The Influence of Consumer Perception of Green Marketing on Consumer Response

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Abstract

This research aimed to study (1) the connotation and characteristics of green marketing and the impact of enterprise green marketing on consumer perception, (2) the mechanism through which consumer perception of corporate ability, motivation, and morality influences consumer response, (3) the mediating role of consumer trust in the relationship between consumer perception and consumer response, and (4) the moderating effect of consumer self-improvement on the link between consumer perception and consumer trust. The sample comprised 420 consumers aged 18 or older, selected via convenience sampling. Data were collected using a structured questionnaire consisting of validated measurement items, and the reliability and validity of the scales were confirmed by Cronbach's Alpha and confirmatory factor analysis. Data analysis was conducted using descriptive statistics and structural equation modeling with SPSS and AMOS. The results revealed three key findings. First, consumer perception of green marketing significantly and positively influenced consumer responses, with perceived corporate ability, motivation, and morality each exerting a meaningful impact on both emotional and behavioral responses. Second, consumer trust was found to mediate, confirming its importance as the psychological mechanism that translates green marketing perceptions into actual consumer engagement. Third, consumer self-improvement significantly moderated the relationship between consumer perception and trust, with higher self-improvement strengthening the trust-building process. The study provides a unique contribution by conceptualizing consumer perception of green marketing as a multidimensional construct rather than a single measure, offering a more nuanced understanding of consumer evaluation processes. It further enriches the Stimulus–Organism–Response framework by incorporating consumer trust as a mediator and introducing self-improvement as a novel moderator. These insights extend theoretical knowledge in green marketing research and offer

practical guidance for enterprises seeking to build credibility, foster trust, and enhance sustainable consumer behavior.

Keywords: green marketing; consumer perception; consumer response; consumer trust

Introduction

The continuous decline of global environmental quality and the deterioration of the global ecological environment brought about by the industrial revolution have become an urgent problem for humanity to solve (Isele et al., 2025). As early as the middle of the 20th century, the United Kingdom, the United States, and other countries led the establishment of the International Consumer Union, pioneering environmental protection, and proposed that, based on enjoying the rights of the world's resources, human beings should also assume the corresponding "environmental protection" obligations (Falk, 1996). The concept of "sustainable development" was first mentioned in 1980 in the World Conservation Program jointly published by the International Union for Conservation of Nature, the United Nations Environment Program, and the World Wide Fund for Nature (Mebratu, 1998). Since then, governments worldwide have vigorously promoted green consumption and implemented sustainable development strategies. With these shifts, consumer preferences have changed as well. Unlike in the past, when purchase decisions were primarily price-driven, contemporary consumers increasingly value the environmental responsibility demonstrated by enterprises. This growing green demand has encouraged companies to develop environmentally friendly products (Balaskas et al., 2023; Park et al., 2022; Pichierri & Pino, 2023). The research of Rokka and Uusitalo (2008) confirmed that green products greatly enhance consumers' enthusiasm for choosing. Spack et al. (2012) believe that, regardless of form or situation, the green prompt can maximize consumers' consumption power. In the face of the crisis caused by environmental problems, human beings will also usher in immeasurable market opportunities. Consequently, green marketing has emerged as both a strategic response to environmental crises and a source of new business opportunities (Ofori, 2021). Many companies are changing their product and service delivery models to consumers at the expense of resources and the environment, and instead offering green products (Wiredu et al., 2024; Zhu et al., 2023). The entire production and operation process of enterprises is green, providing the green products consumers demand, enhancing enterprises' overall social image, and improving economic and social benefits (Tu & Wu, 2021). Although the importance of green marketing has been widely recognized, existing studies often treat consumer perception of green marketing as a single

construct, overlooking its multidimensional nature. Furthermore, limited attention has been paid to the psychological mechanisms—such as consumer trust—that translate perceptions of green marketing into emotional and behavioral responses. In addition, individual-level factors, such as self-improvement motivation, remain underexplored as potential moderators of this process. Addressing these gaps is crucial for a more comprehensive understanding of how consumers evaluate and respond to green marketing initiatives.

Research Objective

1. To study the connotation and characteristics of green marketing and the impact of enterprise green marketing on consumer perception.

2. To study the influence mechanism of consumers' perception of green marketing on consumer response, and specifically study the influence of consumers' perception of corporate ability, corporate motivation, and corporate ethics on consumer response of enterprises implementing green marketing.

3. To study the mediating role of consumer trust in the influence of consumer perception of green marketing on consumer response.

4. To study the moderating effect of consumer self-improvement on the relationship between consumer perception of green marketing and consumer trust.

Literature Review

As consumers, businesses, and policymakers increasingly focus on the environmental problems caused by industrialization and overconsumption, green marketing has emerged as a key topic in academic and practical discussions. Green marketing is generally defined as developing, pricing, promoting, and distributing products in ways that do not harm the environment. At its core, it aims to align corporate strategies with sustainable development principles. (Grant, 2008; Nath & Siepong, 2022). While this definition provides a broad scope, much of the existing literature has focused primarily on product-related attributes, such as green packaging or eco-labeling, without sufficiently addressing the deeper psychological processes that influence consumer evaluation of such initiatives. Rokka and Uusitalo (2008) Found that green packaging significantly influences product choices, while Spack et al. (2012) Demonstrated that incorporating environmental cues in marketing communication can significantly enhance consumer engagement with green products. These findings are valuable but remain descriptive; they do not fully explain

how consumers interpret and internalize green marketing messages, leaving a theoretical gap that this study aims to address.

The effectiveness of green marketing largely depends on consumers' subjective perception of the enterprise's environmental efforts. Scholars generally regard this perception as a multidimensional construct, primarily composed of perceived corporate ability, motivation, and morality (Bai et al., 2024; Homer, 2022; Yang & Chai, 2022). Perceived corporate ability refers to consumers' judgment of the enterprise's competence in providing environmentally friendly products and services. When a company is seen as having strong R&D capabilities, high product quality, and efficient management, its credibility in the green market is significantly enhanced (Berens. et al., 2005; Bhattacharya & Sen, 2003). However, most studies have examined these dimensions in isolation rather than as an integrated construct. As a result, little is known about how ability, motivation, and morality interact to form a holistic perception of green marketing, which is one of the key contributions of the present study.

Consumer trust serves as a mediating factor in the relationship between green marketing perception and consumer response. Chaudhuri (2001) Noted that consumer trust strengthens emotional commitment and promotes purchase behavior, while Kang and Hustvedt (2014) Found that corporate transparency and social responsibility enhance trust. In green marketing, trust helps bridge the potential cognitive gap between a company's environmental claims and consumers' perceptions. Without trust, even the best-designed green marketing strategies may fail to generate positive consumer responses.

Based on this, the following research hypotheses are proposed:

H1: Consumer perception has a significant positive impact on consumer response.

H1a: Consumer enterprise ability perception has a significant positive impact on consumer emotional response.

H1b: Consumer enterprise ability perception has a significant positive impact on consumer behavior response.

H1c: Consumer enterprise motivation perception has a significant positive impact on consumer emotional response.

H1d: Consumer enterprise motivation perception has a significant positive impact on consumer behavior response.

H1e: Consumer enterprise moral perception has a significant positive impact on consumer emotional response.

H1f: Consumer enterprise moral perception has a significant positive impact on consumer behavior response.

Consumer perception has a significant positive impact on consumer trust

H2a: Consumer enterprise ability perception has a significant positive impact on consumer trust.

H2b: Consumer enterprise motivation perception has a significant positive impact on consumer trust.

H2c: Consumer enterprise moral perception has a significant positive impact on consumer trust.

H3: Consumer trust has a significant positive impact on consumer response.

H3a: Consumer trust has a significant positive impact on consumer emotional response.

H3b: Consumer trust has a significant positive impact on consumer behavior response.

H4: Consumer trust plays a mediating role between consumer perception and consumer response

H5: Consumer self-improvement moderates the relationship between consumer perception and consumer trust.

Theoretical Framework

This study builds a theoretical framework based on the Stimulus–Organism–Response (S–O–R) model. In this framework, consumer perception of green marketing (stimulus) affects consumer response (emotional and behavioral) through consumer trust (organism) (Hameed et al., 2022; Singh et al., 2014) Perception includes three dimensions: perceived corporate ability, motivation, and morality. Furthermore, consumer self-improvement is introduced as a moderating variable that may influence the strength of the relationship between green marketing perception and trust. This model provides the basis for hypothesis development and empirical testing.
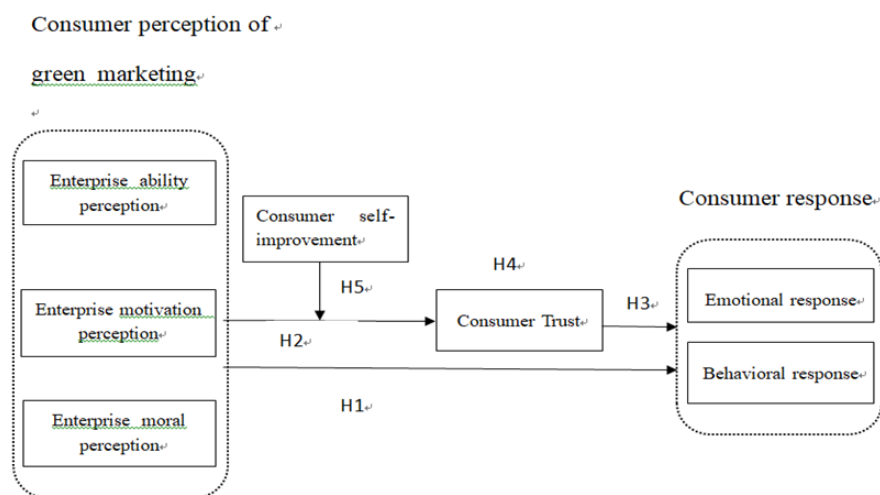

Figure 1: Theoretical framework of study

Research Methodology

This study adopted a quantitative research approach appropriate for testing hypothesized relationships among variables within a structured theoretical framework. To collect data from consumers, a non-probability convenience sampling method was employed. Convenience sampling was selected because it is practical for accessing a large number of respondents within a limited time frame and resources, a strategy often used in consumer behavior and green marketing research. (Peterson & Merunka, 2014). The study population consisted of consumers aged 18 and above with experience purchasing or evaluating green products. Participants were drawn from major urban areas in China, including Beijing, Shanghai, Guangzhou, and Chengdu, to capture a range of socio-economic and cultural contexts. Questionnaires were distributed online (via Wenjuanxing, a widely used Chinese survey platform) and offline (through shopping malls, universities, and public community spaces) to ensure broader coverage. Data were collected between January and February 2025, yielding 420 valid responses. The minimum sample size was calculated based on the number of questionnaire items: with 26 items and the recommendation of 15 respondents per item. (Memon et al., 2020). At least 390 participants were required. The achieved sample size of 420 exceeded this threshold, ensuring sufficient statistical power. Reliability of the constructs was assessed using Cronbach's Alpha, with all scales exceeding the 0.70 threshold recommended by Adamson and Prion (2013). Construct validity was evaluated through confirmatory factor analysis (CFA), using indicators such as average variance extracted (AVE), composite reliability (CR), and factor loadings, all of which met acceptable thresholds. (Sureshchandar, 2023).

Questionnaire design

The questionnaire was designed to capture demographic characteristics and latent constructs used in the structural equation modeling (SEM) analysis. It is divided into three sections: respondents' basic demographic information, measurement of latent variables in the conceptual model, and additional consumer background information. Consumer background information includes gender, age, education level, occupation, and monthly disposable income. All latent variables were measured using a five-point Likert scale, ranging from 1 ("strongly disagree") to 5 ("strongly agree"), in order to quantify attitudes and perceptions with reliability and comparability across respondents. The questionnaire used in this study has been certified under STIU-HREC004/2025.

Table 1 The measurement item of enterprise ability perception

Variable name	No.	Measurement item	Document Source
Enterprise ability perception (NLGZ)	NLGZ1	I think the company is in a leading position in the industry	Berens et al. (2005); Bhattacharya and Sen (2003)
	NLGZ2	I think the company has a substantial research and development capability in the industry.	
	NLGZ3	I think the company is very competitive.	
	NLGZ4	I think the company can provide good-quality green products.	
	NLGZ5	I think the company provides high-quality after-sales service.	
	NLGZ6	I think the enterprise is a highly managed company.	

Table 2 The measurement item of enterprise motivation perception

Variable name	No.	Measurement item	Document Source
Enterprise motivation perception (DJGZ)	DJGZ1	I believe the company's green marketing behavior is to create better value for consumers.	Rifon et al. (2005)
	DJGZ2	I believe that the green marketing behavior of the company is indeed aimed at better promoting social progress.	
Corporate motivation perception (DJGZ)	DJGZ3	I think the company provides economic assistance to ecological and environmental organizations.	
	DJGZ4	The company will allocate its sales revenue to ecological public welfare.	
	DJGZ5	I believe that the company's green marketing behavior is aimed at promoting the development of green ecology in a tangible way.	
	DJGZ6	The company will use some of its profits to give back to society.	

Table 3 Measurement items of enterprise moral perception

Variable name	No.	Measurement item	Document Source
Enterprise moral perception (DDGZ)	DDGZ1	I believe that the company's behavior complies with legal rules	Rokka and Uusitalo (2008)
	DDGZ2	I believe the company's business practices emphasize ethical standards.	
	DDGZ3	The company actively carries out activities that contribute to the overall social ecology.	

Table 4 Measurement of emotional response

Variable name	No.	Measurement item	Document Source
Emotional response (QGXY)	QGXY1	I am eager to know the company's product information related to environmental protection.	Chaudhuri (2001)
	QGXY2	I am willing to pay more for the products of eco-conscious companies.	
	QGXY3	I am willing to participate in its related green environmental protection activities by purchasing its products.	

Table 5 *Measurement items of behavior response*

Variable name	No.	Measurement item	Document Source
Behavioral response (XWXY)	XWXY1	I will always buy the company's products	Park et al. (2006)
	XWXY2	I will be loyal to this brand.	
	XWXY3	I would recommend the company's products to others.	

Table 6 *Measurement items of consumer trust*

Variable name	No.	Measurement item	Document Source
Consumer trust (XR)	XR1	I think the company is trustworthy	Kang and Hustvedt (2014)
	XR2	I think the company's attitude towards green marketing is very sincere	
	XR3	When the company makes major decisions, it will first consider consumer interests.	
	XR4	I do not think the company will use my private information to harm me.	
	XR5	I believe that the company can fulfill its corresponding corporate social responsibility well.	

Research Scope

Starting from the internal factors of consumers' multidimensional perception of green marketing, this paper systematically analyzes the moderating factors and intermediary effects that shape consumers' multidimensional perception of green marketing, and examines the influence of consumers' perceptions of corporate capability, corporate motivation, and corporate ethics on consumer response. This paper analyzes the mediating role of consumer trust in the relationship between consumer perception and consumer response to green marketing. The independent variable is consumer perception of green marketing, and there are three factors or dimensions: perceived enterprise capability, perceived enterprise motivation, and perceived enterprise ethics. The dependent variable is consumer response. Consumer trust is a mediating variable. Consumer self-improvement is a moderating variable. Due to the rise of green consumption, enterprises' green marketing activities are widely carried out, and the range of people who can contact and perceive them is large. Considering the consumption power and cognitive level of green marketing activities, this study will make appropriate choices for the study region and consumer age, and the study population will be consumers over 18 years old.

Research Results

The researchers sorted and analyzed the 420 valid questionnaires collected. SPSS was used for sample statistics and descriptive data analysis. AMOS was used to construct validity through confirmatory factor analysis, and a structural equation model (SEM) was constructed. Verify the hypothetical relationship between variables.

Demographic Analysis of the Respondents

The demographic profile of the respondents indicates a balanced gender distribution, with 51.43% male (n = 216) and 48.57% female (n = 204). In terms of age, the most significant proportion of participants was in the 26–30 age group (29.52%), followed by the 30–40 age group (25.00%) and the 18–25 age group (18.57%). Respondents aged 41–50 accounted for 17.38%, while the smallest group was those aged 51–60 (9.52%). The sample reflects a relatively even gender representation and a concentration of participants in younger to middle-aged categories.

Table 7 Gender and age distribution

Category	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
Genders	Male	216	51.43	51.43
	Female	204	48.57	100.00
	18–25 years old	78	18.57	18.57
	26–30 years old	124	29.52	48.09
Age	30–40 years old	105	25.00	73.09
	41–50 years old	73	17.38	90.47
	51–60 years old	40	9.52	100.00

The educational background of respondents was relatively high, with the majority holding a college or undergraduate degree (60.00%), followed by graduate students (22.62%). In comparison, only a small proportion had a high school education or less (17.38%). In terms of occupation, the largest group comprised individuals in research, education, and environmental health (29.52%), followed by general workers or service personnel (22.38%) and engineering technicians (17.14%). Smaller proportions were government workers (5.71%), enterprise management personnel (6.90%), freelancers (12.86%), and others (5.48%). Regarding monthly discretionary income, most participants reported earnings between 4001–8000 yuan (50.48%), with smaller groups earning less than 2000 yuan (10.00%), 2001–4000 yuan (12.38%), 8001–10000 yuan (16.67%), and more than 10,000 yuan (10.48%). The sample reflects a highly

educated respondent pool, diverse occupational representation, and a concentration in mid–level income categories.

Table 8 Distribution of education, occupation, and monthly income

Category	Options	Frequency	Percentage (%)	Cumulative Percentage (%)
Educational level	Junior high school and below	26	6.19	6.19
	High school, technical secondary school	47	11.19	17.38
	College or undergraduate	252	60.00	77.38
	Graduate student	95	22.62	100.00
Occupation	Government workers	24	5.71	5.71
	General workers or service personnel	94	22.38	28.09
	Enterprise management personnel	29	6.90	34.99
	Engineering technician	72	17.14	52.13
	People in the fields of research, education, and Environmental	124	29.52	81.65
	Freelancer	54	12.86	94.51
	Others	23	5.48	99.99
Monthly discretionary income	Less than 2000 yuan	42	10.00	10.00
	2001–4000 yuan	52	12.38	22.38
	4001–6000 yuan	102	24.29	46.67
	6001–8000 yuan	110	26.19	72.86
	8001–10000 yuan	70	16.67	89.53
	More than 10,000 yuan	44	10.48	100.00
Total		420		

In the above reliability analysis, the Cronbach α coefficient is above 0.8, CITC of all projects is greater than 0.6, and the α coefficient after deleting any project is not significantly higher than the original coefficient, indicating that the overall reliability reaches an acceptable level.

Table 9 Reliability Analysis Table

Variable Factor naming	Item	Correction term total correlation (CITC)	Cronbach's Alpha if item Deleted	Cronbach's Alpha
Ability perception (NLGZ)	NLGZ1	0.816	0.844	0.885
	NLGZ2	0.692	0.866	
	NLGZ3	0.695	0.865	
	NLGZ4	0.675	0.869	
	NLGZ5	0.667	0.870	
	NLGZ6	0.644	0.873	
Motivation perception (DJGZ)	DJGZ1	0.813	0.844	0.884
	DJGZ2	0.681	0.866	
	DJGZ3	0.672	0.868	
	DJGZ4	0.666	0.869	
	DJGZ5	0.690	0.865	
	DJGZ6	0.663	0.869	
Moral perception (DDGZ)	DDGZ1	0.714	0.737	0.827
	DDGZ2	0.682	0.765	
	DDGZ3	0.670	0.777	
Emotional response (QGXY)	QGXY1	0.759	0.689	0.826
	QGXY2	0.661	0.784	
	QGXY3	0.657	0.787	
Behavioral response (XWXY)	XWXY1	0.710	0.702	0.810
	XWXY2	0.641	0.763	
	XWXY3	0.661	0.745	
Consumer trust (XR)	XR1	0.777	0.800	0.858
	XR2	0.659	0.832	
	XR3	0.680	0.827	
	XR4	0.642	0.837	
	XR5	0.617	0.843	
Consumer self–improvement (TS)	ZWTS1	0.755	0.676	0.820
	ZWTS2	0.641	0.790	
	ZWTS3	0.658	0.771	

Validity Analysis

This study used the maturity scale, so confirmatory factor analysis was used to test structural validity, including convergent and discriminant validity.

The confirmatory factor analysis results indicate that all items loaded significantly on their respective latent variables, with standardized factor loadings (SFL) ranging from 0.692 to 0.877, exceeding the recommended minimum of 0.60

Table 10 Table of factor load coefficients

Latent variable	Item	Ustd.	S.E.	C.R.	P	S.F.L	AVE	CR
	NLGZ1	1.000	–	–	–	0.876		
	NLGZ2	0.756	0.042	17.926	0.000	0.746		
Ability perception	NLGZ3	0.763	0.042	18.004	0.000	0.749		
(NLGZ)	NLGZ4	0.694	0.040	17.211	0.000	0.726	0.567	0.886
	NLGZ5	0.680	0.041	16.768	0.000	0.713		
	NLGZ6	0.630	0.039	16.069	0.000	0.692		
	DJGZ1	1.000	–	–	–	0.877		
	DJGZ2	0.684	0.039	17.505	0.000	0.735		
Motivation perception	DJGZ3	0.660	0.039	16.835	0.000	0.715		
(DJGZ)	DJGZ4	0.651	0.039	16.889	0.000	0.717	0.564	0.885
	DJGZ5	0.709	0.040	17.646	0.000	0.739		
	DJGZ6	0.669	0.040	16.679	0.000	0.711		
Moral perception	DDGZ1	1.000	–	–	–	0.841		
(DDGZ)	DDGZ2	0.772	0.051	15.263	0.000	0.762	0.620	0.830
	DDGZ3	0.760	0.050	15.186	0.000	0.757		

As can be seen from Table 11, AVE arithmetic square root values of variables such as consumer perception of enterprise capability, perception of enterprise motivation, perception of enterprise ethics, consumer trust and consumer response are all greater than 0.7, and greater than the absolute value of Pearson correlation coefficient between factors, indicating that the scale in this study has good discriminative validity.

Table 11 Pearson correlation and AVE arithmetic square root values

	Ability perception (NLGZ)	Motivation perception (DJGZ)	Moral perception (DDGZ)	Emotional response (QGXY)	Behavioral response (XWXY)	Consumer trust (XR)	Consumer self-improvement (TS)
Ability perception (NLGZ)	0.753						
Motivation perception (DJGZ)	0.502	0.751					
Moral perception (DDGZ)	0.422	0.392	0.787				
Emotional response (QGXY)	0.409	0.418	0.412	0.793			
Behavioral response (XWXY)	0.370	0.368	0.351	0.488	0.775		
Consumer trust (XR)	0.420	0.443	0.470	0.519	0.381	0.744	
Consumer self-improvement (TS)	0.264	0.347	0.284	0.256	0.356	0.314	0.788

Note: Diagonal bold numbers are AVE square root values

Taking the impact of consumer perception of green marketing on consumer response as an object, this study established a second-order structural equation theoretical model, as shown in Figures 2 and 3. This model reflects the interactions among consumer perceptions of green

marketing, consumer trust, consumer self-improvement, and consumer response, as well as the relationships among the various variables.

The confirmatory factor analysis and structural model estimation yielded satisfactory fit indices. The χ^2/df ratio was below the recommended threshold of 3.0, while the RMSEA value was below 0.08, indicating acceptable model fit. Incremental fit indices (CFI, TLI, and NFI) all exceeded 0.90, indicating that the hypothesized model fits the observed data well. (Brown & Moore, 2012). These results confirm that the measurement model is reliable and valid, and the structural model adequately captures the relationships among the latent constructs. The standardized path coefficients demonstrate that consumer perception of green marketing significantly positively affects consumer trust (β= 0.70) and consumer response (β= 0.66). Consumer trust, in turn, significantly influences both emotional (β= 0.83) and behavioral responses (β= 0.69). Among the three dimensions of consumer perception, moral perception exerted the most potent effect, followed by motivation and ability. These findings highlight the central role of ethical considerations in shaping trust and response, reinforcing the importance of corporate transparency and responsibility in green marketing practices. The results provide strong empirical support for the S-O-R theoretical framework. In this study, stimuli (S) are represented by consumer perceptions of green marketing (ability, motivation, morality), which significantly influence the organism (O), reflected in consumer trust. Trust then serves as the psychological mechanism that transforms perception into responses (R), both emotional and behavioral. The significant path coefficients confirm that consumer trust mediates perception and response, illustrating how marketing stimuli are internalized before shaping outward behaviors. Furthermore, the moderating role of self-improvement strengthens the organismic process, suggesting that individuals with higher self-improvement tendencies are more likely to translate positive perceptions into trust.

In summary, the structural equation model demonstrates strong validity and provides evidence that consumer trust is a pivotal mediator in green marketing communication. By validating the multidimensional construct of consumer perception and integrating self-improvement as a moderating factor, this study refines the S-O-R framework and contributes to a deeper understanding of how green marketing strategies foster sustainable consumer behavior.
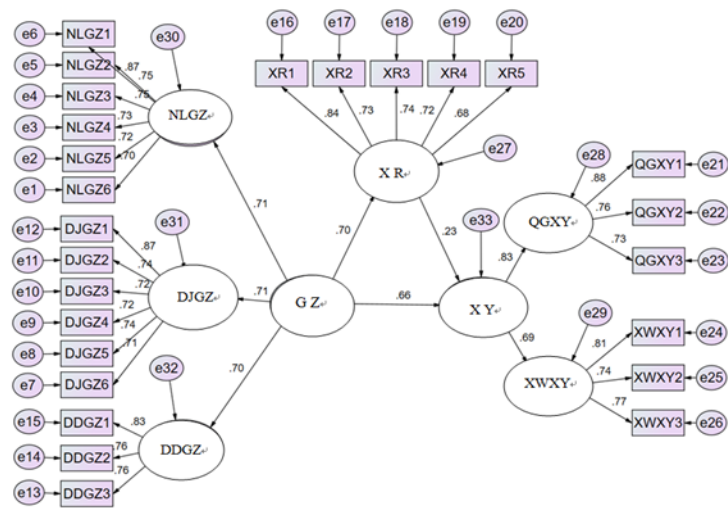
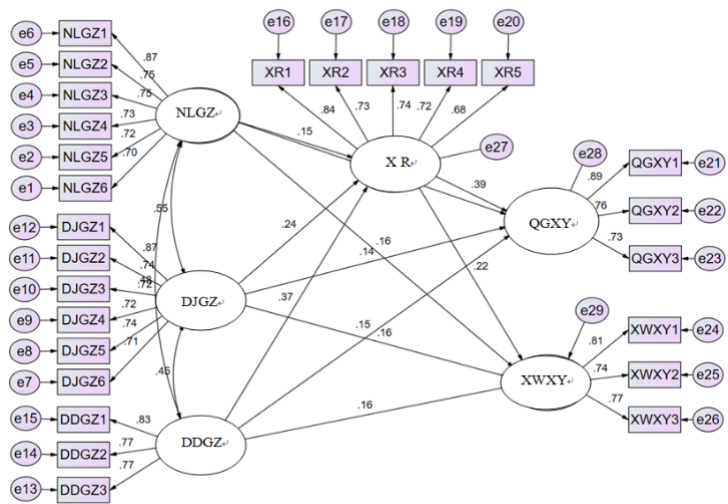**Figure 2** Structural Equation model (first order)

Figure 3 Model of Green Marketing Perception and Consumer Response

Hypotheses Testing

Table 12 lists the path coefficients and the degree of importance of the relationships among the observed, potential, and hypothesis variables. It can be seen that:

First, the standard path coefficient (β) of consumer green marketing perception (GZ) and consumer response is 0.662, P<0.001, indicating that green marketing perception has a significant positive impact on consumer response, and H1 is established.

Second, the standard path coefficient (β) of consumer green marketing perception (GZ) and consumer trust is 0.699 and P<0.001, indicating that green marketing perception has a significant positive impact on consumer trust. H2 is assumed to be valid.

Third, the standard path coefficient (β) of consumer trust (XR) and consumer response is 0.226, P<0.001, indicating that green marketing perception has a significant positive impact on consumer response, assuming that H3 is valid.

Table 12 Path Analysis and Hypothesis Testing

Path	β	Unstd.	S.E.	C.R.	P
GZ ––⟶ XR	0.699	1.491	0.172	8.657	***
NLGZ ⟶ XR	0.148	0.222	0.093	2.378	0.017
DJGZ ⟶ XR	0.24	0.326	0.084	3.906	***
DDGZ ⟶ XR	0.367	0.459	0.078	5.914	***
XR ––⟶ XY	0.226	0.215	0.088	2.443	0.015
XR⟶QGXY	0.388	0.447	0.074	6.084	***
XR⟶XWXY	0.219	0.221	0.07	3.161	0.002
GZ –– ⟶ XY	0.662	1.344	0.236	5.702	***
NLGZ ⟶ QGXY	0.144	0.249	0.105	2.372	0.018
DJGZ ⟶ QGXY	0.137	0.215	0.095	2.263	0.024
DDGZ ⟶ QGXY	0.146	0.212	0.092	2.307	0.021
NLGZ ⟶ XWXY	0.155	0.235	0.102	2.304	0.021
DJGZ ⟶ XWXY	0.16	0.22	0.092	2.379	0.017
DDGZ ⟶ XWXY	0.164	0.207	0.089	2.327	0.02
GZ ⟶ NLGZ	0.706	1	0	0	0
GZ ⟶ DJGZ	0.705	1.1	0.129	8.531	***
GZ ⟶ DDGZ	0.698	1.182	0.139	8.531	***
XY ⟶ QGXY	0.834	1	0	0	0
XY ⟶ XWXY	0.687	0.728	0.076	9.537	***

Note: *** means p<0.001, ** means p<0.01, * means p<0.05.

Discussions

This study employs quantitative research methods to analyze the impact of consumer perceptions of green marketing, consumer trust, and consumer self–promotion on consumer responses. It also measures the mediating effect of consumer trust and the moderating effect of consumer self–promotion. With 420 valid samples of consumers aged 18 or older as the research subjects, descriptive statistical analysis indicates that the sample is sufficient, adequate, and representative. The reliability and validity of the data were analyzed, and the fit of each variable and the model was assessed using confirmatory factor analysis (CFA). All indicators met the standards, and a structural equation model (SEM) was constructed to analyze the relationships and paths between observed and latent variables. All 16 research hypotheses in this study are valid from the data analysis, as shown in Table 13.

This study confirms that consumer perception of green marketing — operationalized through the dimensions of enterprise ability, motivation, and morality — significantly enhances both emotional and behavioral responses (H1 and sub-hypotheses accepted). This aligns with earlier studies indicating that green marketing strategies, such as eco-labeling and eco-packaging, positively shape consumer behavior. (Kuria, 2024). However, this study contributes by unpacking perception into three nuanced dimensions, revealing that moral perception emerges as the strongest predictor—adding granularity that was largely missing in previous single-construct models. The mediating role of consumer trust (H4 accepted) resonates with findings in green advertising contexts, where trust and perceived value jointly mediate the effect of green messaging on purchase intention. (Li & Shan, 2025). Furthermore, research on green perceived value and green trust similarly underscores trust as a critical conduit to consumer purchase behavior. (Duong et al., 2025) This study deepens this understanding by demonstrating trust's mediating function within a multidimensional model of green perception, reaffirming its psychological centrality. The found moderating effect of consumer self-improvement (H5 accepted) is novel. While prior studies have explored demographic moderators, few have examined internal motivational constructs. This study suggests that individuals with stronger self-improvement motives not only perceive green efforts more favorably but also develop greater trust—an insight that opens fresh avenues for theoretical refinement of the S–O–R framework in green marketing contexts.

Table 13 Results of Hypotheses

No.	Hypothesis	Result
H1	Consumer perception has a significant positive impact on consumer response.	Accepted
H1a	Consumer enterprise ability perception has a significant positive impact on consumer emotional response.	Accepted
H1b	Consumer enterprise ability perception has a significant positive impact on consumer behavior response.	Accepted
H1c	Consumer enterprise motivation perception has a significant positive impact on consumer emotional response.	Accepted
H1d	Consumer enterprise motivation perception has a significant positive impact on consumer behavior response.	Accepted
H1e	Consumer enterprise moral perception has a significant positive impact on consumer emotional response.	Accepted
H1f	Consumer enterprise moral perception has a significant positive impact on consumer behavior response.	Accepted
H2	Consumer perception has a significant positive impact on consumer trust	Accepted
H2a	Consumer enterprise ability perception has a significant positive impact on consumer trust.	Accepted
H2b	Consumer enterprise motivation perception has a significant positive impact on consumer trust.	Accepted
H2c	Consumer enterprise moral perception has a significant positive impact on consumer trust.	Accepted
H3	Consumer trust has a significant positive impact on consumer response.	Accepted
H3a	Consumer trust has a significant positive impact on consumer emotional response.	Accepted
H3b	Consumer trust has a significant positive impact on consumer behavior response.	Accepted
H4	Consumer trust serves as a mediating factor between consumer perception and consumer response.	Accepted
H5	Consumer self-improvement moderates the relationship between consumer perception and consumer trust.	Accepted

New Knowledge from Research

Unlike previous studies that often treat green marketing as a single construct, this study decomposes consumer perception into three distinct but interrelated dimensions—perceived corporate ability, motivation, and morality—offering a more nuanced understanding of how consumers evaluate green marketing efforts. By introducing consumer trust as a mediating variable, the study uncovers the psychological process through which green marketing perception is transformed into emotional and behavioral responses. These highlights trust as a pivotal mechanism for enhancing the effectiveness of green marketing. The study is among the first to explore self-improvement motivation as a moderator in the green marketing context. It reveals that consumers with stronger self-improvement tendencies are more responsive to green messaging, especially in developing trust toward the brand.

Conclusion

This study explored the impact of consumer perception of green marketing on consumer response, incorporating consumer trust as a mediating variable and self-improvement as a moderating variable. Based on the Stimulus–Organism–Response (S–O–R) theoretical framework,

a conceptual model was developed and tested through structural equation modeling. The empirical findings reveal that perceived corporate ability, motivation, and morality significantly influence consumer trust and responses. Among them, perceived morality exerted the most substantial overall effect, highlighting the critical role of ethical judgment in shaping consumer attitudes and behaviors. Furthermore, the results confirm that consumer trust partially mediates the relationship between green marketing perception and consumer response. This suggests that building consumer trust is essential for translating green marketing efforts into actual emotional engagement and behavioral support. In addition, self-improvement motivation was found to significantly moderate the effect of green marketing perception on trust. Consumers with higher levels of self-improvement are more likely to internalize and positively react to green values communicated by firms.

Suggestions

The findings of this study provide several important implications for practice in the field of green marketing. First, enterprises should strengthen the development of comprehensive green marketing mechanisms that extend beyond product innovation to encompass organizational governance and strategic positioning. Since consumer perceptions of ability, motivation, and morality were all found to have significant positive effects on consumer responses and trust, enterprises must build internal capabilities while simultaneously projecting themselves as leaders in environmental responsibility. Establishing such mechanisms enhances credibility and ensures that green marketing practices are institutionalized as long-term commitments rather than isolated campaigns.

Equally important is the role of transparent communication in building consumer trust. Given that trust was confirmed as mediating the relationship between perception and response, enterprises must convey authentic, verifiable commitments to sustainability through consistent communication strategies. This can be achieved by integrating environmental values into media publicity, corporate reporting, and third-party certifications. In doing so, consumers are more likely to perceive the genuine motives behind corporate actions, strengthening both their emotional attachment and behavioral loyalty toward green products. In addition, the moderating effect of consumer self-improvement suggests that enterprises should tailor their communication strategies to appeal to individuals who view sustainable consumption as an extension of personal growth. By framing sustainable choices as opportunities for self-enhancement, firms can stimulate greater

trust and engagement among this consumer segment. Beyond corporate initiatives, the findings also carry implications for policymakers. Regulators should establish rigorous and transparent standards for eco-labeling and environmental claims to curb greenwashing and safeguard consumer confidence. Such measures would support enterprises that act authentically and further reinforce the trust-building process identified by this study as central to the effectiveness of green marketing.

The results also suggest several directions for future academic research. While ability, motivation, and morality were each shown to influence consumer trust and responses significantly, future studies could explore potential interactions among these dimensions to assess whether one can compensate for the weakness of another or whether their effects are mutually reinforcing. Furthermore, identifying consumer self-improvement as a significant moderator underscores the need to expand the investigation to other psychological traits, such as environmental identity, altruism, or materialism, that may condition the pathways between perception, trust, and response. Such work would further enrich the application of the Stimulus–Organism–Response framework in green marketing contexts.

Finally, the current study was conducted within the Chinese consumer market, and it would be valuable for future research to assess whether these relationships hold across different cultural settings, where social norms and environmental expectations may differ substantially. Longitudinal research could also provide insights into how consumer perceptions, trust, and responses evolve as green marketing matures and sustainability becomes more institutionalized across industries. In addition, integrating policy-level factors, such as regulatory interventions or government-led sustainability campaigns, would extend the current enterprise–consumer perspective and offer a more holistic understanding of how external structural forces interact with individual perceptions and trust.

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