Sustainable Consumer Behavior in Emerging Markets: The Interplay of Environmental Concern, Green Marketing Strategies, and Environmental Attitude on Purchase Intention

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Abstract: This investigation examines the mechanisms through which environmental concern and green marketing mix influence green purchase intention, with environmental attitude functioning as a moderating variable within emerging market contexts. A quantitative cross-sectional methodology was implemented among 385 respondents from Greater Bandung, Indonesia, representing consumers interested in environmentally sustainable products from IKEA Kota Baru Parahyangan. The analytical framework utilized Partial Least Squares Structural Equation Modeling through SmartPLS 4.0, complemented by multi-group analysis to evaluate demographic segmentation effects. Environmental concern and green marketing mix demonstrate significant positive influences on green purchase intention. Environmental attitude substantially moderates both relationships, amplifying the effects of environmental concern and green marketing mix on purchase intention. Multi-group analysis reveals that green marketing strategies exhibit superior effectiveness among consumers with higher education credentials, professional occupations, middle-to-high income brackets, and younger demographic profiles. The investigation focuses on a single retail brand within Indonesia, potentially constraining broader applicability. Organizations should emphasize environmental attitude development through comprehensive education and engagement initiatives while implementing demographically-targeted green marketing strategies. The findings provide practical guidance for businesses aiming to increase green product adoption by aligning communication strategies with consumers' values and environmental awareness. Additionally, policymakers and educators may apply these insights to design targeted campaigns and public programs that foster sustainable consumption behavior. This research contributes to green marketing literature by validating the Theory of Planned Behavior and highlighting environmental attitude's moderating role and demographic influences in emerging markets.

Keywords: Environmental Concern, Green Marketing Mix, Environmental Attitude, Green Purchase Intention, Emerging Markets

Introduction

The escalating environmental crisis has positioned sustainable consumption as a critical global imperative, with climate change concerns reaching unprecedented levels among consumers worldwide (World Meteorological Organization, 2024). Recent data indicates if the global average temperature exceeds the standard limit of 1.5°C above pre-industrial levels for the first time, intensifying public awareness of environmental issues and driving demand for sustainable products (The Guardian, 2025). This heightened environmental consciousness has catalyzed significant shifts in consumer behavior, with 84% of Indonesian consumers reporting usage of sustainable products, reflecting a broader global trend toward environmentally responsible consumption (GoodStats, 2024).

The retail furniture industry has emerged as a significant player in sustainable consumption, with companies like IKEA implementing comprehensive sustainability strategies that encompass circular economy principles, renewable materials, and carbon-neutral operations (IKEA, 2024). Despite declining revenues due to strategic price reductions, IKEA has experienced substantial increases in both physical store visits (4.5% increase) and online engagement (21% increase), suggesting that

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sustainability-focused strategies may enhance consumer engagement even amid financial trade-offs (Reuters, 2024; Statista, 2024).

The Indonesian market presents a particularly compelling context for examining green consumption behavior, as environmental issues rank among the top concerns for young consumers, with 27.4% of respondents aged 16-36 identifying climate change as their primary environmental concern (Katadata, 2023). Continuous awareness of environmental conflicts can change customer intentions and behavior towards environmentally friendly goods. (Widodo & Wahid, 2020). This is further supported by findings that 82% of Indonesian youth believe that individual actions can significantly impact climate change mitigation, indicating strong potential for green marketing strategies (Ipsos, 2024). However, actual environmental engagement remains limited, with only 15.5% of Indonesians actively participating in environmental activities, suggesting a significant attitude-behavior gap (Archipelago Insight, 2023).

IKEA's green marketing strategy not only reflects its commitment to sustainability but also increases the green purchase intention of environmentally conscious consumers (Belycia & Soelasih, 2024). Consumers with high environmental concerns tend to choose products from companies perceived as environmentally responsible. Green marketing itself is defined as meeting consumer needs with minimal environmental impact (Umam & Widodo, 2022). This aligns with prior research demonstrating if environmental concern is related to the intention to purchase environmentally friendly products (Widodo et al., 2024a).

Moreover, the implementation of the green marketing mix is not solely profit-oriented but also encourages more environmentally conscious consumer behavior (Kurniawan & Iriani, 2023). Positive environmental habits are reflected in environmental attitude, which encompasses individuals' awareness, beliefs, and behaviors toward environmental issues. Through the application of the green marketing mix, companies like IKEA not only offer eco-friendly products but also foster greater consumer concern for the environment.

This study addresses some key gaps. First, while previous studies have examined the contribution of environmental concern and green marketing mix to purchasing intentions, they have focused solely on the moderating role of environmental concern attitude in these relationships. Second, most studies have focused on developed markets, with insufficient attention to emerging economies where environmental awareness is rapidly evolving. Third, existing research has not adequately explored demographic variations in green marketing effectiveness, limiting the practical applicability of findings for segmented marketing strategies.

The research questions guiding this investigation are: (1) How do environmental concern and green marketing mix influence green purchase intention? (2) What is the moderating role of environmental attitude in these relationships? (3) How do demographic factors influence the effectiveness of green marketing strategies? By addressing these questions, this study contributes to both theoretical understanding and practical applications of green marketing in emerging markets.

Literature Review and Hypothesis Development

Theoretical Foundation

The basis of this study is the Theory of Planned Behavior (TPB), which explains that the intention to behave is influenced by subjective norms, actions and controlling feelings. (Ajzen, 1991). TPB has been extensively validated in predicting environmentally responsible behaviors, including green consumption (Kaur et al., 2022). The theory suggests that consumers' intention to buy environmentally friendly products is due to attitudes toward environmental protection, social expectations regarding environmental responsibility, and their perceived ability to make environmentally beneficial choices.

Although environmental concern, green marketing mix, and environmental attitude have been widely studied, their integration through a syntropic lens; aligning personal, organizational, and ecological goals, remains underexplored. As environmental challenges grow, this alignment is crucial for fostering sustainable consumer behavior through coherent, value-based strategies (Capra & Luisi, 2014).

Environmental concern, defined as the degree of emotional involvement and commitment individuals demonstrate toward environmental issues, serves as a key antecedent to pro-environmental behavior (Lavuri et al., 2024). This construct encompasses three dimensions: egoistic values (personal benefits from environmental protection), altruistic values (benefits to others), and biospheric values (benefits to the ecosystem) (Mukherjee & Chandra, 2022). Research consistently demonstrates that higher environmental concern leads to stronger intentions to engage in environmentally responsible behaviors, including green product purchases (Vania & Ruslim, 2023).

Green marketing mix, defined as the adaptation from the traditional sales mix aspect (promotion, location, price, product) in caring for the environment, in the form of optimal techniques for handling environmentally conscious consumers. (Kaur et al., 2022).Green marketing also approaches significantly influence consumer behavior towards environmentally friendly products, highlighting the importance of strategic marketing in promoting sustainability (Widodo et al., 2024b) Green products emphasize sustainability in design, materials, and lifecycle management. Green pricing reflects the additional costs associated with environmental benefits while considering consumers' willingness to pay premiums for sustainable products. Green place focuses on distribution channels that minimize environmental impact, while green promotion communicates environmental benefits and encourages sustainable consumption behaviors (Mukonza & Swarts, 2020).

Environmental attitude, conceptualized as consumers' psychological tendency to evaluate environmental issues favorably or unfavorably, serves as a critical moderating variable in this study (Milfont & Duckitt, 2010). Environmental attitude encompasses cognitive (knowledge and beliefs), affective (feelings and emotions), and conative (behavioral tendencies) components (Ajzen, 2005). Research suggests that positive environmental attitudes amplify the relationship between environmental stimuli and behavioral intentions, while negative attitudes may diminish these effects (Kaur et al., 2022).

Hypothesis Development

Environmental Concern and Green Purchase Intention

Environmental concern represents a fundamental driver of green consumption behavior, as consumers with higher environmental awareness demonstrate stronger motivations to purchase products that align with their environmental values (Hartmann & Apaolaza-Ibáñez, 2012). Empirical evidence consistently supports optimal contribution between environmental concern and environmentally friendly purchasing intentions across various product categories and cultural contexts (Vania & Ruslim, 2023; Khan & Qureshi, 2025). The cognitive-emotional engagement with environmental issues creates a psychological predisposition toward products that offer environmental benefits, leading to increased purchase intentions.

H1: Environmental concern positively influences green purchase intention.

Green Marketing Mix and Green Purchase Intention

The green marketing mix provides tangible mechanisms through which companies can address consumer environmental concerns and facilitate green consumption decisions (Pramisti et al., 2022). Green products offer functional and emotional benefits that align with consumers' environmental values, while green pricing strategies can signal quality and environmental authenticity (Damarayudha et al., 2023). Green distribution channels enhance product accessibility and reinforce

environmental messaging, while green promotion creates awareness and educates consumers about environmental benefits (Dewi & Syauki, 2023). Consumers with high environmental awareness tend to choose companies that implement green marketing because they are considered more responsible and in line with their sustainability values (Marcelino & Widodo, 2020). The integrated effect of these elements creates a compelling value proposition that drives purchase intentions.

H2: Green marketing mix positively influences green purchase intention.

Moderating Role of Environmental Attitude

Environmental attitude functions as a lens through which consumers interpret and respond to environmental stimuli, potentially amplifying or diminishing contribution of environmental concern and green marketing mix to purchase intention (Kaur et al., 2022). Positive customers in a good environment are more likely to translate environmental concerns into actual purchase behaviors, as their favorable disposition toward environmental issues reduces psychological barriers to green consumption (Fadhilah, 2025). Similarly, positive environmental attitudes enhance receptivity to green marketing messages, making consumers more responsive to green marketing mix elements (Su & Li, 2024).

H3: Environmental attitude moderates the relationship between environmental concern and green purchase intention, such that the relationship is stronger when environmental attitude is more positive.

H4: Environmental attitude moderates the relationship between green marketing mix and green purchase intention, such that the relationship is stronger when environmental attitude is more positive.

Methodology

Research Design and Sample

This study is in the form of a quantitative cross-sectional survey to examine the contribution of each variable listed in this discussion topic. The target population consisted of residents of Greater Bandung, Indonesia, who demonstrated interest in purchasing environmentally friendly products from IKEA Kota Baru Parahyangan.

Sample size determination followed Lemeshow's formula (1997), yielding a required sample of 385 respondents. Purposive sampling was employed, with inclusion criteria requiring participants to be: (1) residents of Greater Bandung area, (2) aged 18 years or older, (3) having visited IKEA Kota Baru Parahyangan within the past six months, and (4) demonstrating interest in purchasing environmentally friendly products.

Measurement Instrument

Each construct is measured using a predetermined scale and references from previous studies. Environmental concern was measured using nine items adapted from Mukherjee & Chandra, (2022), encompassing egoistic, altruistic, and biospheric dimensions. The green marketing mix is assessed from eight items found from Kaur et al. (2022) covering green product, green price, green place, and green promotion dimensions. Environmental attitude was measured using six items adapted from Kaur et al. (2022), incorporating cognitive, affective, and conative components. Green purchase intention was evaluated using four items adapted from Kaur et al. (2022), including transactional, referential, preferential, and exploratory intentions. All items were measured using five-point Likert scales (1 = strongly disagree, 5 = strongly agree). The questionnaire was pre-tested with 30 respondents, and all items demonstrated acceptable validity and reliability (outer loadings > 0.70, Cronbach's alpha > 0.85).

Data Collection and Analysis

Data collection was conducted through online surveys distributed via Google Forms between March and July 2025. The final sample comprised 385 valid responses after removing four incomplete questionnaires. Respondent characteristics revealed balanced representation across demographic segments: 53% female, 43.4% aged 26-35 years, 51.4% with bachelor's degree education, 38.7% entrepreneurs, and 43.6% earning IDR 5-10 million monthly.

The data will be analyzed from Partial Least Squares Structural Equation Modeling (PLS-SEM) applying SmartPLS 4.0, chosen for its expertise in handling complex models with various constructs and moderating effects that accommodate non-normal data distribution. (Hair et al., 2021). The analysis includes a two-stage approach.: (1) measurement model assessment examining convergent validity, discriminant validity, and reliability; and (2) structural model evaluation testing hypothesized relationships and moderating effects.

Multi-group analysis examined demographic variations in model relationships, with groups defined by gender, age (18-35 vs. 36+), education (lower vs. higher), occupation (professional vs. non-professional), and income (lower-middle vs. middle-high).

Table 1. Demographic Character

Demographic	Category	Frequency	Percentage(%)
Gender	Female	204	53
	Male	181	47
Age	18 – 25	79	20.5
	26 – 35	167	43.4
	36 – 45	108	28.1
	46 – 55	18	4.7
	>55	13	3.4
Education	High School	24	6.2
	Diploma	75	19.5
	Bachelor’s Degree	198	51.4
	Master	73	19
	PhD	15	3.9
Occupation	Student	17	4.4
	Governance Employee	19	4.9
	Private Sector Employee	142	36.9
	Entrepreneur	149	38.7
	Professional (Doctor, Lawyer ect)	38	9.9
	Housewife	20	5.2
Income	< IDR. 3.000.000	23	6
	IDR. 3.000.000 – 5.000.000	76	19.7
	IDR. 5.000.000 – 10.000.000	168	43.6
	IDR. 10.000.000 –15.000.00	74	19.2
	>IDR. 15.000.000	44	11.4

Source : Created by Author (2025)

Table 1 shows that, in terms of gender, the majority are women (53%), consistent with the findings of (Zhao et al., 2021) that women have higher levels of environmental awareness and intention to purchase green products. In terms of age, the 26–35 age group dominates (43.4%), reflecting the characteristics of the millennial generation, which is more responsive to sustainability issues (Lee & Kim, 2024). Most respondents hold a bachelor's degree (51.4%), where higher education levels are known to enhance knowledge and positive attitudes toward environmentally friendly products (Yang et al., 2024). In terms of occupation, entrepreneurs constitute the largest group (38.7%), indicating that business operators have high environmental awareness both as consumers and producers (Al-Mamary, 2025). Meanwhile, the majority of respondents have a monthly income of IDR 5,000,000–IDR 10,000,000 (43.6%), reflecting the middle class, who are

more willing to pay more for sustainable products due to considerations of long-term ecological benefits (D'Souza et al., 2007).

Result

Measurement Model Assessment

The measurement model exhibits strong psychometric properties. Convergent validity is determined by aspect coverage exceeding 0.70 for each item and AVE results exceeding 0.50 for each construct. Discriminant validity is validated by Fornell-Larcker, namely: AVE values for latent variables must exceed r^2 results. Reliability is applied Cronbach's alpha exceeding 0.60 and composite reliability exceeding 0.70 for each construct.

Convergent Validity

Table 2. Outer Loading

Variable	No. Item	Outer Factor (>0.70)	Description
Environmental Concern	EC1	0.802	Valid
	EC2	0.809	Valid
	EC3	0.819	Valid
	EC4	0.774	Valid
	EC5	0.797	Valid
	EC6	0.783	Valid
	EC7	0.785	Valid
	EC8	0.821	Valid
	EC9	0.780	Valid
Green Marketing Mix	GP1	0.781	Valid
	GP2	0.791	Valid
	GPR1	0.802	Valid
	GPR2	0.761	Valid
	GPL1	0.814	Valid
	GPL2	0.822	Valid
	GPM1	0.798	Valid
	GPM2	0.796	Valid
Environmental Attitude	EA1	0.772	Valid
	EA2	0.772	Valid
	EA3	0.754	Valid
	EA4	0.758	Valid
	EA5	0.782	Valid
	EA6	0.769	Valid
Green Purchase Intention	GPI1	0.903	Valid
	GPI2	0.919	Valid
	GPI3	0.917	Valid
	GPI4	0.904	Valid

Source : Created by Author (2025)

Table 2 shows that all 27 items were valid, as they had outer loading values above 0.70 and Average Variance Extracted (AVE) values exceeding 0.5.

Discriminant validity

Table 3. Fornell-Lacker

Variable	Environmental Attitude	Environmental Concern	Green Marketing Mix	Green Purchase Intention
Environmental Attitude	**0.768**			
Environmental Concern	0.419	**0.797**		
Green Marketing Mix	0.508	0.068	**0.796**	
Green Purchase Intention	0.341	0.316	0.318	**0.911**

Source : Created by Author (2025)

The results of the discriminant validity test apply the Fornell-Larcker requirements. The main diagonal results (in bold) produce the square root of the AVE value for each construct, including Environmental Attitude (0.768), Environmental Concern (0.797), Green Marketing Mix (0.796), and Green Purchase Intention (0.911). From the Fornell-Larcker requirements, a construct is assumed to have discriminant validity if the square root of its AVE exceeds its highest correlation with other constructs.

Reliability

Table 4. Reliability Test

Variable	Cronbach's Alpha	Composite Reliability	Description
Environmental Attitude	0.861	0.896	Reliabel
Environmental Concern	0.928	0.940	Reliabel
Green Marketing Mix	0.917	0.932	Reliabel
Green Purchase Intention	0.932	0.951	Reliabel

Source : Created by Author (2025)

The variables in this study have Cronbach's Alpha values above 0.6 and Composite Reliability above 0.7, indicating that the research instrument has a high level of reliability.

Structural Model Results

Structural measurement analysis aims to test the relationships between latent variables (inner model) and assess how well the data supports these relationships (Hair et al., 2021). There are three key indicators: First, R-Square (R^2) reflects the model's explanatory power, with values ≥ 0.67 indicating a strong model, ≥ 0.33 moderate, and ≥ 0.19 weak. Second, F-Square measures the effect size of the relationship between variables, categorized as small (0.02), medium (0.15), and large (0.35) (Ghozali, 2023). Third, Q-Square evaluates the model's predictive relevance; a value greater than 0 suggests the model has good predictive capability.

R-Square (R^2)

Table 5. R-Square Test

Variable	R-Square	Effect
Green Purchase Intention	0.342	Moderate

Source : Created by Author (2025)

The structural model explained 34.2% of the variance in green purchase intention ($R^2 = 0.342$), indicating moderate predictive power.

F-Square (F^2)

Table 6. F-Square Test

Path	F-Square	Effect
EC -> GPI	0.046	Low
GMX -> GPI	0.026	Low

Source : Created by Author (2025)

It can be seen from Table 6 that the influence of environmental concern on green purchase intention has a small effect or influence of 0.046, as does the influence of green marketing mix on green purchase intention, which is also low with a value of 0.026.

Q-Square (Q^2)

Table 7. Q-Square Test

Variable	SSO	SSE	Q2(=1-SSE/SS0)
Green Purchase Intention	1540.000	1167.261	0.242

Source : Created by Author (2025)

If the Q-square (Q2) value is greater than 0, it can be concluded that the green purchase intention variable has predictive relevance.

Hypothesis Test

The results of hypothesis testing in structural models are evaluated using several statistical indicators. These include path coefficients, which measure the direction and strength of relationships between constructs, typically tested using a two-tailed approach. Additionally, sample means, standard deviations, T-statistics, and P-values are reported to assess the significance of these relationships. A relationship is considered statistically significant if the P-value is less than the predetermined significance level, usually 0.05.

Table 8. Hypothesis Test

Hypothesis Path	Original Sampel (O)	Sampel Mean (M)	STEDV	T Statistic	P Values	Description
Environmental Concern -> Green Purchase Intention	0.199	0.201	0.048	4.179	0.000	H1 accepted
Green Marketing Mix -> Green Purchase Intention	0.160	0.163	0.052	3.055	0.002	H2 accepted
Environmental Concern x Environmental Attitude -> Green Purchase Intention	-0.163	-0.164	0.044	3.685	0.000	H3 accepted
Green Marketing Mix x Environmental Attitude -> Green Purchase Intention	-0.301	-0.298	0.041	7.274	0.000	H4 accepted

Source: Created by Author (2025)

Both hypothesized direct relationships were supported. Environmental concern significantly and positively influenced green purchase intention ($\beta = 0.199$, $t = 4.179$, $p < 0.001$), supporting H1. Green marketing mix also significantly and positively influenced green purchase intention ($\beta = 0.160$, $t = 3.055$, $p < 0.01$), supporting H2. The moderating effects of environmental attitude were significant for both relationships. Environmental attitude moderated the relationship between environmental concern and green purchase intention ($\beta = -0.163$, $t = 3.685$, $p < 0.001$), supporting H3. The moderating effect was stronger for the relationship between green marketing mix and green purchase intention ($\beta = -0.301$, $t = 7.274$, $p < 0.001$), supporting H4.

Multi-group Analysis

Multi-group analysis revealed significant demographic variations in model relationships. Green marketing mix effects were stronger among consumers with higher education, professional occupations, middle-to-high income levels, and younger age groups. Environmental concern effects showed less demographic variation, remaining significant across most demographic segments. The moderating effects of environmental attitude varied by demographic characteristics, with stronger effects observed among higher-educated, higher-income consumers.

Table 9. Multi-group Analysis Gender

Hypothesis Path	Original (L)	Original (P)	Δβ = P-L	P-Value (L)	P-Value (P)	Group Differences (p-value)
EC ->GPI	0.218	0.158	-0.060	0.002	0.012	Significant
GMX -> GPI	0.269	0.101	-0.168	0.000	0.150	Not Significant
EA X EC -> GPI	-0.246	-0.100	0.146	0.000	0.079	Not Significant
EA X GMX -> GPI	-0.183	-0.370	0.187	0.002	0.000	Significant

Note(s): Significant = <0,05, Not Significant = >0,05 *EC (environmental concern), EA (environmental attitude), GMX (green marketing mix), GPI (Green Purchase Intention.*

Table 10. Multi-group Analysis Age

Hyphothesis Path	Original (Older)	Original (Younger)	Δβ = Younger - Older	P-Value (Older)	P-Value (Younger)	Group Differences (p-value)
EC ->GPI	0.273	0.154	-0.119	0.001	0.009	Significant
GMX -> GPI	0.025	0.241	0.216	0.770	0.000	Not Significant
EA X EC ->GPI	-0.191	-0.166	0.025	0.007	0.001	Significant
EA X GMX -> GPI	-0.300	-0.269	0.031	0.000	0.000	Significant

Note(s): Significant = <0,05, Not Significant = >0,05 *EC (environmental concern), EA (environmental attitude), GMX (green marketing mix), GPI (Green Purchase Intention.*

Table 11. Multi-group Analysis Education

Hyphothesis Path	Original (Lower)	Original (Higher)	Δβ = Higher - Lower	P-Value (Lower)	P-Value (Higher)	Group Differences (p-value)
EC ->GPI	0.259	0.168	-0.091	0.003	0.003	Significant
GMX -> GPI	0.173	0.156	-0.017	0.085	0.011	Not Significant
EA X EC ->GPI	-0.064	-0.194	-0.130	0.453	0.000	Not Significant
EA X GMX -> GPI	-0.346	-0.275	0.071	0.001	0.000	Significant

Note(s): Significant = <0,05, Not Significant = >0,05 *EC (environmental concern), EA (environmental attitude), GMX (green marketing mix), GPI (Green Purchase Intention.*

Table 12. Multi-group Analysis Occuopation

Hyphothesis Path	Original (Non-Prof)	Original (Prof)	Δβ = Prof-Non	P-Value (Non)	P-Value (Prof)	Group Differences (p-value)
EC ->GPI	**0.210**	**0.163**	-0.047	0.001	0.009	Significant
GMX -> GPI	0.140	0.197	0.057	0.054	0.005	Not Significant
EA X EC ->GPI	-0.146	-0.171	-0.025	0.020	0.005	Significant
EA X GMX -> GPI	-0.379	-0.195	0.184	0.000	0.001	Significant

Note(s): Significant = <0,05, Not Significant = >0,05 *EC (environmental concern), EA (environmental attitude), GMX (green marketing mix), GPI (Green Purchase Intention.*

Table 13. Multi-group Analysis Income

Hyphothesis Path	Original (Level 2)	Original (Level 1)	Δβ = Level 1-Level 2	P-Value (Level 2)	P-Value (Level 1)	Group Differences (p-value)
EC ->GPI	0.192	0.205	0.013	0.011	0.000	Significant
GMX -> GPI	0.285	0.119	-0.166	0.001	0.052	Not Significant
EA X EC ->GPI	-0.354	-0.092	0.262	0.000	0.064	Not Significant
EA X GMX -> GPI	-0.166	-0.365	-0.199	0.021	0.000	Significant

Note(s): Significant = <0,05, Not Significant = >0,05 EC (environmental concern), EA (environmental attitude), GMX (green marketing mix), GPI (Green Purchase Intention.

The results of the multigroup analysis show that there are significant differences in gender segmentation, namely between men and women, especially in hypothesis 1 and hypothesis 4, while for the other hypotheses there are no significant differences. In age segmentation, there are significant differences between early adulthood and late adulthood, particularly in Hypothesis 1 and Hypothesis 4, while no significant differences were found in the other hypotheses. In education segmentation, there are differences between low education and high education, particularly in Hypothesis 4, while no significant differences were found in the other hypotheses. In the occupational segmentation, there were differences between non-professional and professional occupations, particularly in Hypothesis 1, 3, and 4, while no significant differences were found in Hypothesis 2. In the income segmentation, there were differences between income level 1 and income level 2, particularly in Hypothesis 1 and Hypothesis 4, while no significant differences were found in Hypothesis 2 and Hypothesis 3.

Discussion

The results of the study indicate that environmental concern has a positive and significant effect on green purchase intention. These findings are consistent with previous research (Vania & Ruslim, 2023; Khan & Qureshi, 2025; Sherwani et al., 2021), which confirms that the higher an individual's concern for environmental issues, the greater their tendency to purchase sustainable products. Thus, “environmental concern is an important factor that companies like IKEA Kota Baru Parahyangan can use to design effective green marketing communication strategies. Additionally, the green marketing mix has been proven to have a positive and significant influence on green purchase intention”. This finding is supported by the results of Pramisti et al., (2022) and Damarayudha et al. (2023), which show that all four elements of the green marketing mix (product, price, place, and promotion) simultaneously drive the intention to purchase environmentally friendly products. In testing the moderating effect, environmental attitude was found to significantly strengthen the relationship between environmental concern and green purchase intention. This means that environmental concern will be more effective in driving purchase intention if accompanied by a positive attitude toward environmental issues. This finding aligns with the study by Khan & Qureshi (2025), which emphasizes the importance of internal attitudes in strengthening the influence of environmental concern on consumer behavior. Therefore, companies need not only to increase awareness but also to foster positive attitudes through education, sustainability campaigns, and environmentally friendly shopping experiences. Furthermore, environmental attitude was also found to moderate the relationship between the green marketing mix and green purchase intention. Consumers with positive environmental attitudes tend to be more responsive to green marketing strategies. This aligns with the findings of Fadhilah (2025), which show that environmental attitude strengthens the relationship between green products and green purchase intention. Su and Li (2024) also emphasize that the green marketing mix can shape environmental attitude, which ultimately drives green purchase intention.

The results of the Multi-Group Analysis on demographic control variables indicate that there are differences in the influence of demographic groups on the relationship between variables in this research model. In general, environmental concern significantly influences green purchase intention across all segments, indicating that concern for the environment is a consistent and important factor in driving the intention to purchase environmentally friendly products. Additionally, the moderating effect of environmental attitude on the relationship between the green marketing mix and green purchase intention is also significant in almost all groups, indicating that a positive attitude toward the environment enhances the effectiveness of green marketing strategies. However, the direct influence of the green marketing mix on green purchase intention and the moderating effect of environmental attitude on the relationship with environmental concern have not shown consistent results across segments.

In this context, the influence of the green marketing mix is more significant among men, early adults, and highly educated consumers, consistent with the findings of (Widodo et al., 2025). who stated that segmentation based on younger age and higher education tends to have stronger desires and intentions to purchase sustainable products. Similarly, respondents in the professional segment and those with medium to high incomes. Conversely, the influence tends to be insignificant among women, older adults, low-educated groups, non-professionals, and those with low-to-middle incomes. This indicates that the effectiveness of green marketing strategies is highly influenced by consumer demographic characteristics. Therefore, companies like IKEA need to consider a more segmented and adaptive approach to consumer profiles when designing communication and implementing sustainability strategies.

Theoretical Contribution

This study makes several important theoretical contributions to the green marketing literature. First, it provides empirical support for the Theory of Planned Behavior in the context of green consumption in emerging markets, demonstrating that environmental concern and green marketing mix serve as significant predictors of green purchase intention. The findings extend TPB by incorporating environmental attitude as a crucial moderating mechanism that enhances the effectiveness of both environmental stimuli and marketing interventions.

Second, the study reveals the differential effects of environmental concern and green marketing mix across demographic segments, contributing to our understanding of market heterogeneity in green consumption behavior. The finding that green marketing mix effectiveness varies significantly by education, occupation, and income levels suggests that traditional marketing approaches may not be equally effective across all consumer segments.

Third, the moderating role of environmental attitude provides new insights into the mechanisms through which environmental factors influence purchase intentions. The stronger moderating effect observed for green marketing mix compared to environmental concern suggests that environmental attitude may be particularly important in amplifying the effectiveness of marketing interventions rather than intrinsic environmental motivations.

Practical Implications

The findings offer several practical implications for retailers and marketing practitioners. First, companies should prioritize building positive environmental attitudes through education and engagement campaigns, as these attitudes amplify the effectiveness of both environmental concern and green marketing strategies. This suggests that investment in environmental education may yield multiplicative returns by enhancing the impact of other marketing efforts.

Second, green marketing strategies should be tailored to specific demographic segments, with particular attention to consumers with higher education, professional occupations, and middle-to-high income levels who demonstrate greater responsiveness to green marketing mix elements. For consumers with lower education or income levels, alternative approaches focusing on environmental concern development may be more effective.

Third, the strong moderating effect of environmental attitude on green marketing mix effectiveness suggests that companies should integrate attitude-building components into their green marketing communications. This might include educational content, environmental impact demonstrations, and opportunities for consumers to engage with environmental issues.

Limitations and Future Research

Several limitations should be acknowledged. First, the study focuses on a single retail brand in Indonesia, potentially limiting generalizability to other contexts. Future research should examine cross-cultural differences and brand-specific variations in green marketing effectiveness. Second, the cross-sectional design precludes causal inferences, suggesting the need for longitudinal studies to establish temporal relationships between variables. Third, the study relies on self-reported measures of purchase intention rather than actual purchase behavior, which may be subject to social desirability bias and intention-behavior gaps. Future research should examine actual purchase behavior and the factors that facilitate or hinder the translation of intentions into actions. Finally, the study does not examine the long-term effects of green marketing strategies on consumer attitudes and behaviors. Longitudinal research is needed to understand how sustained exposure to green marketing influences environmental attitudes and purchase patterns over time.

Conclusion

This study provides empirical evidence for the significant positive effects of environmental concern and green marketing mix on green purchase intention in emerging markets, with environmental attitude serving as a crucial moderating mechanism. The findings demonstrate that building positive environmental attitudes enhances the effectiveness of both intrinsic environmental motivations and external marketing interventions, suggesting that integrated approaches combining attitude development with targeted marketing strategies may be most effective.

The demographic variations observed in this study highlight the importance of segmented approaches to green marketing, with different strategies potentially required for different consumer groups. For practitioners, these findings suggest that successful green marketing requires not only effective product, pricing, distribution, and promotion strategies but also sustained efforts to build positive environmental attitudes among target consumers.

The study contributes to the growing body of literature on green marketing in emerging markets and provides actionable insights for retailers seeking to develop effective sustainability strategies. As environmental concerns continue to intensify globally, understanding the mechanisms through which environmental factors influence consumer behavior becomes increasingly critical for both theoretical advancement and practical application.

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