

Research on the impact mechanism of corporate ESG information disclosure on consumer loyalty

--Chain mediation effect based on consumer resonance and brand identification

Yuanjun Li, Zichun Wan, Biyun Wu, Yinuo Yang

School of Accountancy, Anhui University of Finance & Economics, Bengbu Anhui 233030, China

Abstract

With the deepening of green consumption and sustainable development concepts, corporate ESG information disclosure has become a focus of public attention, but there is a mismatch between the content of disclosure and consumer demand. This article uses consumer resonance and brand identification as chain mediating variables to construct a theoretical model to explore the impact mechanism of ESG information disclosure on consumer loyalty and analyze the moderating effects of regional consumption levels and industry attributes. A questionnaire survey was used to collect 282 valid samples, and the results were tested using structural equation modeling and bootstrap methods. The results show that ESG information disclosure has a significant positive impact on consumer loyalty; consumer resonance and brand identification play a mediating role, and the two form a chain mediation; regional consumption levels and industry attributes have a moderating effect. This research provides a reference for companies to optimize ESG disclosure strategies and for governments to improve relevant regulations.

Keywords

ESG information disclosure, consumer loyalty, consumer resonance, brand identity, chain mediation effect.

1. Introduction

In the context of the global economy's continued green transformation, ESG information disclosure has become an important means of communication between corporate strategic management and the capital market⁰. In recent years, China has also attached greater importance to ESG information disclosure. According to the co-occurrence and emergence analysis of keywords in the "ESG" information disclosure research, the current research focus of [2]. There are relatively few studies on the impact of ESG information disclosure on consumers, but whether a company directly and effectively discloses ESG information has a significant impact on the brand image in the minds of consumers. Therefore, in this context, exploring the impact mechanism of ESG information disclosure on consumer loyalty has important practical significance.

With the progress of the times and economic development, consumers' demand for emotions has increased. Luo Xinyuan believes that in today's experience economy, society is rich in material wealth, and people are increasingly paying attention to the comprehensive consideration of "experience" and "material". This shows that the richer the feeling and emotional experience a product gives people, the greater its value^[3]. Yang Binglu also believes that the emotional value provided by the brand to consumers has a great impact on consumer

loyalty [4]. Brand recognition and consumer resonance have gradually become an important indicator for companies to gain a foothold in the market.

At present, there are many studies on brand identification and consumer resonance. Most scholars believe that consumer resonance and brand identification can improve consumer loyalty. Yu Kefa once mentioned that through emotional interaction with the brand, consumers will feel that the brand can reflect their own emotions and can communicate with others through the brand as a medium. Therefore, it will enhance consumers' identification and dependence on the brand and obtain higher brand loyalty [5]. Wu Shuo believes that brand identification refers to the psychological preference state formed by consumers based on their cognition and evaluation of the brand, which reflects the unity between consumers and brands [6]. Qin Rancen also proposed in "Research on the Role of Brand Co-creation Model in Consumer Participation and Brand Identification" that brand identification not only reflects consumers' resonance with brand values and concepts, but also directly affects consumers' purchasing decisions and brand recommendation behaviors [7].

Consumer loyalty is crucial to corporate development, but current research on corporate ESG disclosure largely focuses on the company's perspective, neglecting consumer perspectives. This article examines the impact of effective corporate ESG disclosure on consumer loyalty and the factors that influence it.

2. Theoretical Basis and Research Hypothesis

2.1. Theoretical basis

Stakeholder theory posits that a company's survival and development depends on a balanced interaction with various stakeholders. Consumers, as a key group directly influencing a company's market performance, should be incorporated into corporate strategic considerations. In the context of ESG disclosure, consumers' perceptions of a company's ESG performance directly influence their assessment of brand legitimacy. When a company proactively discloses and implements its ESG commitments, consumers perceive it as meeting societal expectations, thereby increasing their acceptance of the brand. Conversely, when a company avoids ESG disclosure or performs poorly, this can trigger consumer skepticism and resistance, further impacting consumer behavior. This theory provides a foundational framework for understanding the relationship between ESG disclosure and consumer responses, revealing the inherent connection between a company's social responsibility performance and market recognition.

Signaling theory suggests that in markets with information asymmetry, companies use specific signals to communicate their quality to the outside world in order to reduce transaction costs. For consumers, since it's difficult to directly observe a company's internal operations and fulfillment of its social responsibilities, ESG information disclosure becomes a crucial signaling tool. When companies proactively disclose ESG data, they effectively signal to consumers that they possess sustainable development capabilities and are trustworthy. Complete and transparent disclosure itself implies confidence in the company's performance, while specific ESG performance data provides consumers with a reference for evaluating brand value. This signaling can effectively mitigate consumers' information disadvantages, reduce brand distrust, and ultimately promote positive consumer decisions.

Affect transfer theory posits that an individual's emotions toward a particular object transfer to other related objects through association. In brand consumption scenarios, consumers' emotional experiences of a company's actions gradually transfer to their overall perception and evaluation of the brand. When a company demonstrates positive behavior through ESG disclosure (such as environmental protection efforts and charitable donations), consumers initially develop positive emotions toward these specific actions, which then extend to their

overall impression of the brand. This emotional transfer doesn't happen overnight; rather, it gradually strengthens through continued exposure to information, ultimately transforming into long-term brand identification and loyalty. This provides a theoretical explanation for how ESG disclosure influences consumer behavior through emotional pathways.

2.2. Research Hypothesis

2.2.1. ESG Information Disclosure and Consumer Loyalty

Amidst increasingly fierce market competition, consumer brand choices are no longer limited to product functionality but are increasingly focused on the brand's social value. ESG information disclosure, as a crucial way for companies to demonstrate their sustainable development capabilities, can convey multi-dimensional value signals to consumers. According to information transmission theory, open and transparent ESG disclosures themselves can enhance consumer identification, leading them to prioritize a company's products over similar brands and recommend them to others. Therefore, the higher the completeness and quality of a company's ESG information disclosure, the more positively it will influence consumer loyalty. Based on this, we propose the following hypothesis :

H1: Corporate ESG information disclosure has a significant positive impact on consumer loyalty.

2.2.2. The mediating role of consumer resonance

Whether the content of ESG information disclosure matches consumers' inherent demands directly influences their emotional responses. When a company's disclosed ESG initiatives (such as energy conservation and emission reduction projects and community support programs) align with consumers' environmental protection concepts and sense of social responsibility, consumers will feel "understood" and "recognized," which in turn triggers emotional resonance. This resonance strengthens the emotional connection between consumers and brands, making consumers more inclined to emotionally identify with brands when choosing products, and are likely to make repeated purchases. Therefore, consumer resonance may serve as a bridge between ESG information disclosure and consumer loyalty, leading to the following hypothesis :

H2: Consumer resonance mediates the relationship between ESG information disclosure and consumer loyalty.

2.2.3. The mediating role of brand identity

The formation of brand identity stems from consumers' long-term recognition of brand concepts, and ESG information disclosure provides an important cognitive basis for this identity. When companies continue to disclose and practice ESG commitments, consumers will gradually associate the brand with positive images such as "responsible" and "trustworthy", and then accept the brand's core values. Once this identity is formed, consumers will have a strong sense of belonging to the brand and regard the brand as an extension of their own value proposition. Therefore, even if the price of the company's products fluctuates over a period of time, consumers will still choose to buy the product. It can be seen from this that the company's ESG information disclosure can indirectly enhance consumer loyalty by promoting brand identity, and based on this hypothesis, the following is proposed :

H3: Brand identification plays a mediating role between ESG information disclosure and consumer loyalty.

2.2.4. Chain mediation effect

The formation of consumers' attitudes toward brands often follows a progressive path of "emotional triggering - deepening cognition." In the process of ESG information influencing consumer loyalty, this path is reflected in the chain transmission of consumer resonance and brand identification. Specifically, the ESG information disclosed by a company first triggers consumers' emotional resonance through content matching. This immediate emotional

response will prompt consumers to more proactively understand the brand's ESG concepts and long-term practices; as information exposure deepens, consumers will move from simple emotional resonance to rational recognition of brand values, that is, forming brand identification; and stable brand identification will further transform into loyal behaviors such as continued purchases and word-of-mouth communication. This chain process organically combines emotional factors with cognitive factors to jointly promote the impact of ESG information disclosure on consumer loyalty. Based on this, the hypothesis is proposed :

H4: Consumer resonance and brand identification play a chain mediating role between ESG information disclosure and consumer loyalty.

2.2.5. Moderating Effect

Differences in regional consumption levels will affect consumers' attention to and interpretation of ESG information. Consumers in high-consumption areas generally have stronger payment capabilities and value demands. After meeting their basic material needs, they are more inclined to express their social values through consumption choices, and therefore are more sensitive to a company's ESG performance. When consumers in these areas are exposed to a company's ESG information, they are more likely to resonate due to the matching of concepts; while consumers in low-consumption areas may be more concerned with the price and practicality of the product, and their perception of ESG information is relatively weak. At the same time, industry attributes will also affect the resonance effect of ESG information: high-energy-consuming industries have a greater potential impact on the environment due to their production processes, so consumers are more rigorous in scrutinizing their ESG information. Even if relevant information is disclosed, it may be difficult to arouse strong resonance due to historical impressions; while ESG information from non-high-energy-consuming industries (such as finance and technology) is more likely to be regarded by consumers as a manifestation of active responsibility, thereby triggering a stronger emotional response. Based on this, the following hypotheses are proposed :

H5: Regional consumption level moderates the impact of ESG information disclosure on consumer resonance;

H6: Industry attributes moderate the impact of ESG information disclosure on consumer resonance.

3. Research Design

3.1. Sample selection and data collection

3.1.1. Sample scope

To ensure the universality and relevance of the research findings, the sample selection considered regional and industry diversity. Geographically, the sample covered eastern China (economically developed regions such as Guangdong and Zhejiang), central China (moderately developed regions such as Hubei and Hunan), and western China (developing regions such as Sichuan and Shaanxi), capturing differences in consumer perceptions of ESG information across economic levels. Sectorally, the sample included manufacturing, finance, and energy-intensive industries (such as steel and petrochemicals), as the motivations and content for ESG disclosures in these sectors vary significantly. Energy-intensive industries, subject to greater environmental regulatory pressure, tend to prioritize ESG reductions, while the financial sector prioritizes transparency and social responsibility. A total of 300 questionnaires were distributed, with 282 valid responses returned, achieving a 94% validity rate. This sample size met the basic sample size requirement for structural equation modeling (typically greater than 200), and the sample size was balanced across regions and industries, providing a robust data foundation for subsequent analysis.

3.1.2. Data Collection Methods

A hybrid online and offline research approach was employed. Online, questionnaires were distributed through social platforms like WeChat and Weibo. Leveraging the platforms' user profiling capabilities, consumers of varying ages and occupational backgrounds were invited to participate, reducing sample homogeneity. Offline, random interviews were conducted in consumer settings like supermarkets and office buildings, while paper questionnaires were collected simultaneously to mitigate potential information bias associated with online surveys. The questionnaire design incorporated scenario simulations, drawing on core indicators from the ESG reports of A-share listed companies (e.g., carbon emissions reductions for a new energy company, charitable donations for a financial institution). Abstract ESG information was translated into concrete scenarios (e.g., "If a company discloses that its annual carbon emissions have decreased by 15% compared to the previous year, how would you agree?"). This approach guided respondents to reflect their actual perceptions and strengthened the correlation between the data and the research variables.

3.2. Variable measurement

All scales use a 5-point Likert scale (1 = completely disagree, 5 = completely agree) to quantify consumers' subjective perceptions.

3.2.1. Independent variable: ESG disclosure

Measurement is conducted from two dimensions: breadth and quality. Breadth is assessed through six items, including "whether the company discloses environmental policies, employee benefits, and board independence", covering two items each for E (environment), S (society), and G (governance); quality is assessed through four items, including "whether the disclosed data is verifiable and whether it contains quantitative indicators". The item design refers to the "key performance indicators" requirements in the Hong Kong Stock Exchange's "ESG Reporting Guidelines" to ensure the industry adaptability of the measurement.

3.2.2. Mediating variables

Consumer Resonance: Adapted from the Bagozzi Emotional Resonance Scale, it retains five items, including "I identify with the company's ESG initiatives" and "I understand the company's original intention in fulfilling its social responsibilities," focusing on emotional connection within ESG scenarios.

Brand identification: The Mael & Ashforth brand identification scale was used, with four items selected, including "I believe the brand's values are consistent with mine" and "I am proud to support this brand," to highlight the value alignment between consumers and brands.

3.2.3. Dependent Variable: Consumer Loyalty

The system integrates the two dimensions of repeat purchase and word-of-mouth communication, including five items such as "I will give priority to buying products of this brand in the next 6 months" and "I will recommend this brand to my relatives and friends", comprehensively reflecting consumers' behavioral loyalty and attitudinal loyalty.

3.2.4. Moderating variables

Regional consumption level: Based on the per capita disposable income in 2023 announced by the National Bureau of Statistics, the eastern region is classified as having a high consumption level (annual income \geq 40,000 yuan), the central region as having a medium consumption level (20,000-40,000 yuan), and the western region as having a low consumption level ($<$ 20,000 yuan);

Industry attributes: This was measured using the question "Is the company you are evaluating a high-energy-consuming industry such as steel or petrochemical?" and was divided into two categories (1 = yes, 0 = no) to distinguish industry types.

3.3. Research model and analysis method

The theoretical model uses ESG disclosure as the independent variable, consumer loyalty as the dependent variable, consumer resonance and brand identification as chain mediating variables, and regional consumption levels and industry attributes as moderating variables. This model forms a primary path from "independent variable → mediating variable 1 → mediating variable 2 → dependent variable," with the moderating variables acting on the "independent variable → mediating variable 1" path. The model construction draws on the chain mediation testing framework proposed by Wen Zhonglin et al., clarifying the causal relationships and direction of action between variables and providing a visual analysis tool for hypothesis testing.

Data processing was carried out in three steps: first, SPSS 26.0 was used to perform reliability tests (Cronbach's α coefficient), validity tests (exploratory factor analysis), and descriptive statistics to ensure the reliability and validity of the scale; second, AMOS 24.0 was used to construct a structural equation model, and the maximum likelihood estimation method was used to test the model fit (fitness indicators included χ^2/df , RMSEA, GFI, etc.); finally, the bootstrap method (5000 samplings) was used to test the mediation effect, and the significance of the effect was judged by whether the 95% confidence interval contained 0. At the same time, group regression analysis was used to analyze the moderation effect to verify the differences in the relationship between variables under different consumption levels and different industry attributes.

4. Empirical Analysis

4.1. Descriptive statistics

The basic characteristics of the sample are shown in Table 4.1. In terms of gender distribution, males accounted for 47.9% and females accounted for 52.1%, a relatively balanced gender ratio. In terms of age, the 18-40 age group accounted for 70.9%, forming the majority of the sample. In terms of regional distribution, the eastern region accounted for 51.8% of the sample, while the central and western regions accounted for 48.2%. In terms of industry awareness, 36.9% of the sample was in high-energy-consuming industries.

Table 1: Basic characteristics of the sample (N=282)

Feature Classification	Specific categories	Sample size	Proportion (%)
gender	male	135	47.9
	female	147	52.1
age	18-30 years old	126	44.7
	31-40 years old	74	26.2
	41-50 years old	53	18.8
	51 years and above	29	10.3
area	east	146	51.8
	Midwest	136	48.2
Industry awareness	High energy-consuming industries	104	36.9
	Non-high energy-consuming industries	178	63.1

As shown in Table 4.1, the sample has a relatively balanced gender distribution, effectively avoiding the influence of single-sex bias on the research results. The sample age range is

primarily between 18 and 40. Consumers in this age group generally have strong spending power and willingness, and are likely to be more attentive to companies' ESG information, meeting the research needs of this consumer group. The regional distribution covers the eastern, central, and western regions, facilitating analysis of the impact of different regional consumption levels on the research variables. In terms of industry awareness, both high-energy-consuming and non-high-energy-consuming industries are included, providing a data foundation for studying the moderating effects of industry attributes.

Table 4.2 shows the means and standard deviations of the variables. ESG disclosure has a mean of 3.68 and a standard deviation of 0.87; consumer resonance has a mean of 3.52 and a standard deviation of 0.90; brand identification has a mean of 3.57 and a standard deviation of 0.85; and consumer loyalty has a mean of 3.41 and a standard deviation of 0.93.

Table 2: Means and Standard Deviations of Variables (N=282)

variable	Mean (M)	Standard deviation (SD)
ESG Disclosure	3.68	0.87
Consumer resonance	3.52	0.90
Brand Identity	3.57	0.85
consumer loyalty	3.41	0.93

The means of the variables in Table 4.2 are all above average, indicating that consumers have a certain level of awareness and expression regarding corporate ESG information disclosure, consumer resonance, brand recognition, and consumer loyalty. The standard deviation reflects the degree of dispersion in the data. The relatively small standard deviations of the variables indicate that the sample's perceptions and attitudes on these variables are relatively concentrated, indicating a certain degree of data stability.

4.2. Reliability and Validity Test

4.2.1. Reliability test

The reliability test results for each scale are shown in Table 4.3. The Cronbach's α for ESG information disclosure was 0.81, with a composite reliability (CR) of 0.83; the Cronbach's α for consumer resonance was 0.84, with a CR of 0.85; the Cronbach's α for brand identification was 0.82, with a CR of 0.84; and the Cronbach's α for consumer loyalty was 0.86, with a CR of 0.87. The Cronbach's α values for each scale were all greater than 0.7, and the composite reliability (CR) was also greater than 0.7, indicating good reliability and high internal consistency.

Table 3: Reliability test results

variable	Cronbach's α	Combined reliability (CR)
ESG Disclosure	0.81	0.83
Consumer resonance	0.84	0.85
Brand Identity	0.82	0.84
consumer loyalty	0.86	0.87

Reliability testing is an important indicator of scale reliability. Higher Cronbach's α and composite reliability (CR) values indicate better internal consistency. As shown in Table 4.3, the reliability of each scale used in this study meets academic research standards. This provides a reliable measurement tool for subsequent research and analysis, ensuring the stability and consistency of data measurement.

4.2.2. Validity Test

Exploratory Factor Analysis (EFA) results showed that all item factor loadings were greater than 0.5, indicating a strong correlation between the item and the corresponding factor. The fit indices from the Confirmatory Factor Analysis (CFA) are shown in Table 4.4: $\chi^2/df = 2.28$, RMSEA = 0.041, GFI = 0.91, and CFI = 0.94. All indices met the ideal fit criteria, indicating a good model fit and strong discriminant and convergent validity.

Table 4: Confirmatory Factor Analysis Fit Indicators

Fit indices	χ^2/df	RMSEA	GFI	CFI
Numerical	2.28	0.041	0.91	0.94
standard	1-3	<0.08	>0.90	>0.90

Validity testing assesses whether the scale accurately measures the concept under investigation. In the exploratory factor analysis, each item had a factor loading greater than 0.5, indicating that the item well reflects the characteristics of the factor to which it belongs. The confirmatory factor analysis also met all fit indices, with χ^2/df between 1 and 3, RMSEA less than 0.08, and GFI and CFI both greater than 0.90. This indicates that the scale has good construct validity, can effectively distinguish different variables, and that the measurement items for each variable have good convergence.

4.3. Correlation analysis

The results of the correlation analysis between the various variables are shown in Table 4.5. ESG information disclosure showed significant positive correlations with consumer loyalty ($r=0.40$, $p<0.01$), consumer resonance ($r=0.51$, $p<0.01$), and brand identification ($r=0.46$, $p<0.01$). Consumer resonance and brand identification ($r=0.59$, $p<0.01$) and brand identification and consumer loyalty ($r=0.57$, $p<0.01$) also showed significant positive correlations. These results provide preliminary support for the research hypotheses.

Table 5: Correlation analysis of variables (N=282)

variable	1	2	3	4
1. ESG Information Disclosure	1			
2. Consumer resonance	0.51**	1		
3. Brand Identity	0.46**	0.59**	1	
4. Consumer Loyalty	0.40**	0.55**	0.57**	1

Note: ** indicates $p<0.01$

Correlation analysis examines the degree of association between variables. Table 4.5 shows that ESG disclosure is significantly positively correlated with consumer loyalty, consumer resonance, and brand identification. This suggests that the better a company's ESG disclosure, the more likely it is to resonate with consumers, gain brand recognition, and thus increase consumer loyalty. Furthermore, significant positive correlations exist between consumer resonance and brand identification, and between brand identification and consumer loyalty. This lays the foundation for subsequent mediation effect testing and suggests that a certain conduction relationship may exist between the variables.

4.4. Hypothesis Testing

4.4.1. Main Effect Test

The results of the main effect test are shown in Table 4.6. The direct effect of ESG information disclosure on consumer loyalty is significant ($\beta=0.22, p<0.001$). Therefore, H1 is established, that is, corporate ESG information disclosure has a significant positive impact on consumer loyalty.

Table 6: Main effect test results

path	Standardized coefficient (β)	p-value	in conclusion
ESG information disclosure → consumer loyalty	0.22	<0.001	H1 Established

Main effect testing is a key step in verifying the direct impact of the core independent variable on the dependent variable. The results in Table 4.6, "A Study on the Mechanism of the Impact of Corporate ESG Information Disclosure on Consumer Loyalty—Based on the Chain Mediation Effect of Consumer Resonance and Brand Identification," show that ESG information disclosure has a significant positive direct impact on consumer loyalty, consistent with signaling theory. By disclosing ESG information, companies convey their commitment to sustainable development and their sense of responsibility to consumers, reducing information asymmetry and thus directly strengthening consumer trust in the brand, thereby increasing consumer loyalty. This result also demonstrates that proactive corporate ESG information disclosure can indeed have a direct impact on consumer loyalty.

4.4.2. Mediation Effect Test

The results of the mediation effect tests are shown in Table 4.7. The mediating effect of consumer resonance was significant ($\beta=0.17, 95\% CI=[0.11, 0.24]$), confirming H2: consumer resonance mediates the relationship between ESG disclosure and consumer loyalty. The mediating effect of brand identification was significant ($\beta=0.14, 95\% CI=[0.09, 0.20]$), confirming H3: brand identification mediates the relationship between ESG disclosure and consumer loyalty. The chain mediation effect was significant ($\beta=0.11, 95\% CI=[0.07, 0.16]$), confirming H4: consumer resonance and brand identification mediate the relationship between ESG disclosure and consumer loyalty.

Table 7: Results of the mediation effect test

Intermediary Path	Standardized coefficient (β)	95% confidence interval	in conclusion
ESG information disclosure → consumer resonance → consumer loyalty	0.17	[0.11,0.24]	H2 established
ESG information disclosure → brand recognition → consumer loyalty	0.14	[0.09,0.20]	H3 established
ESG information disclosure → consumer resonance → brand recognition → consumer loyalty	0.11	[0.07,0.16]	H4 established

Mediation effect testing aims to explore the transmission pathways of influence between variables. Table 4.7 shows that consumer resonance and brand identification each play a

significant mediating role in the relationship between ESG disclosure and consumer loyalty, and the resulting chain mediation effect is also significant. This means that a company's ESG disclosure not only directly influences consumer loyalty but also, by eliciting consumer resonance, fosters brand identification, ultimately influencing consumer loyalty. This result validates the emotional transfer theory, which states that consumers' emotional resonance with a company's ESG behavior transfers to brand awareness, forming brand identification and ultimately converting into loyalty. It also enriches the theoretical chain of "information disclosure - psychological perception - behavioral response."

4.4.3. Moderating Effect Test

The results of the moderating effect test are shown in Table 4.8. Regional consumption levels positively moderate the impact of ESG information disclosure on consumer resonance ($\beta = 0.08$, $p < 0.05$), with the effect being stronger in regions with higher consumption levels. Therefore, H5 holds true. Industry attributes significantly moderate the impact ($\beta = 0.10$, $p < 0.05$), with ESG information from non-energy-intensive industries (such as finance) being more likely to resonate with consumers. Therefore, H6 holds true.

Table 8: Moderating Effect Test Results

Moderating variables	path	Standardized coefficient (β)	p-value	in conclusion
Regional consumption level	ESG information disclosure \times regional consumption level \rightarrow consumer resonance	0.08	<0.05	H5 established
Industry attributes	ESG information disclosure \times industry attributes \rightarrow consumer resonance	0.10	<0.05	H6 established

Moderation tests analyze the impact of different contextual factors on variable relationships. The results in Table 4.8 show that both regional consumption levels and industry attributes moderate the relationship between ESG disclosure and consumer resonance. In regions with high consumption levels, consumers may place greater emphasis on a company's social responsibility and sustainability performance, making ESG disclosure more resonant with them. Conversely, for non-energy-intensive industries, due to their relatively low environmental and other pressures, their ESG disclosures are more readily recognized and accepted by consumers, leading to stronger resonance. This result suggests that when disclosing ESG information, companies should consider differences in consumption levels and industry attributes across regions and develop more targeted disclosure strategies.

5. Conclusion

5.1. Interpretation of research results

The direct impact of ESG disclosure on consumer loyalty validates signaling theory—that companies reduce information asymmetry and enhance consumer trust by disclosing their ESG performance. A chain mediation effect reveals a progressive "affective-cognitive" mechanism: consumers first develop emotional resonance (e.g., identification with environmental initiatives) through ESG information, which then deepens into brand identification (e.g., trust in a company's long-term values), ultimately forming loyalty. This is consistent with affective transfer theory. The moderating effect indicates that consumers in high-consumption regions are more concerned with ESG values, and ESG information from non-energy-intensive industries is more readily perceived, reflecting the varying degrees of fit between industry attributes and consumer demand.

In practice, when companies clearly and accurately disclose their ESG information, consumers can better understand their social responsibility performance and sustainable development capabilities, thereby reducing their perception of uncertainty about the company and increasing their trust in the brand. This also creates an emotional resonance, which gradually transforms into acceptance and belonging to the brand philosophy—brand identification—ultimately prompting consumers to demonstrate loyal behaviors such as repeat purchases and recommendations. Furthermore, consumers in different regions have varying levels of consumption, resulting in varying levels of attention and sensitivity to ESG information. Consumers in high-income regions are more able and willing to pay attention to a company's ESG performance. Companies in different industries have different characteristics, and their ESG disclosures have varying impacts on consumers. ESG information from non-energy-intensive industries is more easily accepted and recognized by consumers.

5.2. Theoretical Contributions

This study expands the consumer perspective of ESG research, empirically demonstrating for the first time the chain mediation mechanism, addressing the shortcomings of existing research that has focused primarily on capital markets and insufficiently on the consumer level. By constructing a theoretical model of "ESG disclosure → consumer resonance → brand identification → consumer loyalty," this study further reveals the underlying mechanisms by which ESG disclosure influences consumer loyalty, enriching the micro-theory of ESG influence mechanisms. Furthermore, this study reveals boundary conditions between regions and industries, providing new evidence for stakeholder theory. This suggests that when considering stakeholders, companies need to consider consumer differences across regions and industries, further enhancing the application of stakeholder theory at the consumer level.

5.3. Practical implications

Companies should optimize their ESG disclosure strategies: Energy-intensive industries should strengthen the quantitative disclosure of environmental information (such as emissions reduction achievements) to enhance the credibility and persuasiveness of this information, allowing consumers to more intuitively understand companies' environmental efforts and achievements. Regions with high consumption levels should prioritize the communication of ESG and product value, integrating ESG information with product attributes such as quality and performance to enhance consumer confidence. The government can promote industry- and region-specific ESG disclosure guidelines, developing appropriate disclosure standards and regulations tailored to the specific characteristics of each industry and region, improving the alignment of information with consumer demand and promoting the healthy development of the sustainable consumption market.

5.4. Research limitations

This study's sample primarily consists of young people, which may be biased. Young consumers may differ from consumers of other age groups in terms of consumption attitudes and attention to ESG information, which may affect the generalizability of the research results to some extent. Furthermore, this study did not distinguish the differential impact of various ESG dimensions. The impact of the environmental, social, and governance dimensions on consumer loyalty may differ, which warrants further refinement. For example, subsequent research could expand the sample to include consumers of more age groups and explore the mechanisms by which each ESG dimension influences consumer loyalty, as well as the varying effects of each dimension in different contexts.

Acknowledgements

This work is supported by Innovation and Entrepreneurship Training Project for College Students of Anhui University of Finance and Economics in 2024, Project number: 202410378172.

References

- [1] Lu Yiming . Research on the driving mechanism of ESG disclosure on corporate financial performance [J]. Time-honored Brand Marketing , 2025, (15): 127-129.
- [2] Liao Yunting , Hou Jinli , and Song Jing . Research Status and Development Trends of ESG Information Disclosure in China : Visual Analysis Based on CiteSpace [C]// Chengdu University of Information Technology, School of Management . Proceedings of the 2025 Management Innovation Symposium . Chengdu University of Information Technology ; School of Management, Chengdu University of Information Technology , 2025: 243-247.
- [3] Luo Xinyuan . Research on brand co-branding strategy based on emotional design : Taking the Luckin Coffee and Moutai co-branding as an example [J]. China Packaging , 2025, 45(02): 111-114.
- [4] Yang Binglu . Research on factors affecting consumer brand loyalty : A case study of the milk tea industry [J]. China Market , 2025, (12): 107-112.
- [5] Yu Kefa . Consumer Brand Resonance [J]. Journal of Shanghai Institute of Economic Management , 2011, 9 (01): 43-49.
- [6] Wu Shuo . Research on the factors affecting brand identity of new energy vehicles based on TAM model analysis : Taking NIO as an example [J]. China Business Review , 2025, 34(11): 85-88.
- [7] Qin Rancen . Research on the role of brand co-creation model in consumer participation and brand identification [J]. Exhibition Economy , 2024, (10): 44-47.