International Journal of Innovative Research and Publications (2025) 5(12): 83-101
https://doi.org/10.51430/IJIRP.2025.512.006

Article

Impact of ESG Integration on Maintaining Consumer Trust Towards Sustainable Packaging in Bangladesh

Mohammad Arije Ulfy[1], Ahasanul Haque[2*], Dzuljastri Bin Abdul Razak[3], Nor Azizan Binti Che Embi[4]

Received: 29 September 2025 / Accepted: 15 November 2025 / Published online: 30 November 2025

Abstract

The results of this research study identified the potential impacts of environmental, social and governance integration on the customers' trust in sustainable packaging practices in Bangladesh. When customer demand for eco-friendly products increases, companies need to align their corporate activities with ESG standards to maintain credibility and a competitive advantage. This study employed purposive sample techniques and collected 375 observations via semi-structured survey questionnaires from both direct and online data gathering for structural equation modeling analysis. The SEM analysis was performed with SPSS and AMOS version 25. The research found that business credibility is a mediator of ESG efforts and customer trust. To explain how transparency and accountability can sustain trust, stakeholder and signaling theories are used. Results showed that ESG principles (environmental, social and governance)can improve Bangladesh firms' social authority to operate and build trust in consumers. In this study, the behavioral impact of the ESG disclosure on consumer behaviour in underdeveloped economies like Bangladesh is better understood and policy implications for sustainable packaging industries. The findings of this research will be particularly beneficial for both manufacturers, marketers and government authorities to establish effective strategies to implement ESG components in the sustainable packaging sector. Hence, the study will enhance the researchers' ability to discover more variables to examine factors that significantly influence consumer trust, particularly in green packaging industries.

Keywords: *ESG Integration, Consumer Trust, Sustainable Packaging, Corporate Credibility, Stakeholder Theory, SEM-AMOS*

[1,2,4]Department of Business Administration, International Islamic University Malaysia,53100 Jalan Gombak, Kuala Lumpur, Malaysia
[3]Research Fellow, Department of International Institute for Halal Research and Training, International Islamic University Malaysia,53100 Jalan Gombak, Kuala Lumpur, Malaysia

[*]Corresponding Email: ahasanul@iium.edu.my

To cite this article:
Ulfy, M. A., Haque, A., Razak, D. B. A., & Embi, N. A. B. C. (2025). Impact of ESG Integration on Maintaining Consumer Trust Towards Sustainable Packaging in Bangladesh. *International Journal of Innovative Research and Publications,* 5(12), 83-101. https://doi.org/10.51430/IJIRP.2025.512.006

eISSN 2785-826X

INTRODUCTION

ESG integration is the combination of environmental, social, and governance principles into a company's strategy and operations (Islam & Deegan, 2008). Chowdhury (2025) stated that firms that have ESG in mind are more likely to have resilient businesses, loyal customers, and strong reputations. Developing market corporations are often investigated by the use of resources, ethics, and engagement, which is particularly relevant in integrating ESG (Birindelli et al., 2019). In Bangladesh's sustainable packaging industry, ESG principles are a key instrument for balancing profitability with environmental accountability (Ahsan, 2020). Babu and Islam (2022) reported that organizations that successfully incorporate ESG indicators have facilitated better consumer interactions due to perceived ethical consistency and transparency. ESG integration is a communication mechanism for the success of a company over the long term. Amanullah et al. (2024) found that the ESG practices increase brand credibility and social legitimacy, which are essential to consumer perceptions of eco-friendly products. Integration involves setting concrete sustainability targets, checking, and ensuring sustainability reports reflect stakeholder expectations. Several companies have begun to develop ESG methods of packaging, which include biodegradable materials and locally based social practices (Chatterjee & Kumar, 2021). The use of ESG has begun to be put into practice in Bangladesh. But full integration is required for complete integration and even for sustainable practices, whereas sustainability projects cannot be termed superficial (Dutta & Saha, 2020).

While sustainable packaging initiatives are rapidly expanding across Bangladesh's industrial landscape, the credibility of ESG-driven efforts remains questionable for consumers (Faisal, 2021). By far the most publicly supported corporations are not publicly demonstrating a sustainability endorsement, but do not provide open data of their environmental and social commitments (Rahim & Wang, 2025). This credibility gap creates consumer skepticism, weakens trust, and destroys brand reputation (Gupta & Sharma, 2021). Also, ESG reporting in Bangladesh remains in early stages, mainly characterized by inconsistent disclosure and a lack of regulatory oversight (Hossain, 2021). In this sense, ESG integration and consumer trust are not easily discernible.

According to Shuvo and Habib (2024), ESG ventures have improved corporate financial performance in Bangladesh, but little attention has been given to the psychological effects of ESG investment on consumers. For instance, companies often seek to use "eco-friendly" packaging but do not incorporate the social and governance implications to improve overall credibility as they implement environmental efforts such as "eco-friendly packaging" (Amanullah et al., 2024). The central issue here is not ESG adoption but the lackadaisical and superficial approach to its implementation, which undermines consumer confidence. ESG practices, corporate accountability, and consumer trust in the Bangladesh packaging industry should be examined in depth since there is no evidence of any triadic relationship between ESG practices and the business process of e-business (Islam & Chowdhury, 2021). While corporate credibility is a mediator of credibility, this study tries to explain how authentic ESG integration can transform consumer distrust into lifetime trust (Khan & Quaddus, 2018).

The research is theoretical and practical, both to the theory of sustainability, marketing and corporate governance in the context of developing economies. In theory, it furthers understandings of the impact that ESG integration has on consumer trust in sustainable packaging, bringing the gap between existing literature characterized to a large extent by developed countries (Nurunnabi, 2016). Empirical studies, such as Rahman and Karim (2020), have demonstrated that ESG-driven marketing techniques also contribute to consumer satisfaction and brand loyalty in green consumerism. But it has been only a little reported in emerging markets such as Bangladesh, where ESG standards are changing along with consumer awareness (Sadiq & Javed, 2021). This study does provide practical feedback on why businesses seek to maximize competitive advantage through ethical and transparent work.

ESG is also a key component of Bangladeshi Fast Moving Consumer Goods and retail packaging industries and can improve environmental performance as well as increase consumer confidence to enable firms to become long-term brand equity well as improve consumer confidence, helping firms achieve long-term brand equity (Zahan & Sultana, 2023). It also highlights the mediating role of corporate credibility, in that consumer trust is not an outcome of sustainability claims but rather of perceived authenticity and governance integrity (Amanullah et al., 2024). For example, policy recommendations on standardized ESG disclosure can guide regulatory measures to protect against green washing and ensure corporate accountability. The study also lends support to stakeholder theory, signaling theory, and new trust-based models of sustainability behaviour for academics. Providing an evidence-based framework for empirically supporting the role that ESG integration into packaging design, supply chain ethics, and transparent governance can contribute to the increasing loyalty of Bangladesh's increasingly eco-conscious consumers is important to practitioners.

LITERATURE REVIEW

ESG Integration

ESG integration serves to reflect how corporations integrate environmental, social and governance principles into their strategy and operations (Grewal & Dharwadkar, 2002). Chowdhury (2025) argues that ESG principles have improved firmness, consumer trust, and reputational strength in firms. ESG integration is particularly useful in emerging markets, where the firm is often subject to scrutiny of resource use, ethics compliance, and stakeholder involvement (Alam & Rubel, 2023). Rastogi et al. (2025) argued that combining ESG measures effectively allows for higher consumer relationships via ethical alignment and transparency. ESG integration can also be described as a communication tool describing a firm's long-term sustainability vision (Bhuiyan & Haque, 2021). As Amanullah et al. (2024) found, ESG practices offer brands credibility and social legitimacy, which is important in shaping consumers' preferences toward environmentally friendly products. Integration involves creating targets for sustainability, conducting audits, and monitoring the success of sustainability reports to their stakeholders. In Bangladesh, firms like Unilever and Marico have begun adopting ESG packaging techniques, including biodegradable material and social programs that engage the community (Chowdhury & Rahman, 2022). But full integration requires transparent governance and fair labor practices, without which sustainability efforts may be perceived as cosmetic.

Environmental

ESG is about reducing the environmental impacts of waste, and waste reduction and developing sustainable packaging (De & Ghosh, 2020). In Islam et al. (2024, this provides a context in which Bangladeshi Fast Moving Consumer Goods (FMCG) companies are transitioning from biodegradable and recyclable products to biodegradable materials, in view of the need for eco-friendly practices. Environmental integration includes life cycle assessment, carbon footprint reduction and renewable energies (Famiyeh, 2017). Also, compostable packaging has become an important factor in consumer decision-making. Rahim and Wang (2025) found that clear environmental messages, such as "100% recyclable" or "plastic-neutral", can strengthen perceived authenticity through brands using explicit environmental messages. PRAN and Parachute, in Bangladesh, have created recycled packaging and recycling systems that directly aid consumer trust (Jahan & Rahman, 2022). By providing consumer information on how sustainable packaging helps sustain the environment, these initiatives can succeed because consumers are more willing to buy and pay premium prices(Khan, 2020). But without independent verification, these claims may lose credibility, which further supports the importance of integrating ESG into environmental transparency (Grewal & Dharwadkar, 2002). So, environmental performance is both a reputational asset and a moral imperative for firms in their efforts to build consumer trust with sustainable packaging.

Social

The social dimension encompasses labour welfare, consumer safety, community involvement and supply chain ethics (Kundu & Roy, 2022). Reza and Khan (2021) acknowledged that Bangladeshi firms that focus on worker safety, gender inclusion and fair trade have better reputations and consumers. ESG's social pillar emphasizes ethical practices beyond environmental projects that reflect concern about the welfare of society (Miller, 2021). The packaging sector includes fair wages for laborers working in factories, a responsible supply chain and responsible purchase of materials (Kotler & Armstrong, 2020). In addition, socially responsible companies often do community outreach that matches environmental efforts, such as recycling campaigns. Kabir and Ko (2025) assert that ESG policies that integrate social responsibility not only reinforce consumer satisfaction but also contribute to emotional connections with brands. What demonstrates ethical integrity is the availability of labour conditions and community involvement, which form the basis of consumer perception. Given increased awareness of social justice in Bangladesh, especially among the youngest groups, social ESG factors are becoming increasingly integral to confidence-building (Ottman, 2011). In terms of granting authenticity, businesses that humanize their businesses so that they offer benefits for employee welfare and community empowerment give authentic connections beyond transactional loyalty, to trust and advocacy (Shams & Hossain, 2022).

Governance

In ESG integration, corporate transparency, ethical decision-making, stakeholder accountability and regulatory compliance are at the heart of governance (Steenis et al., 2017). A strong governance structure ensures that environmental and social claims regarding the environment are sustained by reliable data and monitored accountability(Ali et al., 2017). Rahimand Wang (2025) advocates transparency that gives credence and prevents accusations of green washing in sustainable debate. The management of Bangladeshi corporations consists of international reporting standards such as GRI or the Sustainable Accounting Standards Board, as well as international reporting practices such as GRS (Aziz & Paul, 2020). These structures ensure consistency and comparability in ESG disclosure, thus creating a trustworthy and trustworthy environment for investors and consumers alike. Zettergren (2004) found that ethical governance has an important role in consumer attitudes towards sustainable brands, especially in markets skeptical of environmental marketing. To ensure accountability and reliability of sustainability claims in Bangladesh, ESG committees on the board and third-party audits can be integrated with board-level ESG committees and third-party audits (Asif et al., 2011). Also, fair governance is related to the prevention of corruption, a fair representation of shareholders and transparent communication with consumers. The companies show integrity in governance as authentic and not opportunistic, and customers interpret ESG efforts as being authentic and not opportunistic. This integrity makes sustainable narratives of packaging legitimate and, thus, genuine consumer trust, enhancing the legitimacy of sustainability narratives describing packaging practices (Bag et al., 2021). Governance is not just a compliance requirement, but also the central factor in corporate credibility; it allows businesses to maintain ethical relationships and long-term reputation in competitive markets (Biswas & Roy, 2015).

H1: ESG Integrating components have a significant positive relationship with consumer trust in sustainable packaging.
H2: ESG Integrating components have a significant positive relationship with corporate credibility in sustainable packaging.

Corporate Credibility

It is corporate credibility in which consumer trustworthiness and knowledge are evaluated, and it is the credibility of a brand's messages in relation to ESG and sustainability claims (Biswas & Roy, 2015). In a sustainable market, credibility functions as a psychological filter for consumers to judge the authenticity of green projects (Carroll, 1999). Zettergren (2025) found that companies demonstrating authentic ESG engagement experience higher brand trust, while companies seen as insincere face consumer anger. Kabir and Ko (2025) also show that consistent ESG messaging across performance enhances consumer loyalty and satisfaction. In Bangladesh, reliance on "greenwashing" is critical since many consumers are becoming increasingly aware of "greenwashing" as companies inflate their sustainability performance. To create credibility, trust requires transparency, certifications of third parties (i.e., ISO 14001 or Fair Trade) and the participation of stakeholder communication (Chowdhury & Rahman, 2022). Also, Amanullah et al. (2024) assert that brand credibility enables consumer perception by reducing dissonance between corporate claims and consumer expectations. In the packaging industry, product labeling and verified data on materials are often strengthened by product labels and documentation (Chen, 2010). For instance, while companies are reporting sustainability metrics, such as recycled content percentage, consumers are more likely to trust and buy from them. The corporate credibility, thus, is tangible and valuable, and carries over from ESG's successes in measurable trust and loyalty and, ultimately, the building of corporate reputation and competitive positioning in Bangladesh's emerging sustainable market (Ferdous & Polonsky, 2013).

A causal variable of corporate credibility is the interconnection between ESG integration and consumer trust (Chen, 2010). Rastogi et al. (2025) found that the impact of ESG practices to consumers is the ability to positively impact consumer behaviour through perceived credibility. It means that ESG integration is not directly guaranteed, but the consumer's belief in the integrity and authenticity of the company motivates trust formation. The authors further noted that corporate image and credibility serve both as an anchor of the relationship between ESG engagement and buying intention, implying that credibility is both an emotionally and cognitively supported component of consumer assessment. In Bangladesh, firms that embrace sustainable packaging with no verification technology can risk consumer skepticism, even if efforts are genuine (Haque & Azmat, 2015). So, credibility is a trust conduit transmitting ESG data to consumer assurance. In practice, this means consistently wording, third-party validation and compliance with ethical governance. The inclusion of annual sustainability reports audited by independent agencies can increase consumer confidence in ESG authenticity. The mediation effect thus implies that ESG initiatives would not resonate emotionally or ethically with consumers unless they had credibility (Rashid, 2009). The corporate credibility thus transforms ESG integration into a trust-based relationship-building mechanism.

H3: Corporate credibility has a significant positive relationship with consumer trust in sustainable packaging.
H4: Corporate credibility mediates the relationship between ESG integrating components and consumer trust.

Consumer Trust in Sustainable Packaging

Consumer trust is based on trust in the credibility, integrity and ethical practice of brand (Esfahbodi et al., 2016). Trust is determined by consumers' willingness to engage in and support environmentally friendly brands in ESG and sustainable packaging (Fornell & Larcker, 1981). Rahim and Wang (2025) noted that the disclosures provided by comprehensive ESG disclosures increase consumer trust in that they show accountability and responsibility. Consumers understand that corporate promises are equivalent to actual behaviour (NielsenIQ, 2021). Amanullah et al. (2204) remarked that young Bangladeshi customers are positively gratified by a brand's transparency with raw material sourcing and ethical practices in the production and marketing of goods. If it is overly aggressive, makes misleading claims, or poorly performs, trust is fragile and can easily crumble. While Bangladesh's developing market and desire for sustainable packaging rely heavily on perceived transparency and consistency in ESG, faith becomes highly dependent on perceived transparency and consistency in ESG programs (Miah & Griffiths, 2019). When consumers see evidence of long-term commitment, such as continued innovation in biodegradable materials or community-based environmental activities, they value brand authenticity and responsibility (Mohr & Webb, 2005). On top of that, ESG-based trust is not transactional but relational and nurtures emotional attachment and loyalty. Consumer trust is an outcome and a reinforcement mechanism of ESG performance and is directly influential in purchasing behaviour and brand advocacy (Luo & Bhattacharya, 2006).

Theory Discussion

The research in this article draws from stakeholder theory and signaling theory, with a focus on corporate credibility, consumer trust and ESG integration. In 1984, Freeman coined a Theory stakeholder Theory that businesses must consider the interests of everyone in the consumer, employees, investors and communities that want them to succeed(Ma & Zhang, 2020). In the case of ESG integration, this theory will be applicable in practice as firms need to be responsible for operating responsibly in the environmental and social systems. Chowdhury (2025) agrees with this thesis of stakeholder-centered ESG practices gaining legitimacy and trust. Signaling Theory (1973), is a well-established description of how ESG disclosures are evidence and a means to reduce uncertainty in consumers' perception. Also, Zettergren (2025) suggested that transparency in sustainability signals can enhance brand attractiveness and create uncertainty. Both describe how credibility as a mediator act in the sense that it filters signals into consumer trust (consumer trust). These theoretical models offer a plan for firms to strengthen stakeholder relations by developing proactive, transparent, and reliable ESG communication strategies at a time when regulatory ESG models have not yet arrived in Bangladesh (Kundu & Roy, 2022).

Research Framework

The proposed conceptual model defines ESG Integration (IV) as an independent variable, Corporate Credibility (MV) as the mediating variable, and Consumer Trust (DV) as a dependent variable. For example, the three ESG dimensions, Environmental, Social and Governance, determine the credibility of a group through the three dimensions of ESG: environmental, social and governance. This approach proposes that authentic and open ESG practices form trusting networks that create positive consumer perceptions of sustainable packaging. Kabir and Ko (2025) suggest credibility as a mediator. To turn knowledge into trust, the ESG need to be coupled with transparent leadership and a moral message. Stakeholder Theory argues for value creation for all stakeholders as safe long-term trust, and Signaling Theory asserts credibly that reliable ESG data is an indicator of quality. The Bangladeshi companies using this concept model are provided with a structured road to link sustainability to their core strategy, emphasizing that transparency and accountability in ESG communication determine whether sustainable packaging as a form of trust-building instrument is efficient. This model can be empirically validated by firms and policymakers, providing firm support for robust ESG communication strategies that will sustain the confidence and sustainability of consumer and corporate sustainability of business.

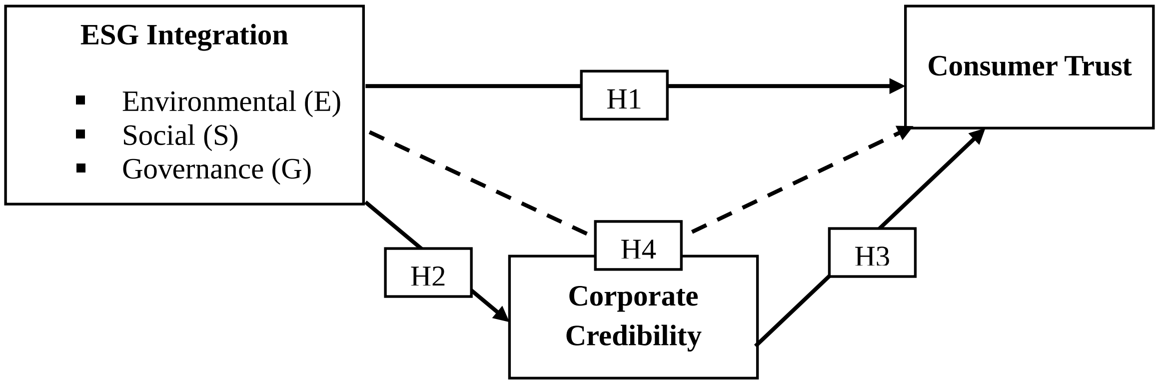

Figure 1. Research Framework

RESEARCH METHODOLOGY

Construct Measurement

The study model comprises three components: ESG integration, corporate credibility, and consumer trust. All components of the apparatus were adapted from prior research to assess the constructs' dependability. ESG integration is derived from the research of Testa et al. (2020), company credibility is sourced from Delgosha & Hajiheydari (2020), and customer trust is referenced from Martínez-Pérez et al. (2020). A five-point Likert scale, where 1 signifies strong disagreement and 5 signifies strong agreement, was employed to assess all tested items. The questionnaire items were initially composed in Bangla before being translated into English. Thirty sets of questionnaires were distributed to the general consumer in Bangladesh to get feedback and insights. The questionnaire was subsequently refined for enhanced clarity and usability based on the feedback and recommendations provided by the participants.

Data Collection

The study employed paper and online questionnaires conducted throughout June and July 2025. The researchers aimed to identify individuals who have made at least one purchase, either in a physical store or online, utilising a purposive sampling technique. All individuals who complete this survey will retain their anonymity. Approximately 410 individuals completed the survey following the dissemination of the Google form link and subsequent in-person sessions. The incomplete survey resulted in the exclusion of 15 responses. 20 respondents were disqualified due to non-compliance with the qualifying criteria. The outcome was the collection of 375 data points that can be employed for further analysis.

DATA ANALYSIS AND FINDINGS

Tools Used

To analyse the demographic profile, SPSS version 25.0 was used. To begin with, descriptive analysis was conducted to form the demographic profile of the respondents. Then SEM-

AMOS software version 25 was employed for this study to validate the measurement model as well as the structural model to test the hypothesis.

Demographic Profile

Table 1 displays the demographic data gathered from all customers who are acknowledged of sustainable packaging. This study kept only 375 of the 410 surveys for additional analysis, as 15 of them contained missing data. In addition, twenty people did not meet the requirements of the study. The data in Table 1 show that there were more male responses than female ones. Among the people who participated in the survey, 259 (or 69.1%) were men and 116 (or 30.9%) were women. Groups consisting of people aged 20–29 (11.7%), 30–39 (46.1%), 40–49 (29.6%), 50–59 (10.7%), and 60+ (1.9%) made up the bulk of the population. Of those who took part, 70.4% had completed some level of higher education, while 23.2% had completed elementary school, and 6.4% had completed primary school. Of those who took the survey, 22.1% were students, 39.2% were working in private services, 6.1% were businesspeople, 25.1% were government employees, and 7.5% were from other backgrounds. Shop at least once a day for 66.1% of the total respondents. The second-highest category, making up 28.0%, is weekly. 91% of people who were surveyed said they know what sustainable packaging is, while 9% said they didn't. On the other hand, 370 people were surveyed and said they would pay more for sustainable packaging (98.7%).

Table 1. Demographic Profile

Measures	Item	Frequency	Percentage
Gender	Male	259	69.1
	Female	116	30.9
Age	20-29	44	11.7
	30-39	173	46.1
	40-49	111	29.6
	50-59	40	10.7
	60 and above	7	1.9
Occupation	Student	83	22.1
	Private Service	147	39.2
	Government Job	94	25.1
	Business	23	6.1
	Others	28	7.5
Education Level	Primary	24	6.4
	Secondary	87	23.2
	Tertiary	264	70.4
Shopping Frequency	Daily	248	66.1
	Weekly	105	28.0
	Monthly	22	5.9
Awareness of Sustainable Packaging	Yes	341	90.9
	No	34	9.1
Willingness to Pay for Sustainable Packaging	Yes	370	98.7
	No	5	1.3

Exploratory Factor Analysis (EFA)

The initial phase in implementing efficient Structural Equation Modeling (SEM) is Exploratory Factor Analysis (EFA). Exploratory Factor Analysis (EFA) is a method widely used in social science research. This analysis enables researchers to discern relevant findings from a particular data set concerning a single element or factor (Hair et al., 2014). Hair et al. (2012) contend that exploratory factor analysis (EFA) is an essential technique since it enables the reduction and classification of several variables into more manageable groups. Kline (2018) asserts that exploratory factor analysis (EFA) is a commonly used statistical instrument for data analysis, mostly applied to streamline data by clarifying the interrelations among a set of variables based on their substantial associations. The principal component extraction method, utilizing Varimax rotation, has been applied to discern the essential components. The principal aim of EFA is to distil massive data sets into several variables, including factor loadings, covariance, and correlation estimates. The primary objective of doing EFA is to evaluate the requisite number of items for each component, necessitating a comprehensive procedure.

Table 2. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.912
Bartlett's Test of Sphericity	3146.717	5641.618
	153	435
	.000	.000

The Kaiser-Meyer-Olkin (KMO) measure and Bartlett's Test of Sphericity were initially performed, as illustrated in Table 2. Tabachnick and Fidell (2007) assert that the Kaiser-Meyer-Olkin (KMO) value must lie between 0 and 1, with a minimum acceptable threshold of 0.60 and a significant p-value ($p < .05$) necessary. The present study demonstrates a Kaiser-Meyer-Olkin (KMO) value of 0.912, signifying that the sample adequacy criteria have been met. A significant result from Bartlett's test of sphericity revealed the presence of sufficient interconnection among variables. The positive results for both KMO and Bartlett's Test of Sphericity indicate that the researcher can conduct factor analysis effectively, as illustrated in Table 2 above.

Confirmatory Factor Analysis (CFA)
Measurement Model

Before testing the hypotheses, the measurement model was evaluated for appropriate factor loadings and goodness-of-fit indices. The AMOS software was used to evaluate the proposed measurement model (Figure 2).

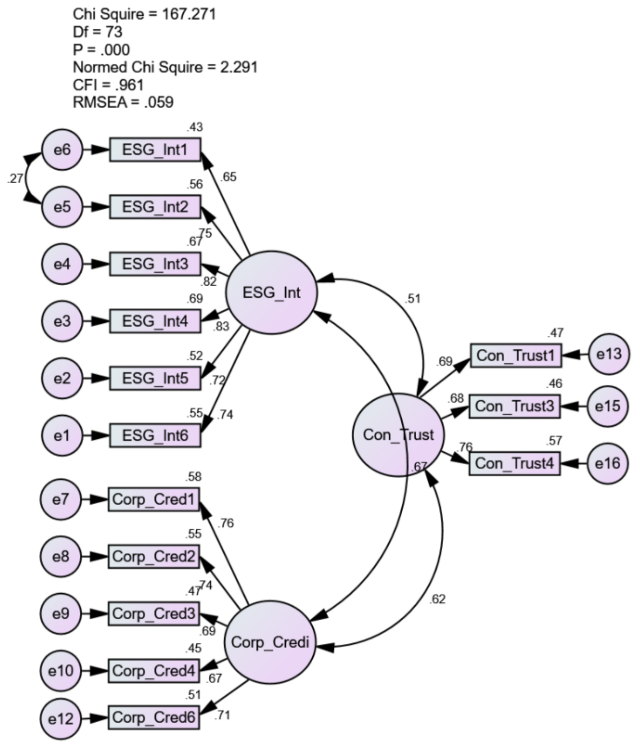

Figure 2. Measurement Model

The AMOS-based confirmatory factor analysis (CFA) was employed to assess the structural integrity of the 30-item scale. The five latent constructs were assumed to be correlated. Three indicators were removed from the measurement model because their loadings were below 0.5, according to the modification indices supplied by AMOS. Hair et al. (2012) assert that a loading value of 0.5 is considered insignificant. Table 3 illustrates the comprehensive model fit for ensuring success. We examined the nine goodness-of-fit indicators. To comprehend well-fit, Hair et al. (2014) suggest that the RMSEA should be below 0.05, and GFI and CFI values must exceed 0.90. Table 3 was considered suitable and exhibited an acceptable value for^{k2}/df. The TLI should exceed 0.90. The 14 -item scale exhibits an adequate model fit.

Table 3. Model Fit

x^2	df	x^2/df	GFI	RMSEA	NFI	CFI	IFI	TLI
167.271	73	2.291	.944	.059	.933	.961	.961	.951

Discriminant and convergent validity were assessed to evaluate the measurement model. The assessment of convergent validity was conducted by the calculation of composite reliability. In accordance with Chin's (1988) advice, a minimum acceptable threshold of 0.7 was suggested to attain satisfactory composite dependability. Moreover, Babin et al. (2008) assert that the AVE value must be 0.5 or greater for optimal outcomes. The current study's

AVE calculation indicates a positive outcome. The average valid estimate (AVE) was calculated by squaring the standardized loads of each build item, summing all construct items, and dividing the total by the number of indicators. All AVE values exceeded 0.5, with the minimum at 0.501 and the maximum at 0.569. The results demonstrate that the CR spans from 0.755 to 0.895, exceeding the recommended threshold of 0.7. Consequently, we may assert that all construct items demonstrated strong reliability based on the findings of the current empirical testing.

Table 4. Confirmatory Factor Analysis (CFA) Report

	CR	**AVE**	**MSV**	**MaxR(H)**	**ESG_Int**	**Corp_Credi**	**Con_Trust**
ESG_Int	0.887	0.569	0.454	0.895	0.754		
Corp_Credi	0.839	0.510	0.454	0.841	0.674***	0.714	
Con_Trust	0.750	0.501	0.387	0.755	0.513***	0.622***	0.708

Note. No Validity Concerns

Discriminant validity may only be confirmed once it is demonstrated that no link should exist between the measurements (Hair et al., 2014). The Fornell-Larcker test and the Heterotrait-Monotrait correlation ratio (HTMT) serve to measure discriminant validity by evaluating cross-loads among constructs. The square root of the AVE values serves as an alternative method for assessing discriminant construct validity when compared to the correlations of the latent variables (Fornell & Larcker, 1981). The discriminant validity is exemplary, since the squared Average Variance Extracted (AVE) for each component surpasses the total of its correlations with other components, as illustrated in Table 4.

Structural Equation Modelling (SEM)

To examine the causal pathways, this study tests four hypotheses. Table 5 presents the hypothesized structural model-based outcomes of the hypothesis testing. Every one of the four hypotheses that were tested had a significant statistical value ($p < 0.05$). The value of R^2 was calculated. As a result, 63.2% of the variance was explained by ESG integration (R^2=0.632), 53.3% by corporate credibility (R^2=0.533), and 16.9% by consumer trust (R^2=0.169) in their propensity towards sustainable packaging.

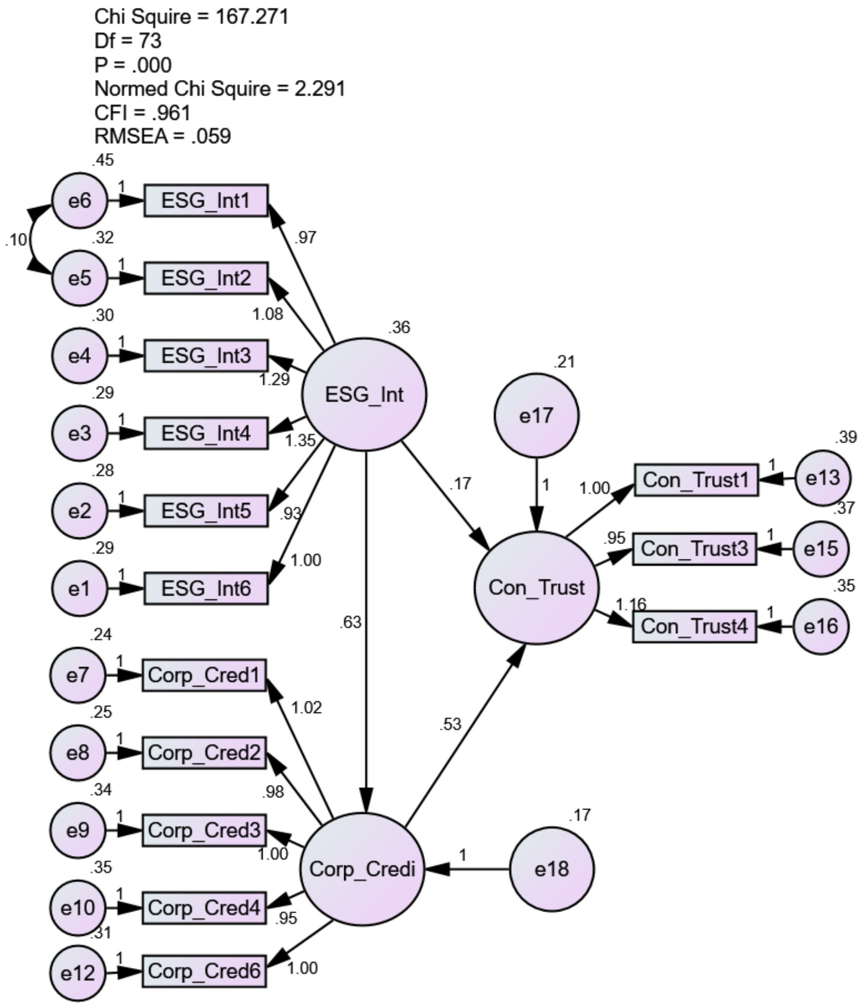

Figure 3. Structural Model

Hypotheses Testing

The findings of the hypotheses indicate that H1, which posits a substantial positive correlation between ESG integration and corporate credibility, is substantiated with β = 0.632; SE = 0.063; CR = 9.985. Correspondingly, H2 and H3 are endorsed according to the β value, which is 0.533 for H2 and 0.169 for H3, respectively. H2 displays an SE of 0.097, a CR of 5.485, and a substantial P value, demonstrating that corporate credibility positively and significantly influences consumer trust. A comparable situation is seen for H3, with SE=0.81 and CR=2.076.

Table 5. Regression Weights

			Estimate	S.E.	C.R.	P	Label
Corp_Credi	<---	ESG_Int	.632	.063	9.985	***	Minimum was achieved Chi-square = 167.271 Degrees of freedom = 73 Probability level = .000
Con_Trust	<---	Corp_Credi	.533	.097	5.485	***	
Con_Trust	<---	ESG_Int	.169	.081	2.076	.038	

Consequently, H3 is corroborated by elucidating that a positive correlation exists between ESG integration and consumer trust.

Mediating Effects

One mediating effect was investigated in this study. Corporate credibility mediates the relationship between ESG integration and consumer trust. The impact of corporate credibility between ESG integration and consumer trust was found to be significant and partially mediated. Meaning that a direct relationship between ESG integration and corporate credibility was found to be significant. The relationship between ESG integration and consumer trust, with a mediating role of corporate credibility, was also found to have a significant impact; thus, there is partial mediation. Therefore, the role of corporate credibility was found to have a significant and partially mediated effect.

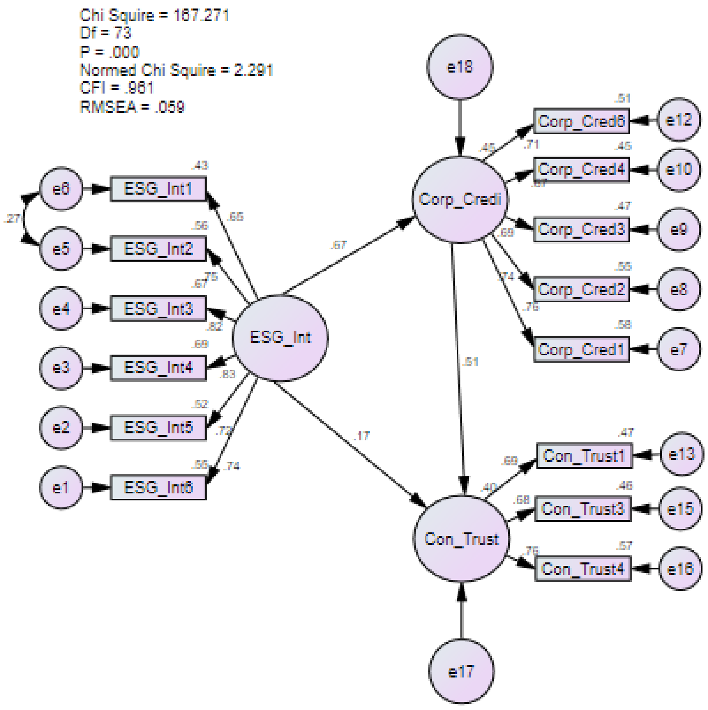

Figure4. Mediating Impact of Corporate Credibility between ESG Integration and Consumer Trust

Table 6. Mediating Effect

Hypothesis	Mediation			Estimate	S.E.	C.R.	P	Remarks
H4. ESG Integration → Corporate Credibility → Consumer Trust	Corp_Credi	<--	ESG_Int	.632	.063	9.985	***	**Partial Mediation**
	Con_Trust	<--	Corp_Credi	.533	.097	5.485	***	
	Con_Trust	<--	ESG_Int	.169	.081	2.076	.038	

In terms of confirming the type of mediation, the relationships present in Figure 4 were tested. Figure 4 and Table 6 show the presence of a significant association between ESG integration and corporate credibility since the critical ratio is 9.985, which is higher than the threshold value of +1.96, a significant p-value with a standard error of 0.632, and a standardized path coefficient of 0.063, which is higher than the threshold value of 0.20. Furthermore, the relationship between corporate credibility and consumer trust is significant; the critical ratio of 5.485 exceeds the threshold value of +1.96, the p-value is below 0.05 with a standard error of 0.533, and the standardized path coefficient of 0.097 also surpasses the threshold value of 0.20. Moreover, there is also a statistically significant relationship between ESG integration and consumer trust, as the critical ratio is 2.076, which is higher than the threshold value of +1.96, and the p-value is lower than 0.05 with a standard error of 0.169, and it has a standardized path coefficient of 0.081, which is higher than the threshold value of 0.20. Therefore, this study endorses that corporate credibility partially mediates the relationship between ESG integration and consumer trust.

Table 7. Results of Hypotheses

Hypothesis	Result
H1: ESG Integrating components have a significant positive relationship with consumer trust in sustainable packaging.	**Accepted**
H2: ESG Integrating components have a significant positive relationship with corporate credibility in sustainable packaging.	**Accepted**
H3: Corporate credibility has a significant positive relationship with consumer trust in sustainable packaging.	**Accepted**
H4: Corporate credibility mediates the relationship between ESG integrating components and consumer trust.	**Partial Mediation**

DISCUSSION

This study focuses on general consumers in Bangladesh, examining how their beliefs regarding EGS integration influence their trust, mediated by business credibility. This study investigates the legitimacy of integrating ESG from a Bangladeshi perspective and analyses the influence of business credibility on customer trust in sustainable packaging. The study's results indicate that general consumers in Bangladesh have a greater willingness to pay for sustainable items due to environmental concerns, hence supporting H1. Both Ahsan's (2020) and Babu's (2022) prior studies corroborate the findings. Secondly, H2 is substantiated, as business credibility significantly influences customer trust in sustainable packaging. In Bangladesh, individuals with heightened awareness of ESG issues are more inclined to invest in sustainable packaging. Bangladeshi customers believe that businesses should exhibit social responsibility. Prior research conducted by Chatterjee and Kumar (2021) supports the finding. Supporting H3, we observe that business credibility substantially influences customer trust.

The findings of Gupta and Sharma (2021) were consistent with the results.

Conversely, H4 established that business credibility considerably mediates the relationship between ESG components and customer trust. Previous research by Kundu and Roy (2022) and Sadiq and Javed (2021) contradicts this study. ESG indices, which encompass sustainability in governance, social responsibility, and environmental impact, significantly influence consumers' general inclination to make purchases. The corporate credibility remains unchanged.

LIMITATIONS AND RECOMMENDATIONS

This study highlights specific shortcomings that require additional examination. By integrating data from other parts of Bangladesh, future research could enhance the study's relevance, given its confinement to the Dhaka city area. Secondly, there exists the issue of neglecting moderating influences. Future research may investigate the influence of moderating variables on the proposed model to address these challenges. Gender, age, and ethnicity are among the customer demographic factors that relevant researchers may utilize. This study has focused just on general customers, but it may broaden its scope in the future to encompass Generation Z, Generation X, Generation Y, or millennia's. Future research should examine climate change, biodiversity, resource efficiency, community engagement, customer welfare, transparency, and ethical conduct, as this study addressed just a restricted range of ESG components. This study examined sustainable packaging broadly; future research may concentrate on specific categories such as biodegradable, reusable, and bio-based packaging. Participants cannot articulate their views on particular subjects due to the standardized nature of this quantitative survey's questionnaire. Future researchers may utilize qualitative and quantitative approaches, or solely qualitative analysis, to examine current occurrences. Incorporating client data from many countries and age groups will validate the research methodologies across diverse cultures and contexts, thereby benefiting future studies.

IMPLICATIONS

This study provides recommendations for the Bangladeshi authorities responsible for regulating the sustainable packaging sector. The research demonstrated that ESG factors, including environmental consciousness, social accountability, and governance sustainability, affect customers' overall trust in sustainable packaging. Consequently, stakeholders in the bio-based packaging industry ought to prioritize contemporary customers in their strategic decision-making processes. Governments and pertinent agencies should prioritize enhancing public awareness in order to promote sustainable packaging. Factors such as ESG integration and corporate reputation impact consumer trust. Environmental, social, and governance considerations empower packaging authorities to devise strategies that encourage consumers to trust sustainable packaging, according to the research.

CONCLUSION

In conclusion, environmental, social, and governance factors are becoming more and more important for Bangladeshi consumers to trust sustainable packaging. Utilizing SPSS for demographic analysis and SEM-AMOS for hypothesis testing, all hypotheses were substantiated with data, indicating that diverse attributes were correlated with consumers' trust in sustainable packaging through the mediation of business credibility. Greater consciousness enhances the appeal for individuals to trust in sustainable packaging, which is the primary reason for this heightened awareness. Consumer trust in sustainable packaging draws attention to the importance of social responsibility and sustainability in enhancing corporate credibility, as the transparency of business practices clearly indicates that consumer trust, along with social responsibility and governance sustainability, is strengthened. Moreover, business credibility was identified as a factor that bolsters consumer confidence by linking authenticity to increased trust. It achieves its goal by integrating ESG concepts to offer a comprehensive approach to sustainable consumption, which governments and businesses could leverage in their marketing and educational efforts to advocate for sustainable packaging and enhance Bangladesh's environmental sustainability.

REFERENCES

Ahsan, M. (2020). Sustainable packaging and consumer perception in emerging markets: Evidence from Bangladesh. *Journal of Cleaner Production, 276*, 123250. https://doi.org/10.1016/j.jclepro.2020.123250

Alam, S., & Rubel, M. R. (2023). CSR, ESG performance and consumer trust: Insights from developing economies. *Sustainability, 15*(4), 3101. https://doi.org/10.3390/su15043101

Ali, M., Frynas, J. G., & Mahmood, Z. (2017). Determinants of CSR in developing countries: A review. *Corporate Social Responsibility and Environmental Management, 24*(4), 273–294. https://doi.org/10.1002/csr.1410

Amanullah, M., Moni, H. R., &Tumpa, K. K. (2024). *Does Environmental, Social and Governance disclosure practices promote customer brand perception? The moderating effect of customers' sustainability orientation. Journal of Research in Accounting and Corporate Responsibility (JRACR).*https://www.jracr.com/index.php/jracr/article/view/502

Asif, M., Searcy, C., Garvare, R., & Ahmad, N. (2011). Including sustainability in business excellence models. *Total Quality Management & Business Excellence, 22*(7), 773–786. https://doi.org/10.1080/14783363.2011.585784

Aziz, N., & Paul, J. (2020). Green purchase behavior in emerging markets. *Journal of Retailing and Consumer Services, 57*, 102208. https://doi.org/10.1016/j.jretconser.2020.102208

Babu, M. A., & Islam, M. S. (2022). Consumer trust in eco-friendly packaging: Evidence from Bangladesh. *Management & Marketing, 17*(3), 301–316. https://doi.org/10.2478/mmcks-2022-0018

Bag, S., Pretorius, J. H. C., & Gupta, S. (2021). Consumer trust and green packaging. *Business Strategy and the Environment, 30*(8), 4024–4038. https://doi.org/10.1002/bse.2864

Bag, S., Rahman, M. S., & Naudé, P. (2025). *Examining buyers' attitudes toward climate change policy and their firms' corporate reputation: The serial mediation effect of suppliers' engagement and commitment. Journal of Business & Industrial Marketing, 40*(2), 185–203. https://doi.org/10.1080/1051712X.2024.2396969

Bhuiyan, M. F., & Haque, M. M. (2021). ESG reporting and stakeholder trust in South Asian markets. *Sustainability Accounting, Management and Policy Journal, 12*(5), 1120–1143. https://doi.org/10.1108/SAMPJ-02-2021-0062

Birindelli, G., Dell'Atti, S., Salanitri, V., & Iannuzzi, A. P. (2019). Composition and activity of the board of directors: Impact on ESG performance in the banking industry. *Journal of Cleaner Production*, *237*, 117–891.

Biswas, A., & Roy, M. (2015). Green products: Eco-labeling and consumer trust. *Journal of Cleaner Production, 87*, 376–384. https://doi.org/10.1016/j.jclepro.2014.09.045

Bogdan, P., Maiorescu, A., & Alexe, C. (2022). ESG integration and corporate reputation. *Sustainability, 14*(16), 10122. https://doi.org/10.3390/su141610122

Carroll, A. B. (1999). CSR: The pyramid of corporate social responsibility. *Business Horizons, 42*(4), 39–48. https://doi.org/10.1016/S0007-6813(99)80005-2

Chatterjee, A., & Kumar, H. (2021). ESG disclosures and consumer trust. *Journal of Public Affairs, 21*(3), e2448. https://doi.org/10.1002/pa.2448

Chen, Y. S. (2010). Green brand trust. *Journal of Business Ethics, 93*(2), 307–319. https://doi.org/10.1007/s10551-009-0223-9
Choi, S., & Ng, A. (2011). Environmental sustainability and packaging. *Sustainable Development, 19*(1), 32–48. https://doi.org/10.1002/sd.417
Chowdhury, E. K. (2025). *Sustainable business practices in Bangladesh: Aligning corporate and consumer perspectives. Journal of Responsible Policy & Corporate Practices, 2*(1), 449–467. https://www.emerald.com/jrpc/article/2/1/449/1271495
Chowdhury, M. I., & Rahman, M. A. (2022). ESG adoption in Bangladeshi manufacturing firms. *Asian Journal of Sustainability and Social Responsibility, 7*(1), 8. https://doi.org/10.1186/s41180-022-00109-6
De, D., & Ghosh, S. (2020). Sustainable supply chain and packaging practices. *Resources, Conservation and Recycling, 156*, 104703. https://doi.org/10.1016/j.resconrec.2020.104703
Delgosha, M. S., &Hajiheydari, N. (2020). How corporate credibility affects consumer trust in digital services. *Journal of Retailing and Consumer Services, 54*, 102–117.
Dutta, B., & Saha, D. (2020). Consumer awareness of green packaging. *Environmental Science and Pollution Research, 27*(20), 25847–25860. https://doi.org/10.1007/s11356-020-08882-4
Esfahbodi, A., Zhang, Y., & Watson, G. (2016). Sustainable packaging decisions. *International Journal of Production Economics, 171*, 89–97. https://doi.org/10.1016/j.ijpe.2015.10.021
Faisal, M. N. (2021). ESG and supply chain resilience in emerging markets. *Journal of Cleaner Production, 320*, 128802. https://doi.org/10.1016/j.jclepro.2021.128802
Famiyeh, S. (2017). Corporate social responsibility and trust. *Social Responsibility Journal, 13*(3), 601–614. https://doi.org/10.1108/SRJ-04-2016-0047
Ferdous, A. S., & Polonsky, M. (2013). Sustainability in South Asia. *Asian Journal of Business Research, 3*(2), 56–74. https://doi.org/10.14707/ajbr.130006
Fornell, C., & Larcker, D. F. (1981). Evaluation of SEM models. *Journal of Marketing Research, 18*(1), 39–50. https://doi.org/10.1177/002224378101800104
Giuliani, E., Neri, F., &Gorgoni, S. (2022). Social sustainability in global value chains: Evidence from emerging markets. *Business Strategy and the Environment*, *31*(2), 567–582.
Grewal, R., & Dharwadkar, R. (2002). Trust and corporate reputation. *Strategic Management Journal*, *23*(3), 231–245. https://doi.org/10.1002/smj.222
Gupta, S., & Sharma, R. (2021). ESG initiatives and consumer trust. *Corporate Governance, 21*(4), 657–674. https://doi.org/10.1108/CG-08-2020-0309
Haque, A., & Azmat, F. (2015). Consumer perceptions of green initiatives in Bangladesh. *International Journal of Consumer Studies*, *39*(6), 741–748. https://doi.org/10.1111/ijcs.12239
Hossain, M. (2024). *The empirical study on sustainable made in Bangladesh brand: On manufacturing, marketing, logistics, and export. Theseus Publication Repository.*https://www.theseus.fi/handle/10024/875704
Hossain, M. N., & Khan, M. (2019). Packaging sustainability in Bangladesh. *Environmental Management and Sustainable Development, 8*(4), 157–173. https://doi.org/10.5296/emsd.v8i4.15567
Hossain, M. S. (2021). Sustainability reporting practices in Bangladesh. *Social Responsibility Journal, 17*(6), 869–887. https://doi.org/10.1108/SRJ-02-2020-0054
Islam, M. A., & Deegan, C. (2008). CSR reporting in Bangladesh. *Managerial Auditing Journal, 23*(5), 449–472. https://doi.org/10.1108/02686900810875364

Islam, M. T., & Chowdhury, M. M. (2021). Consumer trust in sustainable brands. *Sustainability, 13*(16), 8760. https://doi.org/10.3390/su13168760

Islam, R., Shirsha, S. F., Faruk, A., & Elahi, Q. M. (2024). *Sustainability in FMCG: Energy efficiency and green packaging as transformative practices. Proceedings of the International Conference on Industrial Engineering and Operations Management (IEOM) Bangladesh.*https://ieomsociety.org/proceedings/bangladesh2024/6.pdf

Jahan, S., & Rahman, S. (2022). Sustainable packaging trends in FMCG. *Journal of Packaging Technology and Research, 6*, 89–101. https://doi.org/10.1007/s41783-021-00100-7

Khan, A., & Quaddus, M. (2018). Consumers' trust in green products. *Journal of International Consumer Marketing, 30*(2), 86–101. https://doi.org/10.1080/08961530.2017.1400454

Khan, T. R. (2020). Consumer attitudes toward green packaging in Bangladesh. *South Asian Journal of Business Studies, 9*(3), 345–360. https://doi.org/10.1108/SAJBS-01-2020-0014

Kotler, P., & Armstrong, G. (2020). *Principles of marketing* (18th ed.). Pearson. https://www.pearson.com/en-us/subject-catalog/p/principles-of-marketing/P200000008830/9780135766604

Kundu, S., & Roy, S. (2022). ESG and consumer trust in South Asia. *Sustainability, 14*(5), 2510. https://doi.org/10.3390/su14052510

Lee, K. (2008). Opportunities for green marketing. *Australasian Marketing Journal, 16*(2), 51–66. https://doi.org/10.1016/S1441-3582(08)70045-1

Luo, X., & Bhattacharya, C. B. (2006). CSR and customer satisfaction. *Journal of Marketing, 70*(4), 1–18. https://doi.org/10.1509/jmkg.70.4.1

Ma, Y., & Zhang, S. (2020). ESG performance and consumer perceptions. *Journal of Business Ethics, 161*(4), 1087–1104. https://doi.org/10.1007/s10551-019-04354-4

Martínez-Pérez, A., García-García, M. R., & Martínez-López, F. J. (2020). Consumer trust and sustainability communication. *Journal of Business Research, 116*, 897–908.

Miah, J. H., & Griffiths, A. (2019). Packaging sustainability indicators. *Sustainable Production and Consumption, 17*, 51–66. https://doi.org/10.1016/j.spc.2018.09.008

Miller, T. (2021). ESG and stakeholder trust. *Corporate Governance, 21*(7), 1234–1249. https://doi.org/10.1108/CG-09-2020-0376

Mohr, L. & Webb, D. (2005). CSR and consumer purchase intentions. *Journal of Consumer Research, 31*(1), 117–128. https://doi.org/10.1086/383435

NielsenIQ. (2021). *Sustainable packaging trends*. https://nielseniq.com/global/en/insights/

Nurunnabi, M. (2016). Sustainability reporting in Bangladesh. *Sustainability Accounting, Management and Policy Journal, 7*(3), 420–444. https://doi.org/10.1108/SAMPJ-12-2015-0122

Ottman, J. (2011). *The new rules of green marketing*. Berrett-Koehler. https://www.bkconnection.com/books/title/the-new-rules-of-green-marketing

Rahman, S., & Karim, A. (2020). Waste reduction through sustainable packaging. *Environmental Challenges, 1*, 100006. https://doi.org/10.1016/j.envc.2020.100006

Rashid, N. R. (2009). Awareness of eco/green products. *Journal of Marketing Research and Case Studies, 2009*, 1–10. https://doi.org/10.5171/2009.363543

Reza, M. H., & Khan, A. (2021). ESG disclosure practices in Bangladesh. *Journal of Financial Reporting and Accounting, 19*(5), 692–712. https://doi.org/10.1108/JFRA-11-2020-0337

Sadiq, M., & Javed, M. (2021). ESG and consumer trust in developing nations. *Environment, Development and Sustainability, 23*(11), 17047–17067. https://doi.org/10.1007/s10668-021-01354-2

Shams, S., & Hossain, M. (2022). Consumer loyalty toward sustainable brands. *Sustainability, 14*(3), 1555. https://doi.org/10.3390/su14031555

Steenis, N. D., Van der Lans, I., et al. (2017). Consumer response to sustainable packaging. *Journal of Cleaner Production, 162*, 286–298. https://doi.org/10.1016/j.jclepro.2017.06.036

Testa, F., Miroshnychenko, I., Barontini, R., & Frey, M. (2020). Corporate environmental responsibility and consumer behavior. *Business Strategy and the Environment, 29*(2), 906–917.

Zahan, I., & Sultana, S. (2023). ESG integration and consumer behavior in Bangladesh's FMCG sector. *Sustainability, 15*(12), 9520. https://doi.org/10.3390/su15129520

Jung, B., Park, C. Y., & Huber, T. P. (2025). *The impact of ESG management of small and medium enterprises on purchase intention: The mediating effect of corporate image and trust.Asia Pacific Journal of Corporate Responsibility and Innovation, 11*(3), 66–82. http://apjcriweb.org/content/vol11no3/11.pdf

Kabir, M. S., & Ko, I. (2025). *The perception of ESG management and its relationship with customer satisfaction and loyalty in green consumerism.Proceedings of the 58th Hawaii International Conference on System Sciences (HICSS).*https://scholarspace.manoa.hawaii.edu/items/9ea1ae7d-d187-4647-a654-5e585347473d

Koh, H. K., Burnasheva, R., & Suh, Y. G. (2022). *Perceived ESG (environmental, social, governance) and consumers' responses: The mediating role of brand credibility, brand image, and perceived quality. Sustainability, 14*(8), 4515. https://www.mdpi.com/2071-1050/14/8/4515

Rahim, A. B. A., & Wang, L. (2025). *Implicit or explicit? Understanding consumer responses to ESG-related claims and ESG disclosure in the consumer-packaged goods industry: An emerging market perspective. Corporate Social Responsibility and Environmental Management, 32*(4), 612–629. https://onlinelibrary.wiley.com/doi/abs/10.1002/csr.70012

Rastogi, N., Singh, J., Tyagi, S., Ahmad, V., & Kumar, R. (2025). *Building trust through ESG: A study on consumer behaviour in sustainable fashion.F1000Research, 14*(97). https://f1000research.com/articles/14-97

Shuvo, T. F., & Habib, M. H. (2024). Impact of ESG (Environmental, Social, and Governance) Investing on Financial Performance in Bangladesh. *Supply Chain Research, 2*(1), 8884.

Zettergren, E. (2025). *The impact of ESG marketing: A qualitative study on brand trust, brand attractiveness and purchase intentions in environments possibly sceptic to sustainability. Lund University Publications (DiVA Portal).*https://www.diva-portal.org/smash/record.jsf?pid=diva2:1971296