TPM Vol. 32, No. S8, 2025
ISSN: 1972-6325
https://www.tpmap.org/

ECONOMIC RESPONSIBILITY MEDIATES THE RELATIONSHIP BETWEEN GREEN MARKETING MIX STRATEGIES AND CONSUMER BUYING BEHAVIOR IN UAE HYPERMARKETS

ASIM MEHMOOD [1], DR. AMIYA BHAUMIK [2]

[1]FACULTY OF BUSINESS AND ACCOUNTANCY, LINCOLN UNIVERSITY COLLEGE MALAYSIA, MAIN CAMPUS, SELANGOR, MALAYSIA amehmood@lincoln.edu.my
[2]FACULTY OF BUSINESS AND ACCOUNTANCY, LINCOLN UNIVERSITY COLLEGE MALAYSIA, MAIN CAMPUS, SELANGOR, MALAYSIA EMAIL: amiya@lincoln.edu.my

Abstract
This study investigates the mediating role of economic responsibility (ER) in the relationship between the green marketing mix (GMM) and consumer buying behavior (CBB) within UAE hypermarkets. A total of 220 questionnaires were distributed to hypermarket customers, resulting in a high response rate of 90%. Data were analyzed using SPSS (Version 31), beginning with EFA on 22 measurement items to assess factor loadings, convergent validity, and internal consistency. Subsequently, multiple regression and mediation analyses were conducted to evaluate the hypotheses. The findings reveal that the GMM has a significant positive influence on CBB, with ER emerging as a partial mediator of this relationship. These results underscore the importance of economic considerations in reinforcing the impact of sustainable marketing strategies on CBB. However, as the study is context-specific to Dubai, caution should be exercised when generalizing the findings to other regions or retail environments.

1. INTRODUCTION

The global marketplace has witnessed a fundamental transformation as sustainability has evolved from a peripheral concern to a strategic imperative for both corporations and consumers (Sharma, 2025). In the UAE, these shifts are reinforced by state-led sustainability agendas, such as the UAE Vision 2031 and the circular economy policy (2021–2031), positioning sustainability at the core of retail and consumption patterns (WAM, 2025). Hypermarkets, as dominant retail formats in the UAE, play a crucial role in advancing these goals by shaping everyday consumer choices through pricing, product assortments, and promotion strategies (Camilleri et al., 2023). Green marketing, conceptualized through the four Ps product, price, place, and promotion offers a structured approach to reduce environmental impact while meeting consumer needs (Proi et al., 2023). Research indicates that green product innovation, eco-labelling, fair pricing, and transparent promotional efforts enhance consumer attitudes and positively influence purchase intentions (Su and Li, 2024). However, the impact of the green marketing mix (GMM) is not uniform across contexts; its effectiveness is mediated by consumers' perceptions of firms' broader commitments, including corporate social responsibility (CSR) (Ahmad et al., 2023). CSR, particularly in its social and economic dimensions, has been shown to reinforce consumer trust, brand loyalty, and willingness to pay for sustainable products (Bailey et al., 2018). Social responsibility signals such as community engagement and fair labor practices combine with economic responsibility factors, including affordability and local economic development, to mediate the relationship between green marketing practices and consumer behavior (Zaborek and Kurzak Mabrouk, 2025). When hypermarkets integrate economic responsibilities into their green marketing strategies, consumers are more likely to perceive authenticity and align their purchase behavior with these values (Lu et al., 2020). Conversely, perceived greenwashing risks can weaken this link, underscoring the importance of credible CSR integration (Ahmad et al., 2023).

The retail sector in the UAE, and specifically hypermarkets, in the UAE are not only central to household consumption but also act as platforms where global sustainability agendas intersect with local consumer values (Hattingh et al., 2024). Their scale, extensive product assortments, and ability to influence price perceptions make them pivotal in shaping green consumption patterns. Moreover, hypermarkets are increasingly expected to demonstrate corporate responsibility by supporting local communities, promoting fair labor practices, and reducing food waste, while simultaneously fulfilling economic responsibilities such as providing affordable green alternatives and contributing to the national economy (Bailey et al., 2018; Zaborek and Kurzak Mabrouk, 2025). These intersecting responsibilities directly mediate how consumers interpret and respond to green marketing strategies in the hypermarket context. Hence, UAE hypermarkets offer an ideal setting to investigate how the green marketing mix, when integrated with economic responsibility practices, translates into measurable shifts in consumer buying behavior. Despite extensive scholarship

on green marketing and CSR, limited empirical studies have explored these dynamics within UAE hypermarkets, where consumer demand for environmentally responsible yet affordable products is growing rapidly (PwC, 2022). This gap highlights the need for research that critically examines how the green marketing mix influences consumer buying behavior when mediated by perceived economic responsibilities. The present study addresses this gap by developing and testing a mediation framework tailored to the UAE retail context, offering both theoretical contributions and practical insights for sustainable retail strategy.

2. LITERATURE REVIEW

Over the past few decades, environmental sustainability has shifted from being a secondary issue for corporations to becoming a key source of competitive advantage. Global problems such as climate change, deforestation, and the depletion of natural resources have increased regulatory demands and raised consumer awareness, generating both opportunities and challenges for businesses (Mitra, 2015). In the context of the UAE, sustainability is firmly positioned as a national priority through initiatives like the UAE Vision 2031, which urges companies to embed environmental responsibility into both strategic and operational frameworks (Rauniyar, 2025). As ecological concerns increasingly influence consumer expectations, organisations are under pressure to realign their business models with these evolving preferences while still achieving profitability (Sandra, 2024). Green marketing focuses on designing, pricing, promoting, and distributing products in ways that reflect ecological responsibility, which not only supports environmental protection but also builds brand loyalty, enhances corporate reputation, and strengthens long-term competitiveness (Akude et al., 2025). Central to this concept is the green marketing mix, an adaptation of the traditional 4Ps of marketing, which includes green product, green price, green promotion, and green place (Karakurum, 2024). These dimensions play a vital role in shaping consumer buying behaviour (CBB), defined as the process through which consumers prefer environmentally friendly products over conventional options (Sarmad et al., 2024). CSR which involves voluntary commitments to social and environmental welfare beyond regulatory obligations, has been highlighted as a potential mediating factor in the link between green marketing and consumer purchasing decisions (Deshmukh and Tare, 2024). By reinforcing credibility and enhancing the authenticity of green marketing initiatives, CSR initiatives can strengthen their impact on consumer behaviour and foster greater trust in environmentally sustainable brands (Nguyen-Viet et al., 2024).

2.1 Green Product and Consumer Buying Behavior

Green products defined as goods designed, produced, and marketed to minimize environmental harm are widely regarded as the cornerstone of the green marketing mix (Su and Li, 2024). Research consistently shows that product-related attributes such as eco-labels, recyclable packaging, organic sourcing, and energy efficiency strongly influence consumer buying behavior (CBB) by shaping perceptions of quality, trustworthiness, and environmental impact (Sarmad et al., 2024). In particular, eco-labeling serves as a heuristic that reduces consumer uncertainty, enabling faster and more confident purchase decisions (Proi et al., 2023). However, scholars highlight that the relationship between green products and CBB is not uniform across contexts. For instance, while premium markets exhibit high willingness to pay for eco-friendly goods, price-sensitive segments often prioritize affordability over sustainability, creating an "attitude–behavior gap" (Zhuang et al., 2021). Moreover, cultural and regional differences influence how consumers interpret product greenness (Gu, 2023). Green products are a central element of the green marketing mix because they embody tangible evidence of a firm's environmental commitment. Prior research highlights that eco-friendly product attributes such as recyclable packaging, organic sourcing, and sustainable design significantly enhance consumer perceptions of quality and trust, thereby influencing purchase intentions (Sarmad et al., 2024; Su and Li, 2024). Eco-labels and certifications reduce uncertainty, functioning as credible signals that consumers rely upon in complex retail environments (Proi et al., 2023). In hypermarkets, where product variety is extensive, the presence of green attributes has been shown to improve product differentiation and encourage consumers to substitute conventional items with sustainable alternatives (Ahmad et al., 2023). Nevertheless, the strength of this relationship may be moderated by cultural and economic contexts. While consumers in premium markets often demonstrate strong willingness to pay for green products, price-sensitive segments display hesitancy, giving rise to the widely discussed "attitude–behavior gap" (Zhuang et al., 2021). In the UAE, this gap is mitigated by the increasing alignment of green product strategies with national sustainability agendas, such as the UAE Vision 2031, which promotes consumer awareness of eco-friendly alternatives (Rauniyar, 2025). As a result, consumers are not only encouraged to adopt green products for individual benefits but also to contribute to broader social and environmental goals, reinforcing positive behavioral outcomes (Camilleri et al., 2023).

H1. Green product has a positive and significant impact on consumer buying behaviour

2.2 Green Price and Consumer Buying Behavior

Price is a critical determinant of consumer decisions regarding sustainable products, and numerous studies have examined how green pricing influences consumer buying behavior. Research demonstrates that consumers' willingness to pay more for eco-friendly products depends on perceived value, credibility of environmental claims, and the extent of their environmental awareness (Oesman, 2021). For instance, Oesman (2021) found that consumers

with stronger pro-environmental attitudes were significantly more likely to accept price premiums for products that minimized ecological harm. Similarly, Bruno (2024) emphasized that clear and transparent communication of a product's ecological benefits can legitimize higher prices, increasing acceptance of green pricing strategies. Li (2025) reported that consumers are willing to pay more for eco-friendly goods if brands communicate authentic and measurable sustainability outcomes, suggesting that perceived honesty is central to price justification. Plotkina et al. (2025) further argued that fair green pricing positions firms as socially responsible, which enhances consumer loyalty and encourages repeat purchases. Salini and Thomas (2017) added that premium but fair pricing when combined with eco-labels and consumer education significantly shapes purchase decisions, particularly in developing markets where price sensitivity is high. In a complementary perspective, Peggy et al. (2023) showed that when price reflects both product quality and sustainability attributes, it can serve as a competitive differentiator in markets where environmental awareness is growing.

H2. Green price has a positive and significant impact on consumer buying behaviour

2.3 Green Promotion and Consumer Buying Behavior

Green promotion, encompassing advertising, public relations, eco-labeling, and digital communication of environmental initiatives, plays a crucial role in influencing consumer buying behavior by shaping awareness, trust, and brand credibility. Studies consistently demonstrate that transparent and authentic promotion of ecological benefits strengthens consumer attitudes toward green products and reduces skepticism surrounding corporate sustainability claims. For instance, Eltayib et al. (2025) found that consumers respond positively to advertisements that highlight measurable environmental benefits, as such messages increase trust and intention to purchase. Similarly, Dahhan and Arenkov (2025) reported that eco-labeling combined with credible promotional campaigns significantly enhances consumer perceptions of product quality and sustainability, which translates into stronger purchase decisions. Recent research emphasizes that clarity and transparency in green promotion are critical to overcoming consumer doubts about "greenwashing." Iqbal et al. (2023) observed that vague or exaggerated claims undermine trust, while straightforward communication of sustainability initiatives positively influences purchase intention. Issa and Al Abbar (2017) highlighted that consumers in the Middle East were more receptive to eco-friendly promotions when firms demonstrated tangible evidence of their environmental performance. Moreover, Wang et al. (2022) noted that emotional appeals such as linking eco-friendly products to community well-being can further enhance the persuasiveness of green promotions, particularly in collectivist cultures. Digital and social media platforms have amplified the impact of green promotion by enabling interactive engagement with consumers. Peggy et al. (2023) showed that social media-based green campaigns that combine educational content with promotional offers significantly increased consumer willingness to choose sustainable products. Likewise, Salini and Thomas (2017) found that eco-labels integrated into digital advertising foster consumer knowledge and reinforce loyalty by bridging the information gap between firms and buyers.

H3. Green promotion has a positive and significant impact on consumer buying behaviour

2.4 Green Place and Consumer Buying Behavior

Green place refers to the distribution and availability of eco-friendly products, including the design of supply chains, retail environments, and logistics systems that minimize environmental harm while ensuring accessibility to consumers. Studies indicate that consumer buying behavior is strongly influenced by the ease of access to green products and the visibility of sustainability cues within retail spaces (Barbu et al., 2022). Panopoulos et al. (2022) found that strategic shelf placement and in-store eco-label displays significantly increased consumer preference for environmentally friendly goods. Similarly, Muchenje et al. (2023) observed that when green products are integrated into mainstream retail channels rather than isolated in niche sections, consumer adoption rates rise substantially. Sustainable logistics and distribution also play an important role in shaping consumer perceptions of corporate responsibility. According to Lee et al. (2021), firms that adopt green supply chain practices, such as reducing carbon emissions in transportation and utilizing recyclable packaging in distribution, not only improve operational efficiency but also strengthen consumer trust. Lee et al. (2021) highlighted that consumers increasingly perceive supply chain transparency as part of the overall "place" strategy, directly affecting their buying decisions. Furthermore, Ahmad et al. (2024) showed that convenience in accessing green products whether through online platforms, hypermarkets, or local outlets has a significant positive effect on purchase intentions, particularly among younger, environmentally aware consumers. Green place strategies are especially critical due to their wide assortment and high foot traffic. Research by Marín-García et al. (2022) demonstrated that sustainable retail environments, including energy-efficient store layouts and visible recycling facilities, enhanced customer satisfaction and increased loyalty toward hypermarket brands. Similarly, Fatma and Khan (2023) found that integrating eco-friendly logistics with consumer-facing retail practices such as promoting reusable bags or offering carbon-neutral delivery options improved both consumer perceptions and actual buying behavior.

H4. Green place has a positive and significant impact on consumer buying behaviour

2.5 Consumer Buying Behaviour and Economic Responsibility

Economic responsibility, a key dimension of corporate social responsibility (CSR), refers to a firm's obligation to operate profitably while ensuring fairness, affordability, and contributions to socio-economic development. Unlike

traditional views of economic responsibility as profit maximization, recent scholarship highlights that consumers increasingly evaluate firms on their ability to balance profitability with value creation for stakeholders (Lu et al., 2020). In this sense, economic responsibility extends beyond financial returns to include fair pricing, accessibility of sustainable products, and support for local economies. Studies have demonstrated that economic responsibility significantly shapes consumer buying behavior, particularly in contexts where affordability is a critical determinant of green consumption. For example, Fatma et al. (2021) found that consumers were more willing to purchase sustainable products when companies adopted fair pricing strategies and communicated economic value clearly. Similarly, Nguyen et al. (2016) reported that when eco-friendly products were positioned as both affordable and durable, consumer willingness to purchase increased substantially. Akbar et al. (2020) further observed that economic initiatives such as local sourcing and supplier support not only enhanced consumer trust but also motivated purchase decisions by creating perceptions of shared value. Recent evidence from developing markets reinforces this link. Parker et al. (2022) revealed that consumers interpreted fair pricing of eco-products as a reflection of a company's broader social and economic responsibility, which in turn strengthened brand loyalty. Likewise, Salini and Thomas (2017) highlighted that premium but fair pricing, coupled with educational campaigns, influenced consumer buying behavior by bridging the affordability gap for green goods. Peggy et al. (2025) also emphasized that when consumers perceive economic responsibility such as long-term cost savings from energy-efficient products they are more willing to substitute conventional alternatives with sustainable ones. As Camilleri et al. (2023) noted, when consumers perceive that hypermarkets are balancing profitability with fairness and accessibility, their buying intentions toward green products become significantly stronger.

H5. Economic responsibility has a positive and significant impact on consumer buying behavior.

2.6 Green Marketing Mix and Consumer Buying Behavior Mediated by Economic Responsibility

The green marketing mix (GMM) has been widely acknowledged as a driver of consumer buying behavior (CBB), research increasingly emphasizes that its effectiveness is mediated by economic responsibility. Economic responsibility extends beyond profit-making to include delivering fair value, maintaining affordability, ensuring accessibility, and contributing to local socio-economic development (Lu et al., 2020). When consumers perceive that firms balance environmental initiatives with economic fairness, they are more likely to view green marketing strategies as credible and align their purchase decisions accordingly (Fatma and Rahman, 2020). Empirical studies provide support for this mediating role. Nguyen et al. (2021) demonstrated that consumers' willingness to adopt eco-friendly products increased significantly when companies communicated both affordability and long-term economic benefits, such as durability and cost savings. Similarly, Salini and Thomas (2017) found that premium but fair pricing, combined with transparent eco-labeling, positively influenced consumer behavior by making green products accessible to wider market segments. Peggy et al. (2025) further highlighted that when sustainability attributes are linked with economic value such as energy-efficient products reducing household costs green marketing strategies are more effective in driving purchase intentions. In retail contexts, economic responsibility has been shown to reinforce the impact of pricing and distribution strategies within the GMM. Fatma and Khan (2023) observed that initiatives like local sourcing, fair trade practices, and competitive pricing enhanced consumer trust and purchase decisions by creating perceptions of shared value. Parker et al. (2022) similarly reported that consumers in emerging markets were more likely to engage in sustainable consumption when hypermarkets combined green products with affordability measures and loyalty incentives. Hypermarkets have adopted private-label eco-friendly products, discount schemes, and loyalty programs to ensure that sustainability remains financially accessible to middle- and low-income households (Nurjaman, 2024). Camilleri et al. (2023) emphasized that UAE consumers perceive such practices as both economically responsible and environmentally authentic, which amplifies the effectiveness of green marketing strategies. These findings suggest that the direct impact of the GMM on CBB is significantly enhanced when mediated by economic responsibility. By reinforcing perceptions of fairness, value-for-money, and accessibility, economic responsibility ensures that sustainable consumption aligns with both environmental and financial expectations of consumers.

H6. Economic responsibility positively mediates the relationship between the green marketing mix and consumer buying behavior.

3.METHODOLOGY

3.1. Measurements

A structured survey was administered in two Dubai-based hypermarkets specializing in eco-friendly products. These hypermarkets were purposefully selected because they cater largely to customers who prefer purchasing environmentally sustainable goods. The respondents were identified through purposive sampling, ensuring that only individuals meeting specific eligibility criteria were included. The study focused exclusively on customers who had previously purchased eco-friendly items. The green marketing mix (GMM) was measured through four dimensions: green product, green price, green promotion, and green place; using a total of 14 items adapted from Ahmed et al. (2023) and Bailey, Mishra, and Tiamiyu (2018). The consumer buying behavior (CBB) was measured with 4 items

adapted from (Das and Sabbir, 2019; Kumar et al., 2024). The mediating constructs were also assessed using multi-item scales: economic responsibility with 4 items (Fatma and Rahman, 2020). Altogether, the study employed 22 measurement items, each evaluated using a five-point Likert scale ranging from 1 = Strongly Disagree to 5 = Strongly Agree.

3.2. Participants and Instruments

This research was conducted using a quantitative methodology, emphasising structured data collection and statistical examination. A survey design was implemented to gather primary insights, supported by secondary information drawn from scholarly journals, books, and other credible sources. A total of 220 questionnaires were distributed in selected hypermarkets across Dubai, United Arab Emirates. Out of these, 199 were successfully completed and returned, yielding a high response rate of approximately 90%. Participation was voluntary, and respondents were assured of anonymity and confidentiality. The demographic profile of the sample revealed that 32% were male and 68% were female. With respect to age, 55% fell between 30 and 49 years, 22.2% between 18 and 29 years, 14.6% between 49 and 59 years, while 8.2% were above 60 years old. In terms of marital status, the majority of respondents were married (86%), while 14% were single. Regarding monthly income (measured in AED), 32.3% reported earnings below 4,000, 45.3% earned between 4,000 and 8,900, 10% earned between 9,000 and 14,900, and 12.4% reported incomes exceeding 15,000.

3.3. Data Analysis

Exploratory factor analysis (EFA) was conducted in SPSS (Version 31) on 22 items measuring the green marketing mix (14), consumer buying behavior (4) and economic responsibility (4). Items with loadings ≥ 0.50 were retained, and validity was confirmed as all constructs showed AVE > 0.50 and CR > 0.70 (Hair et al., 2010; Schumacker and Lomax, 2010). Multiple regression tested the effects of GMM dimensions on CBB, while mediation analysis following Hayes (2022) assessed the role of ER.

3.4. Descriptive Statistics and Normality

Descriptive statistics for the six constructs are shown in Table 1. product (M = 3.76), price (M = 3.83), place (M = 3.85), promotion (M = 3.75), economic responsibility (M = 3.86), and consumer buying behavior (M = 3.90) all received moderate-to-high mean scores, suggesting generally positive consumer evaluations. Normality was assessed using the skewness–kurtosis method. Skewness values ranged from –0.75 to +0.90 (all < ± 3), and kurtosis values ranged from –0.94 to +0.87 (all < ±8). These results confirm that the dataset did not deviate substantially from normality (Byrne, 2016; Kline, 2016)

Table 1. Table of Normality

Construct	Mean	Std. Dev.	Skewness	Kurtosis
Product	3.76	0.81	-0.75	0.87
Price	3.83	0.92	-0.27	-0.80
Place	3.85	1.14	0.14	-0.94
Promotion	3.75	1.09	-0.74	-0.31
Economic Responsibility	3.86	0.97	-0.49	-0.55
Consumer Buying Behavior	3.90	0.95	-0.51	-0.58

Note. Values represent construct-level averages across measurement items.

3.5. Model Fitness

To establish construct validity, an exploratory factor analysis (EFA) was performed using principal component analysis (PCA) with Varimax rotation. The procedure produced a six-factor reflecting the theoretical dimensions of the model green product, green price, green place, green promotion, economic responsibility, and consumer buying behavior. Rotation converged in six iterations. Preliminary tests confirmed the adequacy of the data: the Kaiser–Meyer–Olkin (KMO) value was 0.834, surpassing the 0.80 benchmark (Kaiser, 1974), and Bartlett's Test of Sphericity was significant, x^2 (325) = 3553.25, $p < .001$, indicating strong intercorrelations among variables. During the refinement stage, items with poor cross-loadings were excluded, specifically one indicator from green promotion and one from green place. The retention of items was based on indicator reliability, with factor loadings of ≥ 0.70 deemed acceptable (Hair et al., 2010; Schumacker and Lomax, 2010). The final six-factor model accounted for 73.2% of the total variance, and all communalities exceeded the recommended threshold of 0.50. The retained items and their respective loadings are reported in Table 2.

3.5.1 Construct Reliability and Validity

The reliability and validity of the measurement model were assessed using SPSS (Version 31) and Microsoft Excel. As shown in Table 2, Cronbach's alpha (CA) values for all constructs exceeded the 0.70 threshold (Nunnally and Bernstein, 1994), confirming acceptable internal consistency. Composite reliability (CR) values ranged from 0.75 to 0.90, surpassing the recommended minimum of 0.70 (Hair et al., 2010), thereby demonstrating construct reliability. Convergent validity was established, as the average variance extracted (AVE) values for all constructs were greater than the 0.50 criterion (Fornell and Larcker, 1981). Furthermore, factor loadings were generally above 0.70, indicating

strong contributions of items to their respective constructs. These results confirm that the measurement model exhibits solid psychometric properties.

Table 2. Factor Loading, Constructs Reliability and Convergent Validity

Constructs	Items	Factor Loading	λ^2	1 - λ^2	CA	CR	AVE
Green Product	GProduct1	0.796	0.634	0.366	0.842	0.9	0.70084
	GProduct2	0.864	0.746	0.254			
	GProduct3	0.855	0.731	0.269			
	GProduct4	0.832	0.692	0.308			
Green Price	GPrice1	0.836	0.699	0.301	0.885	0.75	0.55444
	GPrice2	0.772	0.596	0.404			
	GPrice3	0.607	0.368	0.632			
Green Place	Place1	0.892	0.796	0.204	0.798	0.887	0.79745
	Place3	0.894	0.799	0.201			
Green Promotion	Promo1	0.823	0.677	0.323	0.887	0.82	0.60575
	Promo2	0.65	0.423	0.578			
	Promo3	0.847	0.717	0.283			
Economic Responsibility	ER1	0.79	0.624	0.376	0.89	0.847	0.62283
	ER2	0.764	0.584	0.416			
	ER3	0.878	0.771	0.229			
	ER4	0.716	0.513	0.487			
Consumer Buying Behavior	CBB1	0.784	0.615	0.385	0.836	0.793	0.56164
	CBB2	0.802	0.643	0.357			
	CBB3	0.691	0.477	0.523			
	CBB4	0.715	0.511	0.489			

Table 3. Discriminant Validity

Variables	Product	Price	Promotion	Place	Consumer Buying Behavior	Economic Responsibility
Product	.84					
Price	.37**	.74				
Promotion	.40**	.18**	.78			
Place	.21*	.10*	.29*	.89		
CBB	.32**	.43**	.39**	.29**	.75	
ER	.35**	.37**	.44**	.33	.80**	.79

As reported in Table 3, the model demonstrates satisfactory discriminant validity, as all inter-construct correlations (r) were below the recommended ceiling of 0.90. The square roots of the average variance extracted (AVE) for product (.84), price (.74), promotion (.78), place (.89), consumer buying behavior (CBB) (.75) and economic responsibility (ER) (.79) all exceeded the corresponding inter-construct correlations. This confirms that each construct shared greater variance with its own indicators than with other constructs. These results provide strong evidence that discriminant validity was achieved across all study variables.

TPM Vol. 32, No. S8, 2025
ISSN: 1972-6325
https://www.tpmap.org/

Open Access

4. RESULTS

As shown in Table 4, the findings reveal a statistically significant association between green product and consumer buying behavior (CBB) in UAE hypermarkets ($\beta = .792$, $t = 4.84$, $p = 0.01$), thereby confirming H1. Green price also showed a strong positive influence on CBB ($\beta = .816$, $t = 6.70$, $p < 0.001$), supporting H2. Likewise, green promotion was positively related to CBB ($\beta = .423$, $t = 6.10$, $p < 0.001$), validating H3. However, green place did not display a significant effect on CBB ($\beta = .150$, $t = .409$, $p = 0.061$), leading to the rejection of H4. The analysis further demonstrated that economic responsibility (ER) emerged as a strong predictor ($\beta = .841$, $t = 29.296$, $p < 0.001$), thereby confirming H5. These results indicate that, with the exception of H4, all hypotheses were statistically supported as evidenced by t-values above 1.96 and p-values below 0.05. In addition, the overall regression model was significant, $F(4, 194) = 39.493$, $p < 0.001$, with an R^2 of 0.425. This suggests that the green marketing mix dimensions (product, price, promotion, and place) together explain 42.5% of the variance in consumer buying behavior.

Table 4. Hypothesis Testing

Hypothesis	Regression Weights	Beta Coefficient	R2	F	t-value	p-value	Hypothesis Decision
H1	Green Product→CBB	.792	.326	23.503	4.842	0.001	Significant
H2	Green Price → CBB	.816	.431	44.987	6.707	0.001	Significant
H3	Green Promotion → CBB	.423	.399	37.398	6.115	0.001	Significant
H4	Green Place → CBB	.150	.029	.167	.409	0.06	Not Significant
H5	ER →CBB	.841	.802	856.5	29.296	0.001	Significant

4.1 Mediation Analysis

The mediation analysis examined whether ER mediate the relationship between the green marketing mix (GMM) and CBB. The mediation model investigated economic responsibility (ER) as a mediator. The effect of GMM on ER was strong and significant (B = .750, p < .001). Furthermore, ER significantly predicted CBB (B = .802, p < .001), even after controlling for GMM. The direct effect of GMM on CBB remained significant (B = .213, p < .001), and the indirect effect through ER was also significant, with the bootstrapped confidence interval excluding zero. This confirms partial mediation, where ER transmits part of the effect of GMM on CBB. Thus, economic responsibility acts as a meaningful psychological mechanism that enhances the influence of green marketing practices on consumer behavior in the UAE hypermarket context. Therefore, Table 5; hypothesis 6 which proposed that ER mediates the relationship between GMM and CBB, is supported.

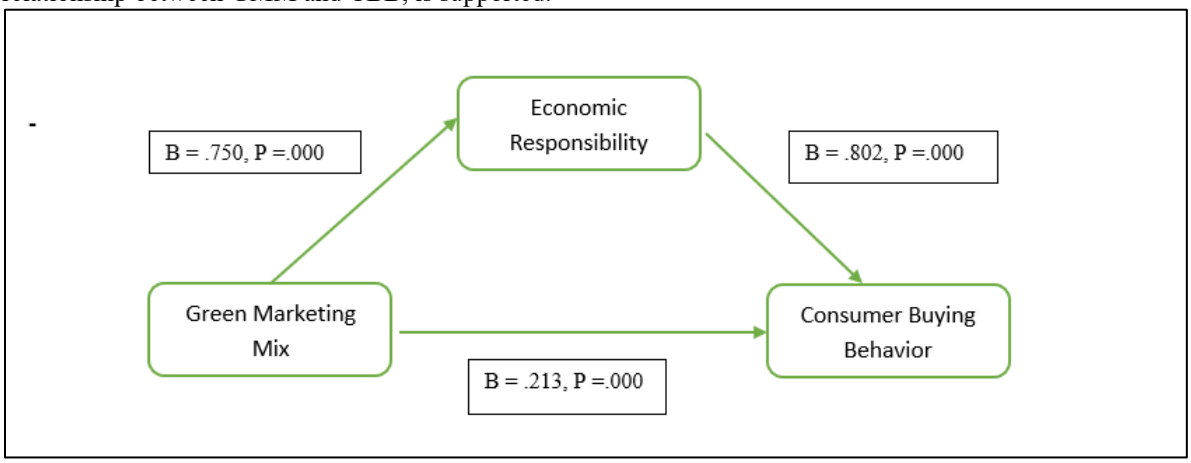

Figure 1. Mediation Model
Source: Computed by own and results are reported

Table 5. Summary of Mediation analysis

Hypothesis	Relationship	Total Effect	Direct Effect	Indirect Effect	Confidence Interval		t-statistics	Conclusion
					Lower Bound	Upper Bound		
H6	GMM → ER→ CBB	.815	.213	.6021	.3606	.8557	4.280	Partial Mediation

5. DISCUSSION

The results provide strong support for H1, confirming that green product attributes significantly influence consumer buying behavior (CBB). In the UAE hypermarket context, consumers appear highly responsive to eco-friendly characteristics such as durability, safety, and environmental certifications. These findings align with Ahmed et al. (2022) and Wibowo et al. (2022), who emphasize that product-related sustainability cues predict purchase intentions in emerging economies. Kalidoss et al. (2025) further argue that eco-labels enhance credibility and reduce consumer skepticism, thereby strengthening willingness to buy. Beyond eco-labels, research suggests that tangible product features such as recyclability, biodegradability, and energy efficiency are particularly effective in shaping purchase intentions (Nguyen et al., 2022). Thus, green products emerge as a critical driver of sustainable consumption, with implications for product design and certification strategies.

H2 received strong empirical support, with green price demonstrating the highest direct impact among marketing mix elements. This indicates that despite rising sustainability awareness, affordability and value-for-money remain decisive in consumer decision-making. Acharya and Diddimani (2025) note that transparent and fair pricing is essential to consumer acceptance of green products. Similarly, Adnan et al. (2025) argue that competitive green pricing reduces resistance to eco-friendly alternatives. Hudayah et al. (2023) also report that when eco-friendly products are priced comparably to conventional goods, their adoption accelerates. These findings resonate with Wahyuni and Zulfikar (2024) who suggest that green products must appeal not only to ethical considerations but also to consumers' utilitarian motives such as cost savings. In emerging economies, where price sensitivity is pronounced, sustainable consumption is more likely to gain traction when firms align ecological responsibility with affordability (Akram et al., 2025).

Promotion was found to significantly enhance CBB, confirming H3. The findings suggest that CSR-driven advertising, eco-labels, and social media campaigns effectively shape consumer awareness and positive attitudes. Prior research underscores that green promotional efforts foster emotional connection and trust, particularly when communication is transparent and educational (Uikey, et al., 2025; Kesa, 2025). Recent studies add that digital and influencer-driven campaigns enhance perceived consumer empowerment, thereby reinforcing sustainable consumption (Rosário and Dias, 2025). Moreover, eco-promotions that highlight both personal benefits (health, safety) and collective benefits (environmental protection) are more persuasive (Nazir and Wani, 2024). This indicates that well-designed promotions can bridge the knowledge action gap by framing sustainability as both a lifestyle choice and a personal advantage.

Contrary to expectations, distribution (green place) showed no significant effect on CBB, rejecting H4. This finding may reflect the hypermarket setting, where product accessibility is generally high, minimizing the influence of distribution on consumer choice. Sohail and Ahmed (2017) report similar mixed outcomes, noting that sustainable logistics practices often remain invisible to consumers unless explicitly marketed. Recent studies confirm that unless green supply chain practices are communicated effectively such as carbon-neutral delivery or sustainable packaging they fail to influence purchase decisions directly (Su et al., 2023). This implies that hypermarkets in the UAE should integrate distribution-related sustainability into promotional messages to enhance consumer awareness.

Economic responsibility emerged as the strongest predictor of CBB, fully supporting H5. This suggests that consumers reward firms demonstrating financial efficiency, affordability, and transparent economic practices. Previous studies confirm that economic responsibility fosters trust and long-term loyalty (Agu et al., 2024). Research also shows that economic responsibility reduces consumer skepticism by signaling organizational integrity and fair value (Koykka, 2024). In markets like the UAE, where consumers balance sustainability values with cost sensitivity, highlighting economic responsibility becomes crucial. Mabkhot (2024) further demonstrates that green initiatives are more successful when coupled with value-for-money strategies that mitigate perceived financial risk.

The mediation analysis H6 was strongly supported, with ER significantly mediating the GMM–CBB relationship. The indirect effect was substantial, confirming that the influence of GMM is transmitted largely through perceptions of economic responsibility. This finding emphasizes that consumers integrate sustainability considerations primarily when they are framed in terms of efficiency, affordability, or long-term savings (Sharma et al., 2023; Luo et al., 2022). Neves et al. (2025) also confirm that economic cues such as cost efficiency and competitive pricing are decisive in

green product adoption. Recent evidence further shows that consumers perceive economic responsibility as a practical enabler that bridges the intention–behavior gap, especially in middle-income contexts (Pradhan et al., 2023). Thus, ER serves as a key mechanism in ensuring that sustainability strategies resonate with cost-conscious consumers, particularly in competitive retail environments like UAE hypermarkets.

6. CONCLUSION

This study examined the impact of the green marketing mix (GMM) on consumer buying behavior (CBB) in UAE hypermarkets, with a particular focus on the mediating role of economic responsibility (ER). The results confirmed that green product, green price, and green promotion significantly enhance CBB, while green place showed no meaningful influence. Among the GMM elements, price emerged as the strongest predictor, reinforcing the primacy of affordability and perceived value in shaping consumer decisions. The findings also revealed that ER is a powerful mediator between GMM and CBB. From a theoretical perspective, this research advances the literature on green marketing by integrating marketing mix elements with corporate responsibility dimensions in a retail context. The confirmation of ER as a significant mediator underscores the importance of economic cues in operationalizing sustainability, extending previous work that often emphasizes social or ethical values. By situating the analysis within the UAE hypermarket sector, the study also contextualizes global debates on sustainable consumption in a rapidly developing, cost-sensitive market. Practically, the findings hold important implications for retailers and policymakers in the UAE. Hypermarkets aiming to promote sustainable consumption should prioritize competitive green pricing, emphasize product quality and eco-certifications, and design promotional strategies that highlight both environmental and financial benefits. Since consumers respond more strongly to economic responsibility, firms should communicate affordability, efficiency, and long-term value as part of their green marketing strategies. At the same time, CSR initiatives should not be neglected but rather integrated with consumer-facing benefits to enhance visibility and impact. These insights provide a roadmap for hypermarkets to align sustainability goals with consumer expectations, thereby supporting the UAE's broader Vision 2031 sustainability agenda.

REFERENCES

1. Bruno, R. X. (2024). The crucial role of transparent communication in sustainability: Challenges and opportunities. International Seven Journal of Multidisciplinary, 3(5). https://doi.org/10.56238/isevmjv3n5-007
2. Ahmad, W., Jafar, R. M. S., Waheed, A., Sun, H., and Kazmi, S. S. A. S. (2023). Determinants of CSR and green purchase intention: Mediating role of customer green psychology during COVID-19 pandemic. Journal of Cleaner Production, 389, 135888. https://doi.org/10.1016/j.jclepro.2023.135888
3. Akbar, K., Jin, Y., Waheed, A., Afzal, F., and Mahsud, M. (2020). Impact of green practices on consumers' sustainable purchase intentions: Humans' management adopting green strategies in Pakistan. Human Systems Management, 1–13. https://doi.org/10.3233/hsm-190856
4. Fatma, M., and Khan, I. (2023). Corporate Social Responsibility and Brand Advocacy among Consumers: The Mediating Role of Brand Trust. Sustainability, 15(3), 2777. https://doi.org/10.3390/su15032777
5. Marín-García, A., Gil-Saura, I., Ruiz-Molina, M.-E., and Fuentes-Blasco, M. (2022). Relationship sustainability-store equity across segments of retail customers. International Journal of Retail and Distribution Management. https://doi.org/10.1108/ijrdm-12-2021-0585
6. Li, D. Impact of green advertisement and environmental knowledge on intention of consumers to buy green products. BMC Psychol 13, 220 (2025). https://doi.org/10.1186/s40359-025-02538-x
7. Nurjaman, K. (2024). Sustainable Marketing: Integrating Green Marketing Practices into Marketing Strategy. INFLUENCE: INTERNATIONAL JOURNAL of SCIENCE REVIEW, 6(2), 71–89.
8. https://doi.org/10.54783/influencejournal.v6i2.232
9. Plotkina, D., Landisoa Rabeson, and Silke Bambauer-Sachse. (2025). The role of green brand image in explaining European consumers' reactions to different types of sustainable packaging. Journal of Retailing and Consumer Services, 84, 104228–104228. https://doi.org/10.1016/j.jretconser.2025.104228
10. Bailey, A.A.; Mishra, A.S.; Tiamiyu, M.F. Application of GREEN scale to understanding US consumer response to green marketing communications. Psychol. Mark. 2018, 35, 863–875.
11. Salsabilla, F., and Isharina, I. K. (2024). The Influence of Service Quality and Price on Customer Satisfaction. Jurnal Manajemen Pemasaran Dan Perilaku Konsumen, 3(2), 348–358. https://doi.org/10.21776/jmppk.2024.03.2.08
12. Parker, H., Bhatti, W. A., Chwialkowska, A., and Marais, T. (2022). Factors influencing green purchases: An emerging market perspective. Sustainable Development, 31(2). https://doi.org/10.1002/sd.2426
13. Sarmad, I., Bukhari, H., and Hafeez, N. S. (2024). Consumer Responses to Eco-Friendly Product Claims: The Role of Information Asymmetry and Online Reviews. International Journal of Management Research and Emerging Sciences, 14(4). https://doi.org/10.56536/ijmres.v14i4.714

14. Deshmukh, P., and Tare, H. (2024). Green marketing and corporate social responsibility: A review of business practices. Multidisciplinary Reviews, 7(3), 2024059–2024059.
15. Chaudhuri, A., Micu, C., and Naderi, I. (2024). Examining Loyalty and Situational Value in Green Retail and Service Establishments. Journal of Marketing Development and Competitiveness, 18(1). https://doi.org/10.33423/jmdc.v18i1.6821
16. Dahhan, A., and Arenkov, I. (2025). The impact of green advertising on consumer purchase intention based on the theory of planned behavior. Multidisciplinary Science Journal, 7(9), 2025427–2025427. https://doi.org/10.31893/multiscience.2025427
17. Zhuang, W., Luo, X., and Riaz, M. U. (2021). On the Factors Influencing Green Purchase Intention: A Meta-Analysis Approach. Frontiers in Psychology, 12(644020). https://doi.org/10.3389/fpsyg.2021.644020
18. Wang, J., Yang, X., He, Z., Jian-guo, W., Bao, J., and Gao, J. (2022). The impact of positive emotional appeals on the green purchase behavior. Frontiers in Psychology, 13. https://doi.org/10.3389/fpsyg.2022.716027
19. Bianchi, E., Bruno, J. M., and Sarabia-Sanchez, F. J. (2019). The impact of perceived CSR on corporate reputation and purchase intention. European Journal of Management and Business Economics, 28(3), 206–221. https://doi.org/10.1108/ejmbe-12-2017-0068
20. DAS, S., and SABBIR, M. M. (2019). Exploring Factors Affecting Consumers' Intention Toward Purchasing Imitation Jewellery: an Extension of Theory of Planned Behaviour. Turkish Journal of Marketing, 4(3), 221–240. https://doi.org/10.30685/tujom.v4i3.61
21. Fatma, M.; Khan, I.; Rahman, Z.; Perez, A. The sharing economy: The influence of perceived corporate social responsibility onbrand commitment. J. Prod. Brand Manag. 2021,30, 964–975
22. Camilleri, M. A., Cricelli, L., Mauriello, R., and Strazzullo, S. (2023). Consumer Perceptions of Sustainable Products: A Systematic Literature Review. Sustainability, 15(11), 8923. https://doi.org/10.3390/su15118923
23. Sharma, C. (2025). Consumer preferences for green and sustainable products. Asian Journal of Management and Commerce, 6(2S), 125–129. https://doi.org/10.22271/27084515.2025.v6.i2sb.640
24. Kumar, R., Mukherjee, S., and Rana, N. P. (2024). Exploring Latent Characteristics of Fake Reviews and Their Intermediary Role in Persuading Buying Decisions. Information Systems Frontiers, 26(3), 1091–1108. https://doi.org/10.1007/s10796-023-10401-w
25. Hattingh, D., Laubli, D., Ciger , G., and Ayad, O. (2024). A growth arena: State of grocery retail 2024 Middle East and North Africa. Mckinsey.com. https://www.mckinsey.com/industries/retail/our-insights/a-growth-arena-state-of-grocery-retail-2024-middle-east-and-north-africa
26. Lu, J., Ren, L., Zhang, C., Rong, D., Ahmed, R. R., and Streimikis, J. (2020). Modified Carroll's Pyramid of Corporate Social Responsibility to Enhance Organizational Performance of SMEs Industry. Journal of Cleaner Production, 271(1), 122456. sciencedirect. https://doi.org/10.1016/j.jclepro.2020.122456
27. Iqbal, A. I., Iqbal, M. S., Athar, A., and Khan, S. A. (2023). Impact of Green Marketing on Consumer Purchase Intention: The Moderating Role of Environmental Knowledge. Journal of Social and Organizational Matters, 2(2), 43–58. https://doi.org/10.56976/jsom.v2i2.25
28. Salini, K., and Thomas, B. (2017). Sustainable Consumption: The Role of Eco Labels on Consumers' Buying Decision. IRA-International Journal of Management and Social Sciences (ISSN 2455-2267), 8(1), 8. https://doi.org/10.21013/jmss.v8.n1.p2
29. Barbu, A., Catană, Ș.-A., Deselnicu, D. C., Cioca, L.-I., and Ioanid, A. (2022). Factors Influencing Consumer Behavior toward Green Products: A Systematic Literature Review. International Journal of Environmental Research and Public Health, 19(24), 16568. NCBI. https://doi.org/10.3390/ijerph192416568
30. Nguyen, T. N., Lobo, A., and Greenland, S. (2016). Pro-environmental purchase behaviour: The role of consumers' biospheric values. Journal of Retailing and Consumer Services, 33, 98–108. https://doi.org/10.1016/j.jretconser.2016.08.010
31. Ahmad, I., Kamran Inayat, Ali, M. A., Raisham Hayee, and Azhar, R. (2024). Navigating Fear of Missing Out in Sustainable Consumption: The Role of Brand Passion and Green Consumer Values in Obsessive-Compulsive Buying. Qlantic Journal of Social Sciences., 5(4), 250–264. https://doi.org/10.55737/qjss.v-iv.24263
32. Mitra, R. (2015). Environmental sustainability as competitive driver in emerging markets. In Emerging Markets and the Future of the BRIC (pp. 65–85). https://doi.org/10.4337/9781783479764.00011
33. Lee, C., Lim, S., and Ha, B. (2021). Green Supply Chain Management and Its Impact on Consumer Purchase Decision as a Marketing Strategy: Applying the Theory of Planned Behavior. Sustainability, 13(19), 10971. https://doi.org/10.3390/su131910971
34. Sandra, A. (2024). Adapting to Rapid Change in Consumer Demands. Researchgate. https://www.researchgate.net/publication/389614930_Adapting_to_Rapid_Change_in_Consumer_Demands
35. PwC. (2022). Middle East consumers are ESG conscious, digitally driven and more price-sensitive while shopping, according to PwC's latest Global Consumer Insights Survey. PwC. https://www.pwc.com/m1/en/media-centre/2022/pwc-middle-east-global-consumer-insights-survey-2022-pulse-4.html

36. Rauniyar, R. (2025). UAE Vision 2031: Key Goals, Strategies and Future Plans. Cleartax; ClearTax. https://www.cleartax.com/ae/uae-vision-2031
37. Proi, M., Dudinskaya, E. C., Naspetti, S., Ozturk, E., and Zanoli, R. (2023). The Role of Eco-Labels in Making Environmentally Friendly Choices: An Eye-Tracking Study on Aquaculture Products with Italian Consumers. Sustainability, 15(5), 4659. https://doi.org/10.3390/su15054659
38. Eltayib, N., Abdullah, O., and Manoj, M. (2025). Impact of Green Marketing Practices on Consumer Purchase Awareness and Buying Decision. International Journal of Latest Technology in Engineering Management and Applied Science, 14(1), 322–331. https://doi.org/10.51583/ijltemas.2025.1401035
39. Lee, C., Lim, S., and Ha, B. (2021). Green Supply Chain Management and Its Impact on Consumer Purchase Decision as a Marketing Strategy: Applying the Theory of Planned Behavior. Sustainability, 13(19), 10971. https://doi.org/10.3390/su131910971
40. Barlas, A., Valakosta, A., Katsionis, C., Oikonomou, A., and Brinia, V. (2023). The Effect of Corporate Social Responsibility on Customer Trust and Loyalty. Sustainability, 15(2), 1036. https://doi.org/10.3390/su15021036
41. Muchenje, C., Tapera, M. C., Katsvairo, H. T., and Mugoni, E. (2023). Green Marketing Strategies and Consumer Behavior. Advances in Marketing, Customer Relationship Management, and E-Services Book Series, 465–484. https://doi.org/10.4018/979-8-3693-0019-0.ch024
42. Akude, D. N., Akuma, J. K., Kwaning, E. A., and Kojo Agyekum Asiama. (2025). Green Marketing Practices and Sustainability Performance of Manufacturing Firms: Evidence from Emerging Markets. Nature Environment and Pollution Technology, 24(1), D1673–D1673. https://doi.org/10.46488/nept.2025.v24i01.d1673
43. Panopoulos, A., Poulis, A., Theodoridis, P., and Kalampakas, A. (2022). Influencing Green Purchase Intention through Eco Labels and User-Generated Content. Sustainability, 15(1), 764. https://www.mdpi.com/2071-1050/15/1/764
44. Su, S., and Li, Y. (2024). Exploring the Impact of the Green Marketing Mix on Environmental Attitudes and Purchase Intentions: Moderating Role of Environmental Knowledge in China's Emerging Markets. Sustainability, 16(24), 10934. https://doi.org/10.3390/su162410934
45. Peggy, Cherry, Kam Kong Lit, Wan, C., and Choy, K. (2023). Green consumption and sustainable development: The effects of perceived values and motivation types on green purchase intention. Business Strategy and the Environment, 33(2). https://doi.org/10.1002/bse.3535
46. Oesman, I. (2021). Consumers' Willingness to Pay More for Eco Friendly Products (Green Products) Classification Daily Needs Products. Proceedings of the 1st International Conference on Economics Engineering and Social Science, InCEESS 2020, 17-18 July, Bekasi, Indonesia. https://doi.org/10.4108/eai.17-7-2020.2303067
47. Karakurum S. S. (2024). Green Marketing Practices In The Context Of Environmental Sustainability: A Case Study Of An Eco-Friendly Cleaning Firm. Journal of Management Marketing and Logistics, 11(1), 41–53. https://doi.org/10.17261/Pressacademia.2024.1884
48. Zaborek, P., and Kurzak Mabrouk, A. (2025). The Role of Social and Environmental CSR in Shaping Purchase Intentions: Experimental Evidence from the Cosmetics Market. Sustainability, 17(5), 1792. https://doi.org/10.3390/su17051792
49. Nguyen-Viet, B., Tran, C. T., and Ngo, H. T. K. (2024). Corporate social responsibility and behavioral intentions in an emerging market: The mediating roles of green brand image and green trust. Cleaner and Responsible Consumption, 12, 100170. https://doi.org/10.1016/j.clrc.2024.100170
50. Issa, N., and Al Abbar, S. (2015). Sustainability in the Middle East: achievements and challenges. International Journal of Sustainable Building Technology and Urban Development, 6(1), 34–38. https://doi.org/10.1080/2093761x.2015.1006709
51. Agu, E. E., Iyelolu, T. V., Idemudia, C., and Ijomah, T. I. (2024). Exploring the relationship between sustainable business practices and increased brand loyalty. International Journal of Management and Entrepreneurship Research, 6(8), 2463-2475.
52. Uikey, A. A., Baber, R., and Marak, Z. R. (2025). Transforming green transparency into green brand loyalty and repurchase intentions: the role of brand image and credibility among electric vehicle users. Journal of Applied Structural Equation Modeling, 9(1), 1-24.
53. Kesa, D. D. (2025). Evaluating the Effectiveness of Green Marketing Campaigns on Consumer Behavior in Eco-Friendly Product Markets. The Journal of Academic Science, 2(5), 1538-1549.
54. Rosário, A. T., and Dias, J. C. (2025). The Role of Digital Marketing in Shaping Sustainable Consumption: Insights from a Systematic Literature Review. Sustainability, 17(17), 7784. https://doi.org/10.3390/su17177784
55. Margariti, K., Hatzithomas, L., and Boutsouki, C. (2024). Elucidating the Gap between Green Attitudes, Intentions, and Behavior through the Prism of Greenwashing Concerns. Sustainability, 16(12), 5108–5108. https://doi.org/10.3390/su16125108
56. Luo, B., Li, L., and Sun, Y. (2022). Understanding the Influence of Consumers' Perceived Value on Energy-Saving Products Purchase Intention. Frontiers in Psychology, 12. https://doi.org/10.3389/fpsyg.2021.640376

57. Mabkhot, H. (2024). Factors Affecting Millennials' Green Purchase behavior: Evidence from Saudi Arabia. Heliyon, 10(4), e25639–e25639. https://doi.org/10.1016/j.heliyon.2024.e25639
58. Neves, C., Oliveira, T., and Santini, F. (2025). Understanding the determinants of sustainable consumption behavior: Insights from a meta and weight analysis. Journal of Environmental Management, 393, 126932. https://doi.org/10.1016/j.jenvman.2025.126932
59. Sharma, K., Aswal, C., and Paul, J. (2022). Factors affecting green purchase behavior: A systematic literature review. Business Strategy and the Environment, 32(4). https://doi.org/10.1002/bse.3237
60. Kaiser, H. F. (1974). An index of factorial simplicity. Psychometrika, 39(1), 31–36. https://doi.org/10.1007/BF02291575
61. Hair, J. F., Black, W., Barry J. Babin, and Anderson, R. E. (2010). Multivariate Data Analysis: A Global Perspective (Seventh Ed). Pearson. Retrieved from: https://www.researchgate.net/publication/280444735_Partial_Least_Squares_Structural_Equation_Modeling_Rigorous_Applications_Better_Results_and_Higher [accessed: 18 June 2025]
62. Byrne, B. M. (2016). Structural Equation Modeling With AMOS Basic Concepts, Applications, and Programming (3rd ed.). New York: Taylor and Francis Group.
63. Schumacker, R. E., and Lomax, R. G. (2010). A beginner's Guide to Structural Equation Modeling. Taylor and Francis. Doi.org/10.4324/9780203851319
64. Wahyuni, A. and Zulfikar, R. (2024). The role of perceived authenticity in increasing green purchase intention: systematic literature review. RSF Conference Series Business Management and Social Sciences, 4(2), 8-15. https://doi.org/10.31098/bmss.v4i2.897
65. Akram, M. R., uz Zaman, S., Alam, S. H., and Tariq, N. (2025). Impact of Product Pricing, Packaging Information, and Brand Trust on Consumer Purchase Intention and Loyalty. Journal of Management and Social Science, 2(1), 247-283.
66. Acharya, R. and Diddimani, M. (2025). Determinants of green consumer behavior: psychological, social, economic, and contextual factors. Asian Review of Social Sciences, 14(1), 1-6. https://doi.org/10.70112/arss-2025.14.1.4286
67. Adnan, M., Cakir, V., Naseer, U., and Khan, N. (2025). Green Purchase Intentions in Emerging Markets: A Theory of Planned Behavior Perspective on Consumer Behavior and Brand Dynamics. Journal of Innovative Research in Management Sciences, 6(1), 20–40. https://doi.org/10.62270/jirms.vi.97
68. Ahmed, R. R., Streimikiene, D., Qadir, H., and Streimikis, J. (2022). Effect of green marketing mix, green customer value, and attitude on green purchase intention: evidence from the USA. Environmental Science and Pollution Research, 30. https://doi.org/10.1007/s11356-022-22944-7
69. Hudayah, S., Ramadhani, M. A., Sary, K. A., Raharjo, S., and Yudaruddin, R. (2023). Green perceived value and green product purchase intention of Gen Z consumers: Moderating role of environmental concern. Environmental Economics, 14(2), 87–102. https://doi.org/10.21511/ee.14(2).2023.07
70. Kalidoss, D. D., Anand, V., and Malik, D. P. (2025). Green Marketing and Consumer Behavior Toward Eco-Labeled Products. International Journal of Environmental Sciences, 11(5s), 621–626. https://doi.org/10.64252/x2kzy247
71. Nazir, M., and Wani, T. A. (2024). Role of social media influencer toward environmental involvement and green buying behavior. Business Strategy and Development, 7(2). https://doi.org/10.1002/bsd2.390
72. Sohail, M. S. (2017). Green marketing strategies: how do they influence consumer-based brand equity? J. For Global Business Advancement, 10(3), 229. https://doi.org/10.1504/jgba.2017.084607
73. Wibowo, S. F., Najib, M., Sumarwan, U., and Asnawi, Y. H. (2022). Green Purchase: A Systematic Review and Future Research Agenda. Indonesian Journal of Business and Entrepreneurship. https://doi.org/10.17358/ijbe.8.1.146