainability content. Repeated interaction with green messages can increase familiarity with environmental issues, make green products more personally relevant, and strengthen favorable product evaluations. Prior research shows that social media can influence young consumers' green consumption through subjective norms and perceived green value (Xie & Madni, 2023), transform green purchase intention (Nekmahmud et al., 2022), and shape green purchase intention through social-media information sharing among Generation Z (Sun & Wang, 2020; Sun & Xing, 2022). Research also suggests that attitude and subjective norms can transmit the influence of social-media e-WOM on green purchase intention (Parveen & Chaudhary, 2025). When users actively like, share, comment on, or discuss green content, they process environmental claims more deeply than passive recipients and are more likely to form positive evaluations of environmentally responsible products. Accordingly, repeated engagement with sustainability-related social media content is expected to strengthen consumers' attitudes toward green drinkware. This mechanism is consistent with SIT and with

evidence that digital social influence is especially important for young consumers (Bhutto & Rūtelionė, 2025).

1. Hypothesis 1. Social media engagement has a positive effect on attitude toward green drinkware.

Social Media Engagement plays a significant role in shaping consumers' attitudes toward green products. The availability of environmental information and content related to sustainability for consumers on social media has had a deep impact on consumer psychology (Xie & Madni, 2023). People tend to judge green products more positively when they like, share, comment, or discuss environmental topics often on social media platforms (Xie & Madni, 2023). This interaction improves the affective responses toward sustainability, which directly contributes to the creation of positive attitudes toward green products. Social media provides an interactive environment that can facilitate attitude change through social presence and perceived credibility of information . The communication on social media creates a sense of community and trust, which makes the messages about green consumption more authentic and convincing (Xie & Madni, 2023)

2. Hypothesis 2. Social Media Engagement has a Positive Effect on Subjective Norms regarding Green Drinkware.

Social Media Engagement is another important factor that influences subjective norms of green consumption. Users see that green products, environmental campaigns, and sustainability talk are regularly approved, and experience social pressure to conform. This process reinforces the perceived expectations of peers, family, and online community to engage in environmentally responsible consumption (Xie & Madni, 2023). Platforms like social media are also good for the transmission of normative beliefs through observation and interaction. Social media interaction reinforced subjective norms through the shared values of the environment. Young consumers internalize collective standards of the environment through ongoing involvement in digital communities that impact their decision-making processes (Xie & Madni, 2023).

3. Hypothesis 3. Attitude Toward Green Drinkware has a positive effect on Green Label Awareness.

Attitude toward green products plays an important role in shaping consumers' attention to and understanding of environmental information conveyed through Green labels. Green labels represent an important green marketing tool that informs consumers about the environmental characteristics of products, especially when these are not directly verifiable (Riskos et al., 2021). Consumers with positive attitude toward green product purchase are more involved with ecolabel information and perceive the information as more credible. Thus, positive perceptions of green products increase consumers' cognitive involvement with ecolabels by increasing their attention to and awareness of green labelling information (Riskos et al., 2021).

4. Hypothesis 4. Subjective norms regarding green drinkware have a positive effect on green label awareness.

Subjective norms can produce a similar informational effect to give the effect to green label awareness. When consumers perceive that peers, family members, or online communities value environmentally responsible consumption, they may become more attentive to the cues that help them act consistently with those expectations. Social pressure may therefore increase

the salience of Green labels and encourage consumers to understand environmental symbols and claims. Evidence on Green labels and user-generated content suggests that social and informational cues jointly shape green purchase intentions (Panopoulos et al., 2022), while studies of eco-label knowledge show that environmental information can support pro-environmental behavior (Hossain et al., 2022).

5. Hypothesis 5. Green label awareness has a positive effect on green brand trust.

Green Label Awareness can reduce ambiguity about whether a product's green attributes are genuine. When consumers understand environmental symbols, sustainability claims, and product information, they are better able to distinguish credible green offerings from vague or potentially misleading claims. Prior research indicates that environmental knowledge and eco-label knowledge strengthen green trust (Hossain et al., 2022) and that perceived greenwashing can damage trust and purchase intentions (Isac et al., 2025). Green Brand Trust is especially important in green marketing because consumers often cannot independently verify the environmental performance of materials, production processes, or end-of-life claims. Credible labels and transparent product information can function as signals that reduce uncertainty and strengthen confidence in the brand's environmental commitment. Conversely, inconsistent or unverifiable claims create greenwashing concerns and weaken credibility (Balaskas et al., 2025; Tu et al., 2024). Thus, greater green label awareness should support green brand trust.

6. Hypothesis 6. Green brand trust has a positive effect on green purchase intention.

Green brand trust reflects confidence that a brand's environmental promises are honest, reliable, and consistent. Trust reduces perceived risk and makes consumers more willing to act on green claims. Prior research consistently associates green trust with purchase intention (Alhomaid, 2025; Murtinmingsih, 2025; Nguyen-Viet et al., 2024; Pramesthi, 2024; Vinoth et al., 2024). In the green drinkware category, trust may be supported by verifiable material safety, durability, reusability, recyclability, and consistency between sustainability communication and product performance. Green brand trust has a significant and positive direct effect on green purchase intention, implying that consumers are more likely to engage in green purchasing when they perceive a brand as credible, reliable, and genuinely committed to sustainability (Alhomaid, 2025). Trust reduces perceived risk and uncertainty in green claims, and thus builds consumers' confidence in their purchase decision. When consumers believe a brand is consistently fulfilling its environmental promises, they are more inclined to support the brand through their purchasing behavior.

7. Hypothesis 7. Economic constraints negatively moderate the relationship between green brand trust and green purchase intention, such that the positive relationship becomes weaker as economic constraints increase.

The conversion of trust into purchase intention may depend on consumers' financial circumstances. Green products can carry price premiums, and young consumers may face budget constraints or competing basic needs. Price sensitivity and willingness to pay a premium are important challenges in green purchase decisions, particularly among young consumers (Gomes et al., 2023; Tan & Fauzi, 2025; Zahro et al., 2025). Accordingly, this study proposes that economic constraints weaken the positive relationship between green brand trust and green purchase intention: consumers may trust a green brand but still be unable or unwilling to purchase when perceived affordability is low. Therefore, the positive effect of Green Brand

Trust on Green Purchase Intention is expected to become weaker as Economic Constraints increase.

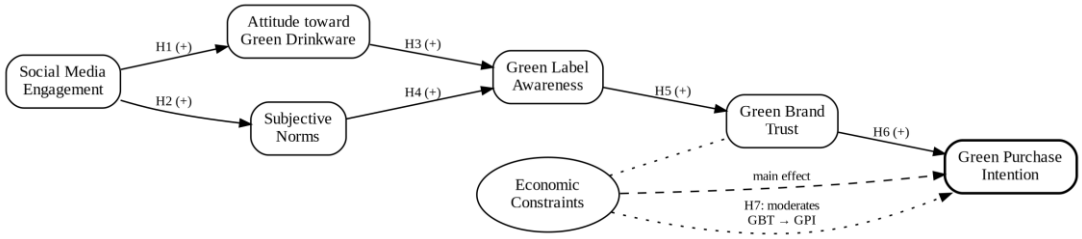


Figure. 1. Conceptual integration of Social Influence Theory and the Theory of Planned Behavior used in the study. H7 represents the interaction between Economic Constraints and Green Brand Trust in predicting Green Purchase Intention.

Measurement instrument and pilot test

The instrument measured seven constructs: Social Media Engagement (SME), Attitude toward Green Drinkware (ATT), Subjective Norms (SNO), Green Label Awareness (GLA), Green Brand Trust (GBT), Economic Constraints (ECO), and Green Purchase Intention (GPI). The original questionnaire contained five items per construct, for a total of 35 research items. Responses were recorded on a four-point Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree). The four-point format was selected to reduce neutral responding and encourage more directional judgments.

Construct definitions and dimensions were developed from prior literature. Attitude covered environmental evaluation, product evaluation, product compatibility, sustainability perception, and green-product preference. Subjective norms reflected injunctive, descriptive, and eco-social normative influence. Green label awareness covered informational value, credibility, environmental commitment, recognition, and label knowledge. Green brand trust reflected perceived positive impact, credibility, trustworthiness, responsibility, and safety. Social media engagement was conceptually linked to compliance, identification, and internalization. Economic constraints represented budget pressure, recurring expenses, price sensitivity, premium-price concerns, and budget priorities. Green purchase intention captured willingness, green-product preference, environmental commitment, and response to brand environmental initiatives. These operationalizations were adapted from prior measures (Carrión-Bósquez et al., 2024; Mihuț et al., 2025; Siraj et al., 2022; Tian et al., 2022; Wang et al., 2022).

A pilot test with 54 respondents was conducted before the final analysis. All pilot constructs exceeded the stated reliability and validity thresholds, with composite reliability values between 0.866 and 0.927 and AVE values between 0.568 and 0.718. The pilot results supported continuation to the full survey.

PLS-SEM analysis

SmartPLS 4 was used to estimate the partial least squares structural equation model. PLS-SEM was selected because the study tests a multi-stage structural model that includes direct, indirect, and moderation effects and emphasizes explanatory and predictive assessment (Hair & Alamer, 2022; Henseler et al., 2009; Memon et al., 2021; Shackman, 2013). The analytical procedure evaluated the measurement model before interpreting the structural paths.

Convergent validity was assessed using outer loadings and average variance extracted (AVE). Retained loadings were required to exceed 0.70 and AVE values to exceed 0.50. Discriminant validity was evaluated using the Fornell–Larcker criterion, heterotrait–monotrait ratios (HTMT), and cross-loadings; HTMT values below 0.85 were treated as conservative evidence of construct distinctiveness (Henseler et al., 2015). Internal consistency was assessed using Cronbach's alpha, rho_A, and composite reliability. Collinearity was examined using outer and inner variance inflation factors (VIF). Structural relationships were evaluated with bootstrapping, using $t > 1.96$ and $p < 0.05$ as the significance criteria. R^2 assessed explanatory power, f^2 assessed incremental effect size, and Q^2predict assessed predictive relevance.

RESULTS AND DISCUSSION

Measurement model assessment

The final measurement model retained four indicators for ATT, GBT, GLA, GPI, SME, and SNO, while all five ECO indicators were retained. Six indicators—ATT4, GBT3, GLA1, GPI5, SME3, and SNO1—were removed during model refinement. All retained outer loadings were above 0.70, ranging from 0.709 to 0.885. AVE values ranged from 0.606 to 0.757, confirming convergent validity.

Internal consistency was satisfactory across all constructs. Cronbach's alpha ranged from 0.784 to 0.893, while composite reliability ranged from 0.860 to 0.926. Discriminant validity was also supported. Each construct satisfied the Fornell–Larcker criterion, and HTMT values ranged from 0.083 to 0.774, remaining below the conservative threshold of 0.85. Cross-loadings showed that every retained indicator loaded most strongly on its intended construct. Outer VIF values ranged from 1.399 to 2.852 and inner VIF values from 1.000 to 1.229, indicating that multicollinearity did not distort the structural estimates.

Table 1. Final measurement model reliability and convergent validity.

Construct	Retained items	Cronbach's α	Composite reliability	AVE
Attitude (ATT)	4	0.794	0.866	0.619
Economic Constraints (ECO)	5	0.870	0.903	0.652
Green Brand Trust (GBT)	4	0.829	0.887	0.664
Green Label Awareness (GLA)	4	0.808	0.874	0.635
Green Purchase Intention (GPI)	4	0.784	0.860	0.606
Social Media Engagement (SME)	4	0.806	0.873	0.634
Subjective Norms (SNO)	4	0.893	0.926	0.757

Structural model and hypothesis testing

Bootstrapping supported six of the seven principal hypotheses. Social Media Engagement had a positive effect on Attitude ($\beta = 0.589$, $t = 16.430$, $p < 0.001$) and an even stronger positive effect on Subjective Norms ($\beta = 0.669$, $t = 20.353$, $p < 0.001$). The associated f^2 values were 0.531 and 0.809, indicating large incremental effects. These findings support H1 and H2 and identify social media engagement as the most influential antecedent in the model.

Attitude positively influenced Green Label Awareness ($\beta = 0.365$, $t = 6.955$, $p < 0.001$; $f^2 = 0.189$), while Subjective Norms had a slightly stronger effect on Green Label Awareness ($\beta = 0.394$, $t = 8.865$, $p < 0.001$; $f^2 = 0.220$). H3 and H4 were therefore supported. Green Label

Awareness positively influenced Green Brand Trust ($\beta = 0.296$, $t = 4.815$, $p < 0.001$; $f^2 = 0.096$), supporting H5, and Green Brand Trust positively influenced Green Purchase Intention ($\beta = 0.311$, $t = 5.556$, $p < 0.001$; $f^2 = 0.100$), supporting H6.

Economic Constraints had a positive main effect on Green Purchase Intention ($\beta = 0.184$, $t = 3.688$, $p < 0.001$; $f^2 = 0.038$). This path was included to estimate the moderator's main effect and was not one of the seven principal hypotheses. Because higher Economic Constraints scores were intended to represent stronger financial limitations, the positive coefficient is counterintuitive and should be interpreted cautiously. More importantly, the ECO × GBT interaction was negative as hypothesized but not statistically significant ($\beta = -0.097$, $t = 1.716$, $p = 0.086$; $f^2 = 0.017$). H7 was therefore not supported, and the data do not provide sufficient evidence that economic constraints change the strength of the Green Brand Trust–Green Purchase Intention relationship.

Table 2. Structural path estimates and hypothesis decisions. Significance criterion: $p < 0.05$.

Hypothesis	Path	β	t	p	f^2	Decision
H1	SME → ATT	0.589	16.430	<0.001	0.531	Supported
H2	SME → SNO	0.669	20.353	<0.001	0.809	Supported
H3	ATT → GLA	0.365	6.955	<0.001	0.189	Supported
H4	SNO → GLA	0.394	8.865	<0.001	0.220	Supported
H5	GLA → GBT	0.296	4.815	<0.001	0.096	Supported
H6	GBT → GPI	0.311	5.556	<0.001	0.100	Supported
H7	ECO × GBT → GPI	−0.097	1.716	0.086	0.017	Not supported
Additional	ECO → GPI	0.184	3.688	<0.001	0.038	Significant main effect

Indirect effects, explanatory power, and predictive relevance

All reported indirect effects were positive and statistically significant. Attitude indirectly influenced Green Brand Trust through Green Label Awareness ($\beta = 0.108$, $p = 0.001$) and Green Purchase Intention through the sequential GLA–GBT pathway ($\beta = 0.034$, $p = 0.009$). Subjective Norms indirectly influenced Green Brand Trust ($\beta = 0.117$, $p < 0.001$) and Green Purchase Intention ($\beta = 0.036$, $p = 0.002$). Social Media Engagement had significant indirect effects on Green Label Awareness ($\beta = 0.478$, $p < 0.001$), Green Brand Trust ($\beta = 0.142$, $p < 0.001$), and Green Purchase Intention ($\beta = 0.044$, $p = 0.004$). These results support the proposed sequential transmission mechanism without requiring a formal full-versus-partial mediation classification.

The model explained 34.7% of the variance in Attitude, 44.7% in Subjective Norms, 39.7% in Green Label Awareness, 8.8% in Green Brand Trust, and 21.0% in Green Purchase Intention. The pattern indicates stronger explanatory power in the earlier social and psychological stages than in the later trust and purchase-intention stages. Q^2predict values were positive for all endogenous constructs: 0.341 for ATT, 0.444 for SNO, 0.163 for GLA, 0.118 for GBT, and 0.081 for GPI. Thus, the model demonstrates predictive relevance throughout the chain, although predictive strength is weakest for the final purchase-intention construct.

Table 3. Explanatory and predictive performance of the endogenous constructs.

Endogenous construct	R^2	Adjusted R^2	Q^2predict
Attitude (ATT)	0.347	0.345	0.341
Subjective Norms (SNO)	0.447	0.446	0.444
Green Label Awareness (GLA)	0.397	0.394	0.163
Green Brand Trust (GBT)	0.088	0.085	0.118
Green Purchase Intention (GPI)	0.210	0.204	0.081

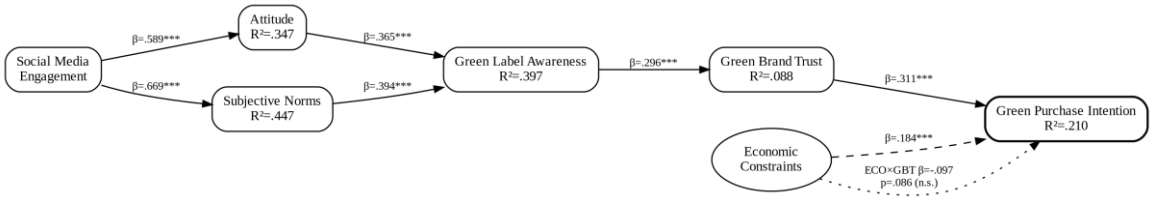


Figure. 2. Empirical structural model. *** $p < 0.001$; n.s. = not significant. The ECO × GBT coefficient represents the moderation test.

The findings show that green drinkware purchase intention among Jakarta's emerging adults is not best understood as a direct consequence of environmental exposure or social-media activity. Instead, the results support a sequential process in which digital social engagement first shapes personal evaluation and perceived social expectations, which then increase attention to environmental product information, strengthen trust in green brands, and ultimately contribute to purchase intention. This multi-stage pattern provides empirical support for the integration of SIT and TPB and clarifies how social influence is transmitted across psychological, informational, and credibility-related stages.

The strongest relationship in the model is the effect of Social Media Engagement on Subjective Norms ($\beta = 0.669$), followed by its effect on Attitude ($\beta = 0.589$). This pattern suggests that social media operates more strongly as a normative environment than as a purely persuasive information channel. Young urban consumers do not encounter green drinkware only as product information; they also observe how peers, influencers, brands, and online communities display and evaluate reusable products. Likes, comments, endorsements, recommendations, and visible product use create signals about what is approved and socially normal. This interpretation is consistent with Xie and Madni (2023), Yang et al. (2021), and research on Gen Z green consumption (Bhutto & Rūtelionė, 2025). It also aligns with SIT's mechanisms of compliance, identification, and internalization (Kelman, 1958).

The effects of Attitude and Subjective Norms on Green Label Awareness extend the usual TPB logic. In classical TPB applications, attitude and subjective norms are often 10293abellin as direct predictors of behavioral intention. Here, their influence is channeled through attention to environmental information. Consumers who evaluate green drinkware positively and perceive social support for sustainable consumption become more attentive to green labels and product claims. This is theoretically important because green drinkware includes product attributes that are not always visually obvious before purchase, such as material safety, reusability, manufacturing practices, and environmental performance. Eco-labels and standardized environmental information can reduce this information asymmetry (Cao & Zhang, 2024; Hossain et al., 2022; Panopoulos et al., 2022; Riskos et al., 2021).

Green Label Awareness significantly increased Green Brand Trust, but the relatively small effect size ($f^2 = 0.096$) and low R^2 for Green Brand Trust (0.088) indicate that label awareness is only one component of trust formation. Consumers may understand an eco-label but still require evidence of product quality, transparent sourcing, reliable performance, consistent sustainability communication, and protection against greenwashing. This interpretation is consistent with the literature on greenwashing and trust (Balaskas et al., 2025; Isac et al., 2025; Tu et al., 2024). The result therefore supports label awareness as an informational bridge while also showing that labels alone cannot create comprehensive brand credibility.

Green Brand Trust significantly increased Green Purchase Intention, supporting earlier findings that credibility and confidence in green claims are important determinants of consumers' willingness to buy environmentally responsible products (Alhomaid, 2025; Murtinmingsih, 2025; Nguyen-Viet et al., 2024; Pramesthi, 2024; Vinoth et al., 2024). Nevertheless, the final R^2 of 0.210 shows that the model explains 21.0% of the variance in purchase intention, leaving 79.0% attributable to factors outside the model. Potential omitted determinants include product availability, perceived value, product quality, design attractiveness, environmental concern, perceived behavioral control, and previous ownership. This multidetermined pattern is consistent with systematic reviews of green purchase intention (Patiño-Toro et al., 2024). Thus, the significant trust path should not be interpreted as evidence that trust is sufficient on its own.

The proposed moderation by Economic Constraints was not supported. Although the interaction coefficient was negative, its p-value of 0.086 and f^2 of 0.017 indicate that the moderating contribution was statistically and substantively weak. This finding contrasts with studies that emphasize price sensitivity as a boundary condition in green purchasing (Tan & Fauzi, 2025; Zahro et al., 2025) but is compatible with evidence that economic limitations do not always override environmental motives (Mabkhot, 2024; Ogiemwonyi & Jan, 2023). One possible explanation is that the sample already consisted of consumers familiar with and often experienced with green drinkware, which may reduce the extent to which financial constraints alter the effect of trust. Another possibility is measurement direction. The positive main effect of Economic Constraints on Green Purchase Intention is counterintuitive given the intended scoring of the construct; these findings therefore suggest that item coding and conceptual direction should be rechecked in future work.

The significant indirect effects reinforce the sequential interpretation. Social Media Engagement reaches Green Purchase Intention through Attitude and Subjective Norms, then Green Label Awareness, and then Green Brand Trust. The indirect coefficient from SME to GLA ($\beta = 0.478$) is particularly notable because it combines the parallel pathways through Attitude and Subjective Norms. This indicates that digital engagement is most powerful at the point where it shapes how consumers evaluate sustainability and perceive its social acceptance. Its influence becomes smaller as the process moves toward brand trust and purchase intention, which is also reflected in the declining R^2 and Q^2predict values in later stages.

Theoretical and Practical Implications

The primary theoretical contribution is the empirical confirmation of a multi-stage SIT–TPB pathway. Rather than positioning social influence as a parallel predictor of purchase intention, the model shows how digital social influence becomes embedded in TPB-related

attitude and subjective norms before progressing to informational and trust-based stages. This gives SIT a clear role in explaining the origin of social and evaluative judgments and gives TPB a broader downstream mechanism through which those judgments become market intention.

Second, Green Label Awareness is positioned as a communication bridge between social-psychological determinants and Green Brand Trust. The result extends green-consumption research by showing that favorable attitudes and perceived social expectations can increase attention to product-level environmental information, which in turn influences credibility judgments. This mechanism helps explain why pro-environmental attitudes may fail to produce purchase intention when consumers cannot identify trustworthy information.

Third, the unsupported moderation effect clarifies the boundary conditions of the model. Economic constraints did not significantly alter the Green Brand Trust–Green Purchase Intention relationship in this sample, suggesting that affordability may operate as a direct or context-specific determinant rather than a universal moderator. The finding encourages future researchers to distinguish among economic constructs such as price sensitivity, perceived affordability, willingness to pay, value for money, and disposable income rather than treating financial limitation as a single homogeneous condition.

The results imply that green drinkware marketing should follow the same sequence identified in the structural model. Because social media has its strongest effects on Subjective Norms and Attitude, firms should first make sustainable drinkware use socially visible and personally relevant. Peer demonstrations, creator partnerships, user-generated reuse stories, community challenges, and repeated real-life product use can create social proof and normalize reusable consumption rather than relying only on one-way promotional claims.

The next stage is informational credibility. Once consumers are socially receptive to green drinkware, marketers should make product-level environmental information easy to verify. A proof-to-trust approach is proposed in which QR-linked product information communicates material composition, BPA-free status where relevant, durability, care instructions, reusability, recyclability, and environmental claims. This recommendation is consistent with the significant GLA → GBT path and the broader need to reduce greenwashing concerns (Balaskas et al., 2025; Tu et al., 2024).

Brand trust should then be supported through consistent product performance and transparent sustainability practices. Labels are more persuasive when consumers can connect them to observable quality and repeated use. Trial programs in cafés, campuses, coworking spaces, or community events may help consumers experience durability and functionality directly. Because the economic moderation hypothesis was not supported, firms should not assume that price discounts alone will unlock purchase intention. Affordability can instead be addressed through segmented product tiers, transparent cost-per-use information, refill incentives, and value communication that preserves environmental standards.

For policymakers and educational institutions, the findings indicate that general environmental awareness is insufficient. Programs should help consumers identify credible labels, understand material safety and recyclability, recognize greenwashing, and compare long-term product value. Public refill infrastructure and visible reuse initiatives can also strengthen the social normalization of reusable drinkware. These measures translate sustainability from an abstract message into a visible and verifiable everyday practice.

CONCLUSION

This study demonstrated that green drinkware purchase intention among emerging adults in Jakarta was shaped by interconnected social, psychological, informational, and trust-related mechanisms. Social media engagement positively influenced attitudes and exerted an even stronger influence on subjective norms. Both constructs positively influenced green label awareness, which subsequently strengthened green brand trust and contributed to green purchase intention. Six of the seven principal hypotheses were supported, whereas economic constraints did not significantly moderate the relationship between green brand trust and green purchase intention.

The findings indicated that environmental awareness and exposure to sustainability-related digital content alone were insufficient to explain green purchase intention. Instead, social influence contributed to favorable personal evaluations and perceived social expectations, which were associated with greater awareness of environmental 10296abelling and stronger brand trust. Theoretically, the study extended the integration of Social Influence Theory (SIT) and the Theory of Planned Behavior (TPB) by identifying a sequential pathway linking social media engagement, attitudes, subjective norms, green label awareness, brand trust, and purchase intention. From a practical perspective, the findings emphasized the importance of social proof, credible and verifiable environmental 10296abelling, brand credibility, positive product experiences, and affordability-oriented value propositions in promoting sustainable drinkware consumption.

Nevertheless, the findings should be interpreted in light of several methodological limitations. The sample was restricted to Jakarta residents aged 20–29 who were familiar with green drinkware, had previously used or purchased such products, and had encountered sustainability-related social media content. Although purposive sampling ensured the contextual relevance of respondents, it limited the generalizability of the findings to the broader population. Furthermore, the sample exhibited demographic imbalances, with relatively high proportions of female respondents, individuals aged 20–24, South Jakarta residents, private-sector employees, and consumers reporting monthly expenditures below IDR 5,000,000. These characteristics may have influenced the observed relationships and should be considered when interpreting the results.

The cross-sectional research design and reliance on self-administered online questionnaires also introduced limitations. Because the data were collected at a single point in time, the findings reflected self-reported perceptions and behavioral intentions rather than observed purchasing behavior. Consequently, the results did not establish causal relationships or demonstrate whether green purchase intention translated into actual purchases or sustained product reuse. This limitation was particularly relevant given the study's emphasis on the intention–behavior gap in sustainable consumption. Future research should employ longitudinal or experimental designs to investigate whether changes in social media engagement, green label awareness, and brand trust predict subsequent purchasing decisions and continued use of reusable drinkware.

The structural model also demonstrated relatively limited explanatory power for the later stages of the proposed decision-making process. Green label awareness accounted for only 8.8% of the variance in green brand trust, while the final predictors explained 21.0% of the variance in green purchase intention. These findings suggested that additional determinants

were necessary to provide a more comprehensive explanation of sustainable purchasing intentions. Future studies should consider incorporating product availability, perceived value, product quality, design attractiveness, environmental concern, perceived behavioral control, and previous product ownership. Furthermore, multigroup analysis could be conducted to examine potential differences in structural relationships across gender, age, occupational categories, expenditure levels, and geographic areas within Jakarta, particularly given the potential influence of demographic and sociocultural characteristics on environmentally responsible purchasing decisions.

Finally, the findings highlighted the need for more precise conceptualization and measurement of economic constraints. The statistically nonsignificant moderating effect, together with the unexpected positive direct coefficient, suggested the possibility of measurement inconsistencies, reverse-coding issues, conceptual ambiguity, or statistical suppression effects. However, these explanations require further empirical investigation. Future research should distinguish among price sensitivity, perceived affordability, perceived value for money, willingness to pay, and financial pressure to clarify their respective roles in sustainable purchasing decisions. Comparative investigations across different environmentally friendly product categories could also determine whether economic constraints operate differently for frequently used and socially visible products, such as reusable drinkware, compared with higher-cost or less visible sustainable alternatives. Such investigations would contribute to refining the integrated SIT–TPB framework and developing more effective strategies for promoting sustainable consumption.

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CONFLICT OF INTEREST

The authors declare that this study was conducted without any commercial or financial relationships that could be interpreted as a potential conflict of interest.

AUTHOR CONTRIBUTIONS

Ivan Rifaldy: research conceptualization, methodology design, experiment execution, data collection, data analysis, manuscript drafting, and manuscript revision. Amalia E. Maulana: research supervision, validation of research results, provision of scientific input, and manuscript review and revision. All authors have read and approved the final version of the manuscript.

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The authors declare that generative artificial intelligence (AI) was used in the preparation of this manuscript to help improve linguistic clarity, correct grammar, and refine the writing structure. Generative AI was not used to generate, manipulate, or analyze research data. The entire content of the manuscript has been reviewed and verified by the author(s). The author(s) are fully responsible for the accuracy, integrity, and final content of the manuscript.

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