Can corporate ESG practices promote consumers' purchase intention of green food? The mediating role of brand trust

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This study aims to explore how corporate environmental, social, and governance (ESG) practices influence consumers' purchase intention of green food through the mediating mechanism of brand trust. Drawing on signaling theory and stimulus–organism–response (S-O-R) theory, this research develops a conceptual model illustrating the relationships among ESG practices, brand trust, and purchase intention. Structural equation modeling (SEM) was employed to empirically test the model based on survey data collected from Chinese consumers. The findings indicate that environmental, social, and governance dimensions of ESG practices significantly and positively influence brand trust; brand trust, in turn, positively affects consumers' purchase intention. Moreover, brand trust partially mediates the relationship between each ESG dimension and consumers' purchase intention. This study clarifies the critical psychological role of brand trust linking ESG practices and consumer behavior, enriching the theoretical understanding of ESG research within consumer behavior literature, and providing actionable managerial insights for green food enterprises on enhancing consumers' brand trust and purchase intention through effective ESG practices.

KEYWORDS

ESG, brand trust, purchase intention, green food, signaling theory, S-O-R theory

1 Introduction

The global food industry is currently confronting multiple challenges, including resource scarcity, ecological degradation, and evolving consumer demands, making sustainable transformation a widely recognized imperative (De Matteis et al., 2024; Latino et al., 2024). In recent years, Environmental, Social, and Governance (ESG) practices have emerged as essential strategic pathways for food enterprises to achieve sustainable development (Lanzalonga et al., 2025). With consumers becoming increasingly attentive to food companies' environmental impact, social equity, and governance transparency, a growing number of enterprises have integrated ESG principles into their management operations and brand strategies to respond effectively to consumer expectations and strengthen their market competitiveness (Lee and Chang, 2024).

Within the context of rapid expansion in the green food market, how enterprises effectively communicate ESG-related information and enhance consumers' purchase intentions has become a key issue for realizing sustainability in the food sector. However, consumers often encounter significant uncertainty and perceived risks in making decisions about green food purchases due to prevailing market information asymmetry and high product homogeneity (Zhao et al., 2024). Consequently, brand trust, as a crucial psychological mechanism, has the potential to significantly reduce consumers' perceived risks and enhance their intentions toward green purchasing (Song et al., 2024; Tran, 2023). Given this context, an in-depth

exploration of how corporate ESG practices reinforce consumers' brand trust, subsequently driving their green food purchase intentions, holds both theoretical value and practical significance for sustainable industry development.

Although existing research has preliminarily explored the relationships between ESG practices and consumer behavior, several theoretical gaps remain. First, previous ESG research has predominantly concentrated on macro-level corporate performance and financial outcomes (Bai et al., 2025; Pham et al., 2025), while systematic analyses of how ESG practices influence consumer purchasing decisions from the consumer's perspective are still insufficient. Second, despite brand trust having been widely validated as a critical mediating mechanism linking corporate responsibility practices and consumer behaviors (Huo et al., 2022; Goyal and Goyal, 2021), few studies have adequately investigated brand trust as a mediator specifically between ESG practices and consumer behavior. Furthermore, prior studies have generally considered ESG practices as a unified construct, overlooking the potentially differentiated impacts of environmental, social, and governance dimensions on consumer behavior (Yu et al., 2025). Therefore, clarifying how each ESG dimension separately affects brand trust and subsequently influences consumers' purchase intentions is essential for advancing the sustainable transformation of the food industry.

Drawing upon signaling theory and stimulus–organism–response (S-O-R) theory, this study proposes a theoretical model of "corporate ESG practices → brand trust → consumers' green food purchase intention" and empirically tests this model using survey data collected from Chinese consumers. The research aims to clarify the specific pathways through which the three ESG dimensions influence consumers' brand trust and purchase intentions. This study not only enriches theoretical insights into ESG practices within sustainable consumption literature but also provides practical guidance for green food enterprises seeking to optimize their brand communication strategies and effectively enhance brand trust and consumer purchase intentions.

2 Literature review and hypothesis development

2.1 ESG

The concept of ESG originated from the field of socially responsible investment, highlighting corporate performance and sustainable development potential across environmental, social, and governance dimensions (Galbreath, 2013; Gillan et al., 2021). With the increasing prominence of sustainable development principles and the influence of capital markets, ESG has evolved from an initial investment evaluation tool into an important theoretical framework for assessing overall corporate social responsibility performance, widely applied in management, finance, and consumer behavior research (Gao and Zhang, 2025; Zou et al., 2025).

Specifically, the environmental dimension of ESG covers corporate responsibility practices related to resource utilization, ecological protection, pollution prevention, and carbon emission control. The social dimension emphasizes companies' practices regarding labor and consumer rights, community relations, and social welfare initiatives. The governance dimension focuses primarily on compliance with laws and regulations, stakeholder rights protection, and anti-corruption practices (Lee, 2024; Puriwat and Tripopsakul, 2023). In recent years, ESG has increasingly become a crucial indicator for evaluating enterprises' long-term value creation capability and social responsibility performance, garnering significant attention from both academia and industry (Wong et al., 2021).

Existing research has predominantly concentrated on the effects of ESG performance on corporate financial outcomes, generally concluding that superior ESG performance significantly reduces corporate risk and enhances long-term financial performance and market value (Yang et al., 2025). Simultaneously, there has been growing scholarly interest in examining ESG within brand management and consumer behavior contexts. Recent studies have demonstrated that effective corporate ESG practices can significantly improve consumers' brand attitudes and preferences, fostering stronger brand identification and emotional attachment among consumers (Lah et al., 2025). However, compared with abundant evidence in the financial and investment domains, the mechanisms and pathways through which ESG practices influence consumer behavior remain relatively underexplored, particularly lacking empirical examination and deep analysis within specific consumption contexts, such as green food.

Moreover, most existing ESG studies have tended to aggregate the environmental, social, and governance dimensions into a single overall construct or have treated them collectively (Chou et al., 2024; Yu et al., 2025). However, there may be significant differences in the specific mechanisms and intensity through which these three ESG dimensions influence consumer decisions (Yun et al., 2024). For instance, the environmental dimension may influence consumers' purchase intentions predominantly through enhancing a company's eco-friendly image, while the social and governance dimensions might play more prominent roles by strengthening consumers' psychological identification with the brand. Thus, separately examining the differentiated effects of ESG's three dimensions in consumer decision-making processes is critical for a more refined understanding and application of ESG strategies.

2.2 Brand trust

Brand trust, rooted originally in social psychology trust theory, refers to a psychological state developed through consumers' interactions with a brand. It reflects consumers' willingness, based on past experiences and brand performance, to believe that the brand will fulfill its promises and not act against consumer interests (Chaudhuri and Holbrook, 2001; Delgado-Ballester, 2004). As a crucial component of brand equity, brand trust is widely recognized as a pivotal psychological mechanism bridging companies and consumers, particularly in consumption contexts characterized by information asymmetry and high decision-making risks (Khamitov et al., 2024; Tosun et al., 2024).

Existing studies generally conceptualize brand trust along two key dimensions: reliability and intentionality. Reliability refers to a brand's ability to consistently fulfill promises and deliver stable quality, whereas intentionality denotes the sincerity of a brand's concern for consumer interests (Delgado-Ballester, 2004). The development of brand trust typically stems from consumers' cumulative positive perceptions and experiences with a brand,

encompassing not only consistent product and service quality but also corporate actions regarding social responsibility and environmental protection (Fatma and Khan, 2023; Moon et al., 2023).

A substantial body of empirical research has demonstrated that brand trust significantly reduces consumers' perceived risks and uncertainties during the purchasing decision process, consequently strengthening their purchase intention and brand loyalty (Konuk, 2023; Liu and Wang, 2023). Particularly in green consumption contexts, once consumers believe a brand exhibits strong environmental responsibility, they are more likely to develop favorable brand attitudes and sustained purchasing behaviors (Wong, 2024). Furthermore, in green product markets where information asymmetry and product homogeneity prevail, brand trust often serves as a critical basis for consumer decision-making. Higher brand trust alleviates decision hesitation, enhancing consumers' willingness to purchase and recommend the brand (Cai et al., 2025; Konuk, 2023).

Recent research has increasingly focused on brand trust as an important psychological mechanism linking corporate social responsibility (CSR) to consumer behaviors. Brand trust has been shown to effectively mediate the transformation of CSR performance into consumers' purchase intentions and brand loyalty (Narayanan and Singh, 2023). It is also recognized as a significant mediator between corporate ESG performance and consumer word-of-mouth behaviors (Bae et al., 2023). Collectively, these findings underscore brand trust's crucial bridging role between corporate responsibility practices, such as ESG and CSR, and consumer purchasing behaviors.

Nonetheless, existing brand trust literature still exhibits notable theoretical gaps. Firstly, most previous studies have focused on the relationship between brand trust and singular dimensions of corporate responsibility (e.g., environmental or social responsibility) (Khan and Fatma, 2023), leaving the combined or differential effects of ESG's three dimensions on brand trust under-explored. Secondly, empirical research sufficiently investigating brand trust as a comprehensive mediating mechanism between corporate ESG practices and consumer purchase intentions remains limited. Therefore, further clarification of the specific mechanism through which brand trust mediates the relationship between corporate ESG practices and consumers' green purchasing intentions holds significant theoretical value for advancing both brand trust theory and corporate responsibility research.

2.3 Theoretical background

2.3.1 Signaling theory

Signaling theory, initially developed in the field of economics, primarily addresses the communication and decision-making behaviors between market actors under conditions of information asymmetry. According to this theory, due to disparities in the information held by transaction parties, the party possessing more information (signal sender) must effectively convey truthful and credible information to the less-informed party (signal receiver) to reduce perceived risks and decision-making uncertainties (Connelly et al., 2011). Thus, "signals" become central elements in the information transmission process, and their effectiveness depends largely on observability, credibility, and costliness (Kirmani and Rao, 2000).

In recent years, signaling theory has been extensively applied within CSR and ESG research domains to explain how corporate responsibility practices are perceived by stakeholders, particularly consumers, and how these perceptions translate into favorable attitudes and behaviors (Raza et al., 2025; Yu et al., 2022). Under conditions of pronounced market information asymmetry, consumers often face challenges in directly assessing whether companies genuinely fulfill environmental, social, or governance responsibilities. Consequently, corporate ESG practices serve as critical signals transmitting a firm's commitment to responsible practices and societal values. Such signals effectively alleviate consumer uncertainty toward firms and brands, thereby enhancing consumer purchase intentions (Bian and Panyagometh, 2023; Huang et al., 2025).

Therefore, signaling theory provides a robust theoretical foundation for this study: corporate ESG practices can be viewed as essential signals communicated to consumers. Through effectively conveying corporate responsibility commitments and values, these signals help consumers form positive perceptions and trust toward brands, ultimately influencing their purchase intentions.

2.3.2 S-O-R theory

S-O-R theory aims to elucidate how external environmental stimuli influence individual behavioral responses through internal psychological or emotional states. Distinct from the traditional stimulus–response (S-R) model, S-O-R theory emphasizes the critical mediating role of internal organismic states between external stimuli and subsequent behaviors. Specifically, external stimuli first evoke internal cognitive or emotional responses, which then drive individuals' behavioral or attitudinal outcomes (Jacoby, 2002).

Recently, S-O-R theory has been extensively applied in consumer behavior research to clarify how external marketing stimuli influence consumer decision-making and purchase behaviors through psychological mechanisms (Li and Shan, 2025). Previous studies have demonstrated that external stimuli, such as corporate social responsibility initiatives, green marketing practices, and environmentally friendly information, significantly affect consumers' emotional and cognitive states, thereby promoting positive purchase intentions and actual purchasing behaviors (Li and An, 2025; Nguyen-Viet et al., 2024; Zhang et al., 2024).

From the S-O-R theoretical perspective, this study conceptualizes corporate ESG practices as external environmental stimuli (S), brand trust as an internal psychological state (O), and consumers' purchase intentions as behavioral response intentions (R). Companies actively engaging in ESG practices—through effectively communicating environmental responsibility, social commitment, and transparent governance—stimulate positive psychological states in consumers, specifically brand trust (Moon et al., 2023). The formation of this psychological state reduces consumers' perceived purchase risks, enhances their perception of brand reliability and intentionality, and subsequently increases their green purchase intentions (Yadav et al., 2025).

Accordingly, drawing upon S-O-R theory, this study constructs the pathway "Corporate ESG practices → Brand Trust → Green Food Purchase Intention." This conceptual pathway systematically illustrates how ESG practices, by activating consumers' internal psychological mechanisms, ultimately translate into green purchase intentions, thereby providing a clearer theoretical explanation of responsible consumer behavior formation.

2.4 Hypothesis development

2.4.1 ESG practices and brand trust

Brand trust represents consumers' psychological state formed through prior brand experiences, reflecting an integrated assessment of the brand's reliability and intentionality. It serves as an essential psychological mechanism translating corporate responsibility practices into favorable consumer responses (Tosun et al., 2024). Drawing upon signaling theory, corporate ESG practices function as effective signals, transmitting responsibility-related information to consumers, thus significantly enhancing consumers' trust toward the brand (Bae et al., 2023; Koh et al., 2022).

Specifically, corporate environmental practices effectively convey genuine commitments to ecological protection. When consumers perceive a brand actively adopting environmentally friendly measures—such as reducing environmental impacts, conserving resources, and utilizing eco-friendly materials—they become more convinced of the brand's ability to fulfill its commitments. This perception enhances consumer evaluations of the brand's reliability and intentionality (Bae et al., 2023). Similarly, corporate social practices—including safeguarding employee rights, protecting consumer welfare, and actively participating in community activities—demonstrate sincerity and concern for consumer and social welfare. These actions significantly elevate consumers' overall perception of brand reliability and intentionality (Koh et al., 2022). Moreover, corporate governance practices, such as comprehensive compliance mechanisms and rigorous ethical standards, help mitigate consumer concerns regarding moral risks, reinforcing perceptions of brand integrity and responsibility (Bae et al., 2023; Koh et al., 2022). Thus, ESG practices across all three dimensions are expected to positively affect consumers' brand trust within the context of green food enterprises. Accordingly, we propose:

> *H1a*: Corporate environmental practices positively affect brand trust.
>
> *H1b*: Corporate social practices positively affect brand trust.
>
> *H1c*: Corporate governance practices positively affect brand trust.

2.4.2 Brand trust and purchase intention

Purchase intention typically refers to consumers' likelihood of purchasing a specific product or brand in the future, serving as a critical predictor of actual purchase behaviors (Diallo, 2012). Previous studies have confirmed that brand trust, as a core psychological variable in consumer decision-making, exerts a significant positive influence on purchase intentions (Ling et al., 2023; Oppong and Bannor, 2024). When consumers believe that a brand consistently provides reliable products or services and genuinely cares about their interests, their perceived risks and uncertainties during decision-making are substantially reduced, leading to stronger brand preferences and increased purchase intentions (Dam, 2020; Liu and Wang, 2023).

In the context of food consumption, brand trust plays a particularly crucial role. Due to heightened consumer sensitivities regarding food safety, health, and environmental protection, establishing and maintaining consumer trust becomes essential (Sun et al., 2022). A higher level of trust in food brands considerably reduces consumer hesitation in decision-making, especially in scenarios characterized by product homogeneity and information asymmetry, thereby significantly enhancing purchase intentions (Bezbaruah et al., 2022). Consequently, in the green food market context, a greater level of brand trust is expected to foster stronger consumer purchase intentions. Hence, we propose:

> *H2*: Brand trust positively influences consumers' green food purchase intentions.

2.4.3 Mediating role of brand trust

Drawing upon signaling theory and the S-O-R framework, brand trust may serve as a crucial psychological mediator between corporate ESG practices and consumer behaviors. Specifically, ESG practices send external signals that consumers perceive and internalize into positive evaluations regarding brand reliability and intentionality, thereby fostering an internal psychological state—brand trust (Bae et al., 2023; Koh et al., 2022). Subsequently, this psychological state of trust significantly reduces perceived risks and uncertainties in the consumer decision-making process, ultimately translating into favorable purchase intentions (Bezbaruah et al., 2022; Sun et al., 2022). Thus, brand trust serves as an intermediary psychological mechanism, implying that ESG practices do not directly influence consumer purchase intentions; rather, they indirectly affect these intentions via the mediating mechanism of brand trust (Moon et al., 2023). Consequently, we propose:

> *H3a*: Brand trust mediates the relationship between corporate environmental practices and green food purchase intentions.
>
> *H3b*: Brand trust mediates the relationship between corporate social practices and green food purchase intentions.
>
> *H3c*: Brand trust mediates the relationship between corporate governance practices and green food purchase intentions.

2.5 Conceptual framework

Based on the theoretical analysis and hypothesis development presented above, this study draws upon signaling theory and the S–O–R framework to propose a conceptual model illustrating how corporate ESG practices influence consumers' green food purchase intentions through the mediating role of brand trust (Figure 1). Specifically, this theoretical model conceptualizes the three ESG dimensions (environmental, social, and governance practices) as external stimuli, brand trust as the internal psychological (organism) state, and consumers' purchase intention toward green food as the ultimate behavioral response.

3 Research design

3.1 Sample and data collection

To empirically test the conceptual model and hypotheses proposed in this study, data were collected through a structured questionnaire survey. The questionnaire comprised three main sections. The first

FIGURE 1
Theoretical model.
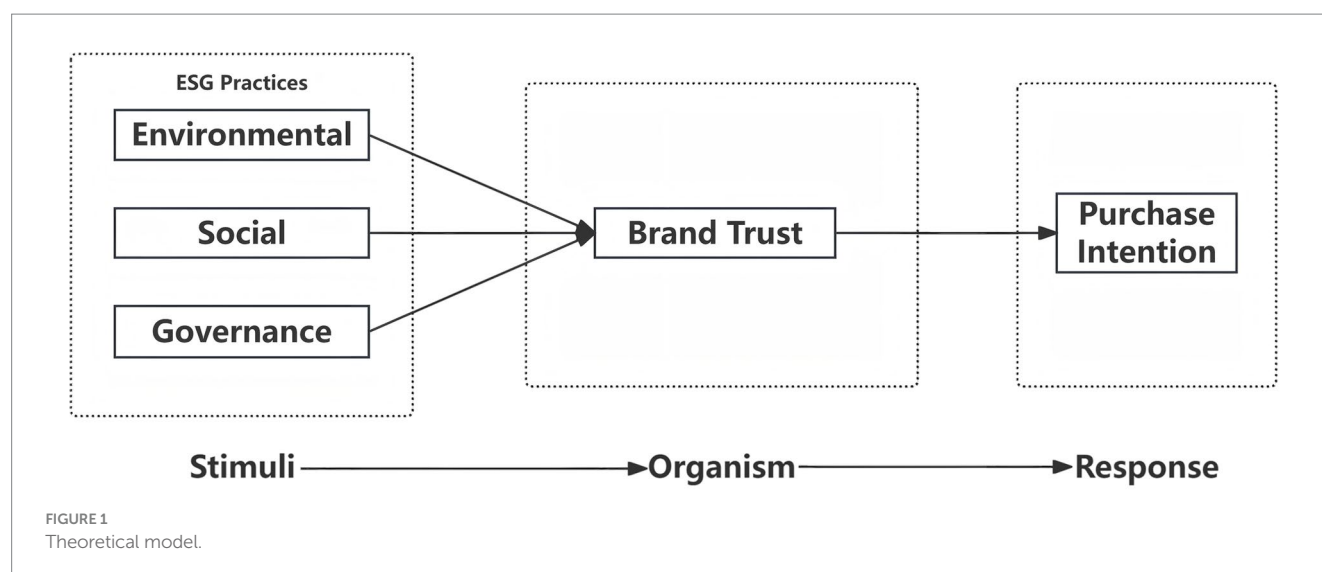
section provided an introduction and informed consent statement. The second section gathered respondents' demographic information, including gender, age, educational level, occupation, and monthly income. The third section included the measurement items of the five core variables: environmental, social, and governance (ESG) practices, brand trust, and purchase intention.

To ensure data validity and relevance, a brief explanation of the ESG concept was provided at the beginning of the questionnaire, followed by a screening question: "Are you aware of or have you paid attention to ESG (Environmental, Social, and Governance) practices of green food enterprises or brands?" Only responses from participants who answered "yes" were included in subsequent analyses. The survey was conducted through a professional online survey platform,[1] targeting a diverse group of consumers across different regions in China. A total of 344 responses were collected, and after excluding invalid responses, 318 valid samples remained. According to guidelines for structural equation modeling (SEM), it is generally recommended that a sample size exceeding 200 observations is adequate, whereas samples above 300 are considered robust and preferable for ensuring stable parameter estimation and valid outcomes (Kyriazos, 2018; Westland, 2010). Thus, the effective sample size in this study meets statistical requirements for SEM analysis.

The demographic characteristics of respondents are detailed in Table 1. Of the valid respondents, 47.48% were male and 52.52% were female, indicating a balanced gender distribution. Age groups were predominantly young and middle-aged consumers, with 48.74% aged between 26 and 35 years, and 23.90% aged between 36 and 45 years. In terms of education level, 87.11% of participants held bachelor's degrees or higher, suggesting that the respondents possessed relatively high education levels. Regarding occupational structure, corporate employees or managers accounted for the largest share (74.53%). Furthermore, over 60% of respondents reported a monthly income ranging between 5,001 and 12,000 RMB, indicating stable economic status among the surveyed population.

3.2 Measures

The measurement items for each core variable were adapted from established and validated scales, with necessary contextual adjustments made to reflect the specific context of green food consumption, thereby ensuring theoretical relevance and empirical validity. Specifically, the measurement items for the three dimensions of corporate ESG practices (environmental, social, and governance) were adapted from scales developed by Lee (2024) and Puriwat and Tripopsakul (2023). Items measuring brand trust were based on the scale developed by Delgado-Ballester (2004), while purchase intention was measured using the scale proposed by Diallo (2012). All measurement items were assessed using a five-point Likert scale, ranging from 1 = "strongly disagree" to 5 = "strongly agree," to evaluate respondents' level of agreement with each statement. Detailed measurement items for all variables are presented in Table 2.

4 Results

4.1 Reliability and validity testing

To ensure the reliability and validity of the measurement instruments, exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were conducted. Results of the EFA indicated that the Kaiser–Meyer–Olkin (KMO) measure was 0.951, and Bartlett's test of sphericity was significant ($p < 0.001$), confirming the suitability of the data for factor analysis.

The internal consistency reliability of each variable was assessed using Cronbach's alpha. As shown in Table 3, all variables exhibited Cronbach's α values exceeding 0.8 (Environmental = 0.819, Social = 0.821, Governance = 0.848, Brand Trust = 0.898, Purchase Intention = 0.879), indicating strong internal consistency reliability.

Furthermore, the convergent validity of the measurement model was assessed using composite reliability (CR) and average variance extracted (AVE). As reported in Table 3, all variables demonstrated CR values higher than the recommended threshold of 0.7 and AVE

1 www.wjx.cn

TABLE 1 Demographic information of respondent.

Variable	Category	Frequency (n)	Percentage (%)
Gender	Male	151	47.48
	Female	167	52.52
Age	18–25 years	69	21.70
	26–35 years	155	48.74
	36–45 years	76	23.90
	46–55 years	17	5.35
	Above 55 years	1	0.31
Educational level	High school and below	6	1.89
	Associate degree	35	11.01
	Bachelor's degree	249	78.30
	Master's degree and above	28	8.81
Occupation	Student	44	13.84
	Corporate employee/manager	237	74.53
	Public sector employee (e.g., civil servants, teachers, doctors, nurses)	24	7.55
	Self-employed/freelancer	9	2.83
	Homemaker	3	0.94
	Others	1	0.31
Monthly income (after-tax)	3,000 RMB or below	41	12.89
	3,001–5,000 RMB	32	10.06
	5,001–8,000 RMB	95	29.87
	8,001–12,000 RMB	104	32.70
	Above 12,000 RMB	46	14.47

values exceeding the standard of 0.5, thus confirming satisfactory convergent validity.

Additionally, discriminant validity was evaluated using the criterion proposed by Fornell and Larcker (1981). As illustrated in Table 4, the absolute values of the correlation coefficients between variables were significantly lower than the square roots of the corresponding AVE values, meeting the discriminant validity requirement. Thus, the measurement model displayed strong discriminant validity.

4.2 Structural equation modeling and hypothesis testing

Structural equation modeling (SEM) with AMOS software was employed to test the proposed hypotheses. First, the overall model fit was assessed. As indicated in Table 5, the model exhibited good fit: χ^2/df = 1.747, RMSEA = 0.049, RMR = 0.018, GFI = 0.904, CFI = 0.956, NFI = 0.904, and NNFI = 0.951. These fit indices all satisfied the recommended thresholds, indicating that the structural model effectively fit the observed data and was appropriate for subsequent path analysis and hypothesis testing.

Next, path analysis was conducted to test the hypotheses. As shown in Table 6, the environmental ($\beta = 0.363$, $p = 0.001$), social ($\beta = 0.332$, $p < 0.001$), and governance dimensions ($\beta = 0.213$, $p = 0.008$) of ESG practices each exhibited significant positive effects on brand trust, supporting hypotheses H1a, H1b, and H1c. Additionally, brand trust demonstrated a strong positive impact on consumers' green food purchase intention ($\beta = 0.830$, $p < 0.001$), thereby supporting hypothesis H2.

4.3 Mediation effect analysis

To further clarify the mediating role of brand trust in the relationship between ESG dimensions and consumers' green food purchase intention, a bootstrapping analysis with 5,000 resamples and 95% confidence intervals (CIs) was conducted.

As presented in Table 7, the indirect effect of brand trust between the environmental dimension and purchase intention was 0.139 (95% CI: [0.062, 0.215], z = 3.532, $p < 0.001$); between the social dimension and purchase intention was 0.128 (95% CI: [0.066, 0.209], z = 3.559, $p < 0.001$); and between the governance dimension and purchase intention was 0.097 (95% CI: [0.041, 0.170], z = 2.970, $p = 0.003$). All indirect effects were significant, and none of the 95% confidence intervals contained zero, confirming that brand trust significantly mediated the relationships between all three ESG dimensions and purchase intention.

Moreover, the direct effects of ESG dimensions on green food purchase intention were also significant (environmental dimension = 0.199, social dimension = 0.127, governance dimension = 0.152), indicating that brand trust partially mediated the relationships between ESG dimensions and consumers' purchase intention.

5 Conclusion

5.1 Main findings and discussion

Drawing upon signaling theory and the S-O-R framework, this study explored how corporate ESG practices influence consumers' purchase intentions toward green food through the psychological mechanism of brand trust. Based on SEM analysis and mediation tests of survey data collected from 318 Chinese consumers, the key findings are as follows:

First, corporate ESG practices significantly and positively influence brand trust. Specifically, the results indicate that environmental ($\beta = 0.363$, p = 0.001), social ($\beta = 0.332$, $p < 0.001$), and governance ($\beta = 0.213$, p = 0.008) practices each positively enhance consumers' perceptions of brand trust. These findings are consistent with prior research demonstrating that corporate engagement in environmental protection, social equity, and transparent governance practices serves as clear and credible signals of corporate responsibility, thereby enhancing consumer perceptions of brand reliability and intentionality (Bae et al., 2023; Koh et al., 2022). Furthermore, this study confirms that ESG practices constitute an important pathway for strengthening brand trust, particularly highlighting stronger influences from the environmental and social dimensions. This outcome likely reflects consumers' heightened sensitivity to environmental protection and social responsibility within the context of green food consumption.

TABLE 2 Variable and measurement item.

Variable			Measurement item
ESG practices	Environmental	EP1	This green food company takes every effort to reduce or get rid of negative environmental consequences.
		EP2	This green food company minimizes resource usage without endangering the environment.
		EP3	This green food company uses environmentally friendly materials with a strong commitment.
		EP4	This green food company focuses on the effective management of waste and recycling disposal activities.
	Social	SP1	This green food company expands good job opportunities, maintains labor relations well, ensures worker stability and welfare benefits, and prohibits child labor.
		SP2	This green food company is actively involved in reducing poverty, strengthening social safety nets, enhancing social responsibility, and fostering cooperation with society for mutual benefit.
		SP3	This green food company protects consumer rights, ensures consumer safety and health, and maintains effective communication with consumers.
		SP4	This green food company makes valuable contributions to local communities by participating actively and promoting local economic development.
	Governance	GP1	This green food company strictly adheres to the law when conducting its business.
		GP2	This green food company is focused on fulfilling its obligations to its partners and stockholders.
		GP3	This green food company has an ethical standards policy that takes precedence over financial performance.
		GP4	This green food company goes out of its way to avoid and prevent corruption.
Brand trust		BT1	This green food brand meets my expectations.
		BT2	I feel confident in this green food brand.
		BT3	This green food brand never disappoints me.
		BT4	This green food brand guarantees satisfaction.
		BT5	This green food brand would be honest and sincere in addressing my concerns.
		BT6	I can rely on this green food brand to solve problems.
		BT7	This green food brand would make any effort to satisfy me.
		BT8	This green food brand would compensate me in some way if there were a problem with the product.
Purchase intention		PI1	There is a high probability that I would consider buying this brand's green food.
		PI2	I would purchase this brand's green food next time.
		PI3	I would consider buying this brand's green food.
		PI4	There is a strong likelihood that I will buy this brand's green food.

Second, brand trust significantly and positively affects consumers' purchase intention toward green food ($\beta = 0.830$, $p < 0.001$). This finding reinforces brand trust as a crucial psychological determinant in consumer decision-making related to green food consumption. When consumers perceive that a brand consistently delivers products meeting or exceeding their expectations, and genuinely cares about consumer interests, their perceived risks and uncertainties diminish substantially, thus leading to greater purchase intentions. While previous research has shown that brand trust positively impacts purchase intentions for agricultural and natural food products (Bezbaruah et al., 2022; Sun et al., 2022), this study explicitly confirms its influential role within the specific context of green food. This might be attributed to the multiple consumer concerns involved in the green food sector, such as food safety, health benefits, and environmental impact, rendering brand trust even more critical in consumer decision-making processes.

Third, brand trust partially mediates the relationship between ESG dimensions and consumers' purchase intentions toward green food. Specifically, the analysis reveals that brand trust partially mediates the

relationships between environmental (indirect effect = 0.139), social (indirect effect = 0.128), and governance (indirect effect = 0.097) dimensions and consumer purchase intention. These results further validate brand trust as an essential psychological mechanism linking corporate ESG practices to consumer behavior, in alignment with previous findings. Prior studies have shown brand trust mediates between ESG dimensions and consumer behaviors such as word-of-mouth and repurchase intentions (Bae et al., 2023; Moon et al., 2023); this study extends these findings by explicitly verifying the mediating role of brand trust between each ESG dimension and purchase intention within the green food consumption context. Additionally, this study highlights that the environmental and social dimensions exert stronger indirect influences through brand trust, suggesting that companies should prioritize communication and implementation of environmental and social practices when promoting ESG initiatives. Conversely, the governance dimension exhibited a relatively weaker indirect effect, potentially because consumer perceptions of governance practices are more indirect and require longer periods of brand interaction and experience to become evident.

TABLE 3 Cronbach's α, standardized estimates, AVE, and CR.

Variable		Cronbach's α	Standardized estimate	AVE	CR
Environmental	EP1	0.819	0.730	0.534	0.821
	EP2		0.733		
	EP3		0.734		
	EP4		0.724		
Social	SP1	0.821	0.747	0.536	0.822
	SP2		0.720		
	SP3		0.723		
	SP4		0.739		
Governance	GP1	0.848	0.741	0.585	0.849
	GP2		0.744		
	GP3		0.793		
	GP4		0.779		
Brand trust	BT1	0.898	0.717	0.525	0.898
	BT2		0.725		
	BT3		0.723		
	BT4		0.713		
	BT5		0.721		
	BT6		0.736		
	BT7		0.726		
	BT8		0.734		
Purchase intention	PI1	0.879	0.811	0.645	0.879
	PI2		0.802		
	PI3		0.797		
	PI4		0.802		

TABLE 4 Pearson correlations and square roots of AVE.

Variable	EP	SP	GP	BT	PI
EP	0.731				
SP	0.631	0.732			
GP	0.638	0.560	0.765		
BT	0.65	0.631	0.603	0.725	
PI	0.637	0.595	0.597	0.714	0.803

TABLE 5 Results of model fit indices.

Fit index	Fitted value	Recommended value
χ^2/df	1.747	<3
RMSEA	0.049	<0.10
RMR	0.018	<0.05
GFI	0.904	>0.90
CFI	0.956	>0.90
NFI	0.904	>0.90
NNFI	0.951	>0.90

5.2 Contributions

At the theoretical level, this study expands the current understanding of the relationship between ESG practices and consumer behavior. Specifically, it systematically elucidates, for the first time, how corporate ESG practices across environmental, social, and governance dimensions influence consumers' green food purchase intentions via the key psychological mechanism of brand trust. By identifying and validating the mediating role of brand trust, this research enriches and advances the integration and application of signaling theory and the S-O-R framework within a specific consumer context. This provides a clear theoretical framework and empirical foundation for future research in related domains.

From a practical standpoint, the findings offer clear managerial guidance for green food enterprises seeking effective ESG brand strategies. The results suggest that companies should emphasize communication strategies particularly related to environmental and social dimensions of ESG, consistently delivering clear and credible responsibility-related information to foster consumers' brand trust, ultimately enhancing their purchase intentions toward green foods. This insight underscores the critical role of brand trust in the implementation of corporate responsibility strategies and provides actionable recommendations for effective ESG communication and brand management.

TABLE 6 Results of hypotheses testing.

Path	Standardized regression coefficient (β)	z-value (CR)	p-value	Hypothesis	Conclusion
EP → BT	0.363	3.480	0.001	H1a	True
SP → BT	0.332	3.875	0.000	H1b	True
GP → BT	0.213	2.636	0.008	H1c	True
BT → PI	0.830	11.844	0.000	H2	True

TABLE 7 Mediation effect analysis results.

Path	Total effect	Indirect effect	Direct effect	95% BootCI	z-value	p-value	Conclusion
EP → BT → PI	0.338	0.139	0.199	0.062 ~ 0.215	3.532	0.000	Partial mediation
SP → BT → PI	0.255	0.128	0.127	0.066 ~ 0.209	3.559	0.000	Partial mediation
GP → BT → PI	0.250	0.097	0.152	0.041 ~ 0.170	2.970	0.003	Partial mediation

5.3 Limitations and future research directions

Despite its theoretical and practical contributions, this study has certain limitations that offer avenues for further research. First, the cross-sectional data utilized in this research may not fully capture the dynamic processes underlying brand trust formation and consumer behavior over time. Future research could therefore adopt longitudinal or experimental designs to explore the long-term formation and evolution of brand trust, thus more robustly validating the sustained impacts of corporate ESG practices on consumer behavior. Moreover, since the data relied on consumers' self-reported measures, potential social desirability bias may exist. Future studies could integrate multi-source or objective behavioral data to enhance the robustness and reliability of research outcomes.

Second, as this study was conducted within the specific context of the Chinese market, cultural influences and consumption habits may limit the generalizability of the findings. Future research could incorporate cross-cultural or cross-regional comparative studies to examine differential mechanisms through which ESG practices influence brand trust and consumer behaviors across diverse cultural or national contexts, thereby improving the external validity and applicability of the conclusions. Furthermore, the current research only examined brand trust as a mediator, without considering other potential mediating or moderating variables such as brand image, consumers' environmental awareness, or perceived authenticity of ESG practices. Future studies could integrate these additional factors to provide a more comprehensive understanding of how corporate ESG practices generate differentiated effects, thus enriching and refining the theoretical framework and improving its precision.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

Ethical approval was not required for the studies involving humans because Ethical approval was not required for the studies involving humans because this study collected data solely through anonymous consumer questionnaires and did not involve any personal sensitive information or intervention experiments. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

YL: Software, Validation, Supervision, Investigation, Writing – review & editing, Conceptualization, Writing – original draft, Formal analysis, Data curation, Resources, Visualization, Methodology, Project administration. XC: Supervision, Methodology, Data curation, Validation, Investigation, Writing – review & editing, Conceptualization, Formal analysis, Resources.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The authors declare that no Gen AI was used in the creation of this manuscript.

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References

Bae, G. K., Lee, S. M., and Luan, B. K. (2023). The impact of ESG on brand trust and word of mouth in food and beverage companies: focusing on Jeju Island tourists. *Sustain. For.* 15:2348. doi: 10.3390/su15032348

Bai, Y., Wang, Z., Huang, Q., and Ding, H. (2025). The impact of ESG performance on corporate value in listed sports companies: the mediating role of intangible assets and moderating role of policy environment. *Sustain. For.* 17:2523. doi: 10.3390/su17062523

Bezbaruah, S., Dhir, A., Talwar, S., Tan, T. M., and Kaur, P. (2022). Believing and acting on fake news related to natural food: the influential role of brand trust and system trust. *Br. Food J.* 124, 2937–2962. doi: 10.1108/BFJ-02-2021-0190

Bian, X., and Panyagometh, A. (2023). The influence of perceived ESG and policy incentives on consumers' intention to purchase new energy vehicles: empirical evidence from China. *Innov. Mark.* 19, 187–198. doi: 10.21511/im.19(4).2023.15

Cai, S., Liu, Y., Aduldecha, S., and Junaidi, J. (2025). Leveraging customer green behavior toward green marketing mix and electronic word-of-mouth. *Sustain. For.* 17:2360. doi: 10.3390/su17062360

Chaudhuri, A., and Holbrook, M. B. (2001). The chain of effects from brand trust and brand affect to brand performance: the role of brand loyalty. *J. Mark.* 65, 81–93. doi: 10.1509/jmkg.65.2.81.18255

Chou, Y. L., Chen, C. Y., Lin, T. H., Zhou, Y.-W., and Lee, Y.-F. (2024). The role of ESG participation in sports sponsorship: enhancing consumer purchase intention through electronic word of mouth (eWOM). *Sustain. For.* 16:10744. doi: 10.3390/su162310744

Connelly, B. L., Certo, S. T., Ireland, R. D., and Reutzel, C. R. (2011). Signaling theory: a review and assessment. *J. Manage.* 37, 39–67. doi: 10.1177/0149206310388419

Dam, T. C. (2020). Influence of brand trust, perceived value on brand preference and purchase intention. *J. Asian Financ. Econ. Bus.* 7, 939–947. doi: 10.13106/jafeb.2020.vol7.no10.939

De Matteis, F., Striani, F., Latino, M. E., and Corallo, A. (2024). The relationship between corporate sustainability and performance: an analysis of Agri-food cooperatives. *Environ. Dev. Sustain.*, 1–28. doi: 10.1007/s10668-024-05391-x

Delgado-Ballester, E. (2004). Applicability of a brand trust scale across product categories: a multigroup invariance analysis. *Eur. J. Mark.* 38, 573–592. doi: 10.1108/03090560410529222

Diallo, M. F. (2012). Effects of store image and store brand price-image on store brand purchase intention: application to an emerging market. *J. Retail. Consum. Serv.* 19, 360–367. doi: 10.1016/j.jretconser.2012.03.010

Fatma, M., and Khan, I. (2023). Corporate social responsibility and brand advocacy among consumers: the mediating role of brand trust. *Sustain. For.* 15:2777. doi: 10.3390/su15032777

Fornell, C., and Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* 18, 39–50. doi: 10.1177/002224378101800104

Galbreath, J. (2013). Esg in focus: the Australian evidence. *J. Bus. Ethics* 118, 529–541. doi: 10.1007/s10551-012-1607-9

Gao, C., and Zhang, S. (2025). Esg performance and corporate financialization: a dual perspective of risk management and value creation. *Financ. Res. Lett.* 71:106442. doi: 10.1016/j.frl.2024.106442

Gillan, S. L., Koch, A., and Starks, L. T. (2021). Firms and social responsibility: a review of ESG and CSR research in corporate finance. *J. Corp. Finan.* 66:101889. doi: 10.1016/j.jcorpfin.2021.101889

Goyal, M., and Goyal, R. K. (2021). Confirming antecedents of green consumption intention: a sustainable model for food aggregators. *IETE J. Res.* 67, 634–645. doi: 10.1080/03772063.2021.1906336

Huang, J., Hu, P., Wang, D. D., and Wang, Y. (2025). The double signal of ESG reports: readability, growth, and institutional influence on firm value. *Sustain. For.* 17:2514. doi: 10.3390/su17062514

Huo, C., Hameed, J., Zhang, M., Bin Mohd Ali, A. F., and Amri Nik Hashim, N. A. (2022). Modeling the impact of corporate social responsibility on sustainable purchase intentions: insights into brand trust and brand loyalty. *Econ. Res.* 35, 4710–4739. doi: 10.1080/1331677X.2021.2016465

Jacoby, J. (2002). Stimulus-organism-response reconsidered: an evolutionary step in modeling (consumer) behavior. *J. Consum. Psychol.* 12, 51–57. doi: 10.1207/S15327663JCP1201_05

Khamitov, M., Rajavi, K., Huang, D. W., and Hong, Y. (2024). Consumer trust: meta-analysis of 50 years of empirical research. *J. Consum. Res.* 51, 7–18. doi: 10.1093/jcr/ucad065

Khan, I., and Fatma, M. (2023). Csr influence on brand image and consumer word of mouth: mediating role of brand trust. *Sustain. For.* 15:3409. doi: 10.3390/su15043409

Kirmani, A., and Rao, A. R. (2000). No pain, no gain: a critical review of the literature on signaling unobservable product quality. *J. Mark.* 64, 66–79. doi: 10.1509/jmkg.64.2.66.18000

Koh, H. K., Burnasheva, R., and Suh, Y. G. (2022). Perceived ESG (environmental, social, governance) and consumers' responses: the mediating role of brand credibility, brand image, and perceived quality. *Sustain. For.* 14:4515. doi: 10.3390/su14084515

Konuk, F. A. (2023). Trustworthy brand signals, price fairness and organic food restaurant brand loyalty. *Manag. Decis.* 61, 3035–3052. doi: 10.1108/MD-07-2022-0889

Kyriazos, T. A. (2018). Applied psychometrics: sample size and sample power considerations in factor analysis (EFA, CFA) and SEM in general. *Psychology* 9:2207. doi: 10.4236/psych.2018.98126

Lah, N. B. C., Singh, K. S. D., Alshdaifat, S. M., and Hanaysha, J. R. (2025). Embedding ESG practices into corporate strategy: a pathway to brand loyalty through consumer brand identification in the cosmetics industry. *Discover Sustain.* 6, 1–16. doi: 10.1007/s43621-025-01346-y

Lanzalonga, F., Oppioli, M., Calandra, D., and Secinaro, S. (2025). The impact of ESG performance on intangible assets and intellectual capital in the food and beverage industry. *Manag. Decis.* 63, 423–442. doi: 10.1108/MD-09-2023-1664

Latino, M. E., Menegoli, M., and De Lorenzi, M. C. (2024). A pattern-based tool to support companies in sustainability-oriented business strategies: grounded theory research in agribusiness. *Corp. Soc. Responsib. Environ. Manag.* 31, 3348–3367. doi: 10.1002/csr.2730

Lee, H. J. (2024). Does corporate ESG, an essential factor for overcoming the climate crisis, affect sustainability: the effects of psychological distance and purchase intention. *Bus. Strateg. Environ.* 33, 8747–8758. doi: 10.1002/bse.3945

Lee, S., and Chang, S. (2024). The decision-making process to consume sustainable food. *Int. J. Gastron. Food Sci.* 38:101075. doi: 10.1016/j.ijgfs.2024.101075

Li, Y., and An, N. (2025). The impact of health consciousness and environmental awareness on sports enthusiasts' purchase intentions for sustainable sports products. *World* 6:20. doi: 10.3390/world6010020

Li, Y., and Shan, B. (2025). The influence mechanism of green advertising on consumers' purchase intention for organic foods: the mediating roles of green perceived value and green trust. *Front. Sustain. Food Syst.* 9:1515792. doi: 10.3389/fsufs.2025.1515792

Ling, S., Zheng, C., and Cho, D. (2023). How brand knowledge affects purchase intentions in fresh food e-commerce platforms: the serial mediation effect of perceived value and brand trust. *Behav. Sci.* 13:672. doi: 10.3390/bs13080672

Liu, Q., and Wang, X. (2023). The impact of brand trust on consumers' behavior toward agricultural products' regional public brand. *PLoS One* 18:e0295133. doi: 10.1371/journal.pone.0295133

Moon, J., Tang, R., and Lee, W. S. (2023). Antecedents and consequences of Starbucks' environmental, social and governance (ESG) implementation. *J. Qual. Assur. Hosp. Tour.* 24, 576–598. doi: 10.1080/1528008X.2022.2070818

Narayanan, S., and Singh, G. A. (2023). Consumers' willingness to pay for corporate social responsibility: theory and evidence. *Int. J. Consum. Stud.* 47, 2212–2244. doi: 10.1111/ijcs.12910

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 Responsible Consumption* 12:100170. doi: 10.1016/j.clrc.2024.100170

Oppong, D., and Bannor, R. K. (2024). Decoding influencer impact in food marketing: the must-haves, should-haves and the role of brand trust and price consciousness. *J. Food Prod. Market.* 30, 210–235. doi: 10.1080/10454446.2024.2406200

Pham, H. M., Vuong, N. L., Tran, D. V., Ngo, M. T. H., and Le, T. T. (2025). Does environmental, social, and governance disclosure affect financial performance? An empirical study of southeast and East Asia commercial banks. *Asia Pac. J. Reg. Sci.* 9, 1–26. doi: 10.1007/s41685-024-00361-7

Puriwat, W., and Tripopsakul, S. (2023). Sustainability matters: unravelling the power of ESG in fostering brand love and loyalty across generations and product involvements. *Sustain. For.* 15:11578. doi: 10.3390/su151511578

Raza, B., St-Onge, S., and Muhammad, I. M. (2025). How cause-related marketing might improve purchase intention in emerging countries: a two-lag study in the finance service sector. *J. Int. Consum. Mark.* 37, 214–228. doi: 10.1080/08961530.2024.2394425

Song, P. T., Oyunbazar, B., and Kang, T. W. (2024). The impact of agricultural food retailers' ESG activities on purchase intention: the mediating effect of consumer ESG perception. *Sustain. For.* 16:8376. doi: 10.3390/su16198376

Sun, Y., Huang, Y., Fang, X., and Yan, F. (2022). The purchase intention for agricultural products of regional public brands: examining the influences of awareness, perceived quality, and brand trust[J]. *Math. Probl. Eng.* 2022, 1–10. doi: 10.1155/2022/4991059

Tosun, P., Cagliyor, S. I., and Gürce, M. Y. (2024). Reducing consumer–brand incongruity through corporate social responsibility and brand trust: exploring negative word-of-mouth (NWOM). *Int. J. Consum. Stud.* 48:e13099. doi: 10.1111/ijcs.13099

Tran, N. K. H. (2023). Enhancing green brand equity through environmental reputation: the important of green brand image, green brand trust, and green brand loyalty. *Bus. Strat. Dev.* 6, 1006–1017. doi: 10.1002/bsd2.294

Westland, J. C. (2010). Lower bounds on sample size in structural equation modeling. *Electron. Commerce Res. Appl.* 9, 476–487. doi: 10.1016/j.elerap.2010.07.003

Wong, A. (2024). How green sustainability efforts affect brand-related outcomes. *Asia Pac J Bus Admin* 16, 1182–1201. doi: 10.1108/APJBA-03-2023-0104

Wong, W. C., Batten, J. A., Mohamed-Arshad, S. B., Ahmad, A. H., Nordin, S., and Adzis, A. A. (2021). Does ESG certification add firm value? *Financ. Res. Lett.* 39:101593. doi: 10.1016/j.frl.2020.101593

Yadav, M., Pandey, D., Kakkar, A., and Farhan, M. (2025). Linking brand trust and attitude with purchase intention of Indian organic food customers: an S–OR model based analysis. *Org. Agric.* 15, 11–27. doi: 10.1007/s13165-024-00480-7

Yang, S. S., Huang, J. W., Chen, H. Y., and Tsay, M.-H. (2025). Detecting corporate ESG performance: the role of ESG materiality in corporate financial performance and risks. *N. Am. J. Econ. Finance* 76:102370. doi: 10.1016/j.najef.2025.102370

Yu, J., Chiriko, A. Y., Kim, S. S., Moon, H. G., Choi, H., and Han, H. (2025). Esg management of hotel brands: a management strategy for benefits and performance. *Int. J. Hosp. Manag.* 125:103998. doi: 10.1016/j.ijhm.2024.103998

Yu, W., Zhou, J., He, M., and Si, D. (2022). Does brand truth-telling yield customer participation? The interaction effects of CSR strategy and transparency signaling. *Behav. Sci.* 12:514. doi: 10.3390/bs12120514

Yun, J., Klaus, P., Hong, E., Lee, S., and Park, J. (2024). Effects of travel agencies' environment, social, and governance marketing activities on consumer behavioral intentions. *Int. J. Tourism Res.* 26:e2789. doi: 10.1002/jtr.2789

Zhang, J., Islam, M. S., Jambulingam, M., Lim, W. M., and Kumar, S. (2024). Leveraging environmental corporate social responsibility to promote green purchases: the case of new energy vehicles in the era of sustainable development. *J. Clean. Prod.* 434:139988. doi: 10.1016/j.jclepro.2023.139988

Zhao, T., Shi, Q., Zhang, X., and Zhang, T. (2024). Decoding green food safety information dependency in the digital era: an intelligent validation using SEM-ANN framework. *J. Retail. Consum. Serv.* 79:103886. doi: 10.1016/j.jretconser.2024.103886

Zou, X., Jiang, J., Zhang, H., and He, H. (2025). ESG performance, media coverage and brand value. *Asia Pac. J. Mark. Logist.* 37, 171–188. doi: 10.1108/APJML-04-2024-0441