Research Article

Mediating effect of social media influencer's credibility on the relationship between CSR initiatives, CSR supportive behavior, and consumer brand loyalty

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ABSTRACT

This study explores the impact of CSR initiatives (CSRI) and CSR-supportive behaviors (CSRSB) on consumer brand loyalty (CBL), with social media influencer credibility (SMIC) as a mediating factor. A survey of 550 Chinese sports brand consumers was conducted, and structural equation modeling (SEM) was employed for data analysis. The results show that CSRI significantly influences CSRSB ($\beta = 0.667$, $t = 27.538$, $p < 0.001$) and SMIC ($\beta = 0.685$, $t = 13.793$, $p < 0.001$). Additionally, CSRSB positively affects SMIC ($\beta = 0.472$, $t = 13.793$, $p < 0.001$) and CBL ($\beta = 0.232$, $t = 5.425$, $p < 0.001$). The mediation analysis confirms that SMIC partially mediates the relationship between CSRI and CBL ($\beta = 0.209$, $t = 4.830$, $p = 0.001$), highlighting the importance of influencer credibility in consumer trust and brand loyalty. The findings suggest that brands should strategically collaborate with credible influencers to amplify CSR messages and enhance long-term consumer engagement. The study provides valuable insights for businesses on optimizing influencer marketing strategies to strengthen CSR-driven brand loyalty.

Keywords: CSR initiatives; social media influencer credibility; CSR-supportive behavior; consumer brand loyalty; structural equation modelin

1. Introduction

Consumer brand loyalty has traditionally been studied through direct brand-consumer relationships, with a primary focus on service satisfaction, emotional attachment, and brand engagement[1]. However, the rise of digital platforms and social media has transformed the way consumers perceive and interact with brands. One of the most influential yet underexplored factors in this shift is the role of social media influencers (SMIs) in shaping consumer perceptions of brands. Consumers increasingly rely on influencers for recommendations and brand-related content, yet existing studies have largely overlooked the mediating effect of influencer credibility in consumer brand loyalty formation.

Corporate Social Responsibility (CSR) initiatives have gained prominence as businesses seek to align with ethical and sustainable practices. While CSR initiatives positively influence consumer perceptions and brand loyalty, the credibility of social media influencers who advocate for these initiatives plays a crucial

role in reinforcing consumer trust[2]. Despite the increasing reliance on influencer endorsements in CSR campaigns, little research has examined how social media influencer credibility mediates the relationship between CSR initiatives and consumer brand loyalty.

This study is grounded in Source Credibility Theory, which explains how individuals evaluate and trust information based on three dimensions: expertise, trustworthiness, and attractiveness. According to this theory, consumers are more likely to be influenced by credible sources when making brand-related decisions[3]. While traditional brand loyalty models emphasize direct brand-consumer relationships, this study integrates Source Credibility Theory to explore how the credibility of social media influencers amplifies or diminishes the impact of CSR initiatives on consumer loyalty.

Previous research has demonstrated that influencer credibility significantly affects consumer attitudes and behaviors. However, most studies have focused on product promotions rather than CSR-driven brand advocacy[4]. This study seeks to bridge this gap by examining how CSR initiatives, when communicated through credible influencers, enhance consumer trust and brand loyalty. Furthermore, it investigates the extent to which CSR supportive behavior contributes to influencer credibility, thereby shaping overall consumer perceptions of a brand.

The implications of this study extend beyond theoretical contributions, offering practical insights for businesses and policymakers. With the increasing reliance on digital branding and influencer marketing, companies need to develop strategic approaches to selecting and leveraging credible influencers in CSR-related brand communication. Understanding the mediating role of influencer credibility can help businesses design more effective marketing strategies, foster consumer trust, and enhance long-term brand loyalty.

Thus, the research questions are shown in below:

1. What is the impact of CSR initiatives on CSR supportive behavior, social media influencer credibility, and consumer brand loyalty?

2. What is the relationship between CSR supportive behavior, social media influencer credibility, and consumer brand loyalty?

3. How does social media influencer credibility influence consumer brand loyalty?

4. What is the mediating role of social media influencer credibility in the Relationship between CSR initiatives and consumer brand loyalty?

By addressing these research questions, this study contributes to the evolving landscape of digital branding, influencer marketing, and CSR-driven consumer engagement, providing both academic and industry perspectives on the growing intersection of social media influence and corporate social responsibility.

2. Literature review

2.1. Corporate social responsibility initiatives and consumer brand loyalty

CSR has become an essential component of business strategy, especially within the sports sector. CSR initiatives in sports have been classified into four main categories: community engagement, environmental sustainability, social justice efforts, and health and wellness programs[5]. Sports brands frequently collaborate with athletes to engage in community service initiatives, such as youth sports programs and health awareness campaigns, which can enhance corporate reputation and cultivate consumer loyalty.

In addition to community involvement, environmental sustainability has gained prominence in sports organizations. Many brands implement eco-friendly practices such as waste reduction, energy-efficient stadiums, and recycling programs to align with consumer expectations regarding sustainability. Social justice efforts, including diversity and inclusion initiatives, help brands meet modern ethical standards while strengthening brand credibility and equity[6]. Furthermore, sports brands promote health and wellness initiatives by encouraging active lifestyles, which positively impacts consumer perceptions and deepens emotional connections with the brand.

CSR should extend beyond financial objectives and focus on broader societal welfare[7]. CSR research has largely focused on five dimensions: economic[8], environmental[6], ethical[9], consumer perception[10], and corporate strategy[11]. While much research has explored CSR's economic efficiency and governance aspects, its impact on consumer trust and brand loyalty remains relatively underexplored[12].

The relationship between CSR and customer brand loyalty is well-documented but often focuses on direct consumer reactions such as corporate reputation, customer satisfaction, and brand image[13-15]. Studies indicate that CSR initiatives build consumer trust, improve transparency, and enhance perceived service quality, all of which are crucial for fostering consumer attitudes and behavioral responses[16,17].

However, previous research has overlooked the role of social media influencers (SMIs) in shaping consumer responses to CSR initiatives. With the increasing influence of digital communication, SMIs serve as key opinion leaders who can amplify or undermine CSR initiatives. This study examines the mediating role of influencer credibility in CSR-driven brand loyalty, filling an existing gap in consumer behavior research.

This study examines CSR initiatives in the context of sports brands, particularly NIKE's CSR strategies. NIKE has implemented sustainability initiatives, including using organic cotton, producing eco-friendly products, and recycling materials[18]. CSR initiatives in this study are measured across three dimensions—environmental, social, and stakeholder perspectives—using fourteen indicators[19].

2.2. CSR supportive behavior and the role of influencers

CSR supportive behavior refers to consumer engagement in and endorsement of corporate social responsibility initiatives. The extent to which consumers support CSR activities depends on their trust in the brand and the credibility of information sources. Research indicates that CSR supportive behavior is highly unpredictable, as engagement levels vary based on the perceived authenticity and alignment of CSR activities with consumer values[20].

CSR supportive behaviors can take multiple forms, including:

- Donation behavior – Financial contributions to CSR initiatives[21].

- Advocacy and participation – Promoting CSR initiatives via word-of-mouth and social media[22].

- Ethical purchasing – Choosing brands that align with personal values and CSR commitments[23].

Despite these positive outcomes, not all CSR initiatives receive universal support. Some consumers remain skeptical, particularly when CSR efforts appear as public relations tactics rather than genuine commitments[24]. Scholars argue that CSR messaging is more effective when communicated through credible, relatable sources rather than traditional corporate channels[25].

This raises an important question: How do social media influencers contribute to CSR supportive behavior? Consumers often rely on influencers as trusted sources of information, making them pivotal in

shaping public perception of corporate CSR efforts. This study explores how the credibility of social media influencers mediates consumer engagement in CSR initiatives and their subsequent impact on brand loyalty.

This study examines CSR supportive behavior as consumers' willingness to endorse sports brands' CSR efforts through engagement and advocacy. Effective CSR communication is crucial for fostering consumer participation. However, consumer perception of CSR initiatives does not always lead to active engagement. This study evaluates CSR supportive behavior using three dimensions: word of mouth, commitment, and consumer engagement, with ten indicators[26].

2.3. Social media influencers' credibility in CSR communication

2.3.1. Conceptualizing social media influencer credibility

The credibility of social media influencers (SMIs) is determined by followers' evaluations of their expertise, trustworthiness, attractiveness, and relatability. Research suggests that influencer credibility plays a crucial role in shaping consumer purchasing decisions and brand attitudes[27].

Key variables used in influencer credibility studies include:

- Attractiveness, expertise, and similarity[28].

- Trustworthiness of influencer content[29].

- Credibility, quality of information, entertainment value, and likability[30].

- Influencer expertise and endorsement effectiveness[31].

Traditionally, influencer credibility has been studied in relation to consumer purchasing behavior, but its role in CSR communication remains largely unexplored. Given that consumers may lack the time or resources to independently evaluate CSR efforts, influencers serve as conduits for CSR messaging, increasing public awareness and engagement.

2.3.2. The mediating role of influencer credibility

Research indicates that influencer credibility acts as a mediator in consumer-brand relationships[32]. Influencer expertise and trustworthiness shape consumer attitudes toward CSR initiatives, which, in turn, influence brand loyalty.

Additionally, studies show that:

- Influencer credibility mediates consumer purchasing decisions and impulse buying[33].

- Credibility strengthens the link between advertisement content and purchase intention[34].

Despite these findings, the role of influencer credibility in CSR-driven brand loyalty remains underexplored. This study addresses this gap by examining how influencers' perceived trustworthiness and expertise enhance consumer engagement with CSR initiatives, ultimately fostering brand loyalty.

In this study, social media influencer credibility is defined as the perceived trustworthiness, expertise, and attractiveness of influencers promoting sports brands. Influencers transmit opinions, values, and behaviors to their audience, shaping consumer attitudes. This study assesses social media influencer credibility using four dimensions: trustworthiness, expertise, similarity, and attractiveness, with fourteen indicators[35].

2.4. Source credibility theory and brand loyalty

2.4.1. Understanding source credibility theory

Source Credibility Theory examines how the credibility of information sources influences audience perception and behavior. It suggests that highly credible sources are more persuasive and effective in shaping consumer attitudes[36]. The two main dimensions of source credibility are:

1. Expertise – The perceived knowledge and competence of the source.

2. Trustworthiness – The perceived integrity and honesty of the source.

In the digital age, consumers are bombarded with vast amounts of information, making source credibility a crucial factor in determining trust and consumer action[37].

2.4.2. Applying source credibility theory to csr communication

This study applies Source Credibility Theory to examine how influencer credibility mediates the relationship between CSR initiatives and brand loyalty. If influencers are perceived as highly credible, their endorsement of CSR efforts is likely to:

•   Enhance consumer trust in the brand.

•   Strengthen emotional connections between consumers and CSR initiatives.

•   Increase CSR supportive behavior and long-term brand loyalty.

Conversely, if influencers lack credibility, their association with a brand's CSR initiative may backfire, leading to skepticism, disengagement, and potential damage to brand reputation.

This study defines consumer brand loyalty as the extent to which consumers exhibit brand allegiance through attitudes, perceptions, and behaviors. Highly loyal consumers maintain a strong affiliation with a brand, make repeat purchases, and recommend it to others. This study measures consumer brand loyalty using four dimensions: brand image, perceived quality, consumer satisfaction, and brand loyalty, with twenty indicators[38].

2.5. Development of the research conceptual model and hypotheses

Supported by the previous extensive literature review, this study attempts to develop a more credible conceptual model which is presented in **Figure 1** below.
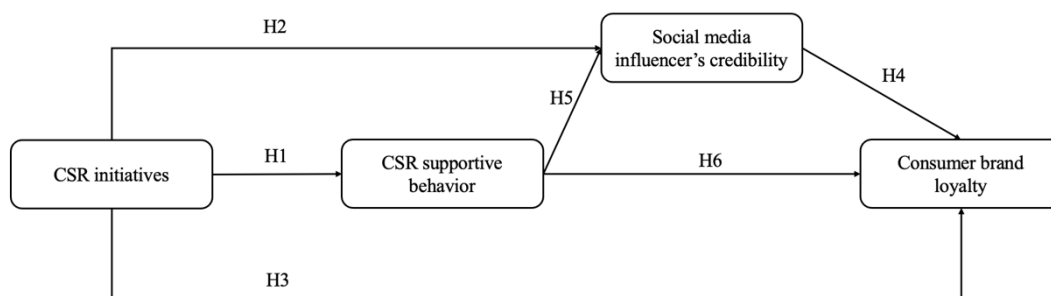

Figure 1. Conceptual model of the study.

2.5.1. Direct hypotheses

1) CSR initiatives and CSR supportive behavior

Studies in hospitality and sports industries have shown that consumers actively support and engage with CSR-driven brands by advocating for their initiatives and promoting them through social media[39]. Additionally, research suggests that environmentally sustainable CSR programs positively influence consumer motivation to support responsible corporate actions[40]. Given that CSR initiatives influence consumer engagement and advocacy behaviors, this study proposes the following hypothesis:

H1: CSR initiatives positively influence CSR supportive behavior.

2) CSR initiatives and social media influencer's credibility

Studies indicate that CSR efforts increase consumer confidence in influencers who advocate for ethical and socially responsible brands. Consumers perceive influencers endorsing CSR-driven campaigns as more trustworthy, particularly when their values align with the CSR objectives of a brand[41]. Furthermore, empirical findings suggest that when influencers promote CSR activities, they strengthen their reputation and reliability as opinion leaders[42]. Given the positive link between CSR initiatives and influencer credibility, this study proposes:

H2: CSR initiatives positively influence social media influencer's credibility.

3) CSR initiatives and consumer brand loyalty

CSR engagement fosters emotional connections with consumers, enhancing perceived brand authenticity. A study in the sports apparel industry found that CSR efforts directly improve consumer loyalty by strengthening ethical consumer-brand relationships[43]. Additionally, research in Spain indicates that CSR-driven consumer trust leads to higher customer satisfaction and brand retention[44]. Given the strong correlation between CSR initiatives and brand loyalty, this study proposes:

H3: CSR initiatives positively influence consumer brand loyalty.

4) Social media influencer's credibility and consumer brand loyalty

Research suggests that social media influencers strengthen brand loyalty by enhancing consumer trust and brand perception[52]. Consumers are more likely to stay loyal to brands that are endorsed by credible influencers, as influencers act as trusted intermediaries between brands and consumers[45]. Given this, the study hypothesizes:

H4: Social media influencer's credibility positively influences consumer brand loyalty.

5) CSR Supportive behavior and social media influencer's credibility

Consumers who support CSR initiatives often trust and engage more with influencers who advocate for socially responsible brands. Research suggests that CSR-driven consumer engagement enhances influencer credibility by reinforcing their ethical positioning and expertise[46].Given this relationship, the study proposes:

H5: CSR supportive behavior positively influences social media influencer's credibility.

6) CSR supportive behavior and consumer brand loyalty

Research suggests that CSR advocacy reinforces brand identity and social belonging, leading to stronger consumer-brand relationships[47]. Given this, the study proposes:

H6: CSR supportive behavior positively influences consumer brand loyalty.

2.5.2. Mediating hypotheses

1) The mediating role of social media influencer's credibility in CSR initiatives and consumer brand loyalty

CSR initiatives influence consumer perceptions, engagement, and trust, all of which contribute to brand loyalty. Social media influencers act as mediators in this relationship by enhancing CSR communication and reinforcing corporate credibility[32]. Research suggests that when credible influencers advocate for CSR initiatives, they strengthen consumer trust, engagement, and long-term brand commitment[33]. Given this, the study hypothesizes:

H7: Social media influencer's credibility mediates the relationship between CSR initiatives and consumer brand loyalty.

2) The mediating role of social media influencer's credibility in CSR supportive behavior and consumer brand loyalty

CSR supportive behavior fosters brand loyalty by reinforcing ethical engagement and consumer trust. Social media influencers bridge the gap between CSR advocacy and consumer-brand interactions by legitimizing CSR efforts and enhancing perceived brand authenticity[48]. Studies indicate that when influencers with high credibility support CSR-driven brands, consumers develop stronger brand loyalty and positive attitudes toward the brand[34]. Therefore, this study proposes the following hypothesis:

H8: Social media influencer's credibility mediates the relationship between CSR supportive behavior and consumer brand loyalty.

3. Methods

This study employs a structured methodological approach to ensure the reliability and validity of the research findings. The methods section outlines the determination of the study population and sample, sampling techniques, data collection procedures, and measurement instruments.

3.1. Study population and sampling

After determining the research and analysis units, we focused on consumers in major cities in China as the research subjects. This study aims to evaluate consumers' perception of sports brands and the factors that influence brand loyalty. To ensure the relevance of the research, the target population is limited to economically developed urban areas with strong purchasing power. The research focuses on the four major Chinese cities of Beijing, Shanghai, Guangzhou, and Shenzhen. These cities occupy an important position in both domestic and international markets due to their advanced infrastructure, level of technological development, and high socio-economic status. Local residents not only have strong purchasing power and high living standards, but also actively participate in interactions with social media influencers, making them ideal research subjects for this study.

The target population of this study is consumers who are passionate about sports brands and have formed consumption habits. The research subjects must meet the following conditions: have completed at least four online purchases of sports related products, ensuring sufficient brand awareness and loyalty; At the same time, participants are required to be active social media users in order to conduct in-depth analysis of the impact of internet celebrities on consumer behavior. The age range of the research subjects is set at 18-45 years old, which covers the core and potential consumer groups of sportswear and related products, and can more comprehensively reflect the current market situation. To increase participation, this survey was

conducted through a Chinese online research platform, and cash rewards were provided to respondents who completed the questionnaire.

3.2. Sampling framework and sample size

Given the impracticality of surveying the entire population, a sample was drawn for analysis. The study employs a convenience sampling method, which allows for efficient data collection from accessible respondents. Convenience sampling is particularly advantageous in exploratory research and when targeting specific consumer segments, as in this study.

The sample framework was established in two stages. First, the study identified an accessible sample source—sports brand consumers residing in the selected cities. Second, participants meeting the research criteria were recruited through an online survey. Given China's advanced digital infrastructure, a targeted paid consumer survey was conducted to ensure data representativeness.

The sample size was determined based on established statistical principles. According to Krejcie and Morgan's[49] sampling table, for a population exceeding one million, a sample size of 384 is considered adequate. Moreover, given that this study employs Structural Equation Modeling (SEM) with SmartPLS, sample size determination considered guidelines specific to SEM analysis. Research suggests that the appropriate sample size for SmartPLS-based SEM studies ranges from 200 to 460[50]. To balance accuracy and sensitivity, the study controlled the sample size within a range of 384 to 399 participants. However, considering potential data attrition and invalid responses, an additional 40% sample increase was applied, leading to a final sample size of 550 respondents.

Participants completed the survey via Google Forms to ensure anonymity and ease of participation. They were invited to join voluntarily and provided with detailed information about the study's objectives. To encourage participation, financial incentives were offered. Furthermore, strict confidentiality and anonymity protocols were maintained to ensure participant privacy.

3.3. Sampling technique

The study utilizes convenience sampling, a widely used non-probability sampling method. Convenience sampling was chosen for its efficiency, cost-effectiveness, and feasibility in reaching a targeted consumer segment. Although probability sampling techniques provide greater generalizability, convenience sampling allows for rapid data collection, particularly when studying a well-defined consumer group.

One key limitation of convenience sampling is its reduced ability to generalize findings beyond the sample population. However, in this study, this limitation is mitigated by the targeted nature of the research, which focuses specifically on sports brand consumers in major urban centers. Given the exploratory nature of the study, convenience sampling provides valuable insights into brand loyalty, social media influence, and consumer perceptions within a distinct market segment.

3.4. Data collection procedure

A quantitative research approach was adopted to systematically collect and analyze data. The primary data collection method was a structured questionnaire survey, which is widely regarded as an efficient tool for gathering large-scale consumer data. The advantages of using an online questionnaire include rapid data collection, cost efficiency, and flexibility in survey design.

The questionnaire was distributed to consumers in the four selected cities via an online survey platform. To ensure accessibility, respondents were given one to two weeks to complete the survey at their convenience. A contact email was provided within the questionnaire to allow respondents to reach out with

any inquiries. The online distribution method facilitated the recruitment of a large and demographically appropriate sample while minimizing geographical limitations.

3.5. Measurement instruments

The study employs the Likert scale for measurement, a widely used psychometric scale in consumer behavior research[51]. The Likert scale provides a reliable means of assessing subjective opinions by allowing respondents to indicate varying degrees of agreement or disagreement. A five-point Likert scale was utilized, ranging from (1) Strongly Disagree to (5) Strongly Agree. This format is commonly applied in studies examining consumer brand loyalty, CSR activities, and influencer credibility.

3.6. Survey design and structure

The questionnaire was carefully structured to maximize clarity and respondent engagement. It begins with an introductory section, which provides respondents with essential information about the study's purpose, ensuring that they understand the survey's significance before proceeding.

The survey is divided into six key sections:

1.   General Information – Capturing demographic details and purchasing behavior.

2.   CSR Programs – Evaluating consumers' perceptions of CSR initiatives.

3.   CSR Supportive Behavior – Measuring consumer engagement with CSR-related activities.

4.   Influencer Credibility – Examining the impact of social media influencers on brand loyalty.

5.   Consumer Brand Loyalty – Measuring loyalty tendencies toward sports brands.

The survey was designed in both English and Mandarin, ensuring that respondents could complete it in their preferred language. Given that the survey was conducted in China, the Mandarin version was essential to optimize comprehension and response accuracy.

Table 1. Latent construct, sub-construct, and number of items in the measurement model.

Latent Construct	Sub-construct	Number of Items
CSR Initiatives	CSR to Environment	6
	CSR to Society	3
	CSR to Stakeholders	5
CSR Supportive Behavior	Word of Mouth	3
	Commitment	3
	Consumer Participation	4
Social Media Influencers' Credibility	Trustworthiness	4
	Expertise	4
	Similarity	3
	Attractiveness	3
Customer Brand Loyalty	Brand Image	4
	Perceived Quality	5
	Consumer Satisfaction	5
	Brand Loyalty	6

3.7. Data processing and analysis

The collected data were coded and analyzed using SPSS v27 and SmartPLS 4, ensuring compliance with statistical and methodological standards. SPSS v27 was used for initial data preparation, while SmartPLS 4 facilitated Structural Equation Modeling (SEM) analysis. The use of SEM allowed for the examination of complex relationships among variables, ensuring robust and reliable findings. By adopting a comprehensive methodological framework, this study ensures the accuracy and relevance of its findings, contributing valuable insights into consumer behavior, social media influence, and brand loyalty in China's sports apparel market.

4. Results

4.1. Response rate

The study employed a convenience sampling method, distributing 137 questionnaires to consumers in Beijing and Shanghai and 138 questionnaires to those in Shenzhen and Guangzhou. Over a two-month data collection period, all 550 questionnaires were successfully collected, resulting in a 100% response rate. Notably, no questionnaires were deemed unusable, and there were no instances of incomplete responses. Consequently, the entire dataset of 550 responses was considered valid for analysis. The number of usable responses was deemed sufficient to conduct all necessary statistical analyses, ensuring the robustness of the study's findings.

Table 2. Summary of the response rate.

Questionnaires Status	Count	Percentage (%)
Distributed	550	100
Not Returned	0	0
Returned	550	100
Unusable	0	0
Total Usable Questionnaires	550	100

4.2. Assumption of normality in multivariate analysis

Skewness and kurtosis were assessed to examine the normality of the dataset. Skewness measures the asymmetry of a distribution, where positive values indicate a longer or thicker right tail, and negative values suggest the opposite. Kurtosis quantifies the extent to which a distribution deviates from normality by measuring the presence of heavy tails or extreme values. A kurtosis value of 3 indicates a normal distribution, while values below 3 suggest a flatter distribution and those above 3 indicate a more peaked distribution, implying a higher likelihood of extreme values[53].

Table 3. Skewness and kurtosis results for all constructs (n = 550).

	N	Mean	Skewness	Std. Error	Kurtosis	Std. Error
CSRI	550	3.347	0.336	0.104	-0.659	0.208
CSRSB	550	3.324	0.293	0.104	-0.886	0.208
SMIC	550	3.334	0.463	0.104	-0.723	0.208
CBL	550	3.354	0.469	0.104	-0.690	0.208

To assess normality, skewness and kurtosis were calculated for all constructs based on the 550 collected responses. The results, as presented in **Table 3**, show that the kurtosis values range from 0 to +0.469, while skewness values range from 0 to -0.886. Both measures are close to zero, indicating that the data conforms

closely to a normal distribution. This suggests that the variables exhibit no significant deviations from normality, ensuring their suitability for further statistical analysis.

4.3. Descriptive analysis

A comprehensive summary of the demographic characteristics of all participants is presented in **Table 3**. Additionally, **Table 4** provides key statistical measures, including the mean, standard deviation, standard error, and variance for each variable. Table 4.5 presents the results of the correlation analysis, offering insights into the relationships between the studied variables.

Table 3. Demographic profile of respondents.

Gender	Frequency	Percentage (%)
Female	283	51.5
Male	267	48.5
Age		
Under18 years	66	12.0
18-24 years	82	14.9
25-30 years	133	24.2
31-40 years	96	17.5
41-50 years	61	11.1
51-60 years	54	9.8
Above 61years	58	10.5
Social Economic Status (RMB)		
Under 3,000 a month	105	19.1
3,000-5,000 a month	152	27.6
5,000-8,000 a month	92	16.7
Above 8,000 a month	201	36.5
Academic qualification		
Junior high school	49	8.9
Undergraduate	107	19.5
University college	123	22.4
High school/Junior college /Technical school	231	42.0
Master's Degree and above	34	6.1
Primary schools and below	6	1.1
Frequency of use of social media		
At least once a day	203	36.9
once a month	2	0.4
once a week	25	4.5
At least once an hour	320	58.2
Online shopping frequency		
1-4 times per month	76	13.8
once a month	296	53.8
Less than 1 time per month	150	27.3
More than 4 times per month	28	5.1

The survey included 550 participants from four major Chinese cities, categorized by socio-economic level. Among them, 36.5% reported monthly expenditures exceeding 8,000 RMB, while 19.1% spent less than 3,000 RMB. The remaining participants were distributed between 3,000–5,000 RMB (27.6%) and 5,000–8,000 RMB (16.7%).

Social media usage was highly prevalent, with 58.2% engaging online at least once per hour, while only 0.4% reported minimal usage. This underscores the importance of social media influencers' credibility in shaping consumer behavior. Despite widespread interest in sportswear, 53.8% of participants purchased sports apparel only once a month, while 27.3% bought it even less frequently.

Education levels were evenly distributed, with the largest group (42%) having completed high school, junior college, or technical school, while only 1.1% had primary education or below. Undergraduate and university college graduates comprised 19.5% and 22.4%, respectively, whereas junior high school graduates (8.9%) and those with a master's degree or higher (6.2%) were less represented.

Gender distribution was balanced, with 51.5% male and 48.5% female respondents. The most represented age group was 25–30 years (24.2%), while other age categories were relatively evenly spread, each comprising approximately 10–15% of the sample.

Table 4. Mean, standard deviation, standard error and variance for variable.

Variable	Mean	SE	SD	Variance
CSR Initiative	3.346	0.031	0.744	0.555
CSR Supportive Behavior	3.323	0.033	0.785	0.618
Social Media Influencers' Credibility	3.334	0.031	0.736	0.543
Consumer Brand Loyalty	3.354	0.029	0.702	0.493

N=550

Table 5. Correlation analysis.

	1	2	3	4
1. CSR Initiative	1			
2. CSR Supportive Behavior	.666**	1		
4. Social Media Influencers' Credibility	.685**	.718**	1	
5. Consumer Brand Loyalty	.651**	.671**	.676**	1

Descriptive statistics provide insights into the data distribution and reliability of the dataset. The mean values for CSR Initiative, CSR Supportive Behavior, Social Media Influencer's Credibility, and Consumer Brand Loyalty are 3.346, 3.323, 3.334, and 3.354, respectively. The small SE and low SD indicate a stable and normally distributed dataset, ensuring its suitability for hypothesis testing and structural modeling.

Correlation analysis reveals significant relationships among key variables. CSR Initiative is strongly correlated with Social Media Influencer's Credibility (r = 0.685) and Consumer Brand Loyalty (r = 0.651), while CSR Supportive Behavior shows a strong association with Social Media Influencer's Credibility (r = 0.718) and Consumer Brand Loyalty (r = 0.671). Additionally, Social Media Influencer's Credibility and Consumer Brand Loyalty exhibit a strong correlation (r = 0.676).

These findings underscore the role of CSR initiatives in enhancing influencer credibility, which in turn strengthens consumer loyalty.

4.4. Assessment of reflective measurement model

This study evaluated the appropriateness of the measurement model using Composite Reliability and Convergent Validity.

4.4.1. Composite reliability

A Cronbach's alpha value of 0.80 is seen good, 0.70 is acceptable, and 0.60 is regarded as poor. A Cronbach's alpha value of 0.70 was employed as the threshold in this study, deemed statistically sufficient.

Table 6 displays the factor loadings, Cronbach's alpha, and composite reliability (CR) for the revised measurement model.

Table 6. Factor loadings, cronbach's alpha, and composite reliability (CR).

Construct	Item	Factor Loading	Cronbach's alpha	CR (Above .7)
CSRI	CSRI1	.730	0.892	0.909
	CSRI2	.745		
	CSRI3	.762		
	CSRI4	.772		
	CSRI5	.730		
	CSRI6	.707		
	CSRI7	.731		
	CSRI8	.766		
	CSRI9	.697		
	CSRI10	.724		
	CSRI11	.754		
	CSRI12	.758		
	CSRI13	.771		
	CSRI14	.758		
CSRSB	CSRSB1	.797	0.861	0.889
	CSRSB2	.712		
	CSRSB3	.782		
	CSRSB4	.651		
	CSRSB5	.788		
	CSRSB6	.718		
	CSRSB7	.727		
	CSRSB8	.728		
	CSRSB9	.729		
	CSRSB10	.713		
SMIC	SMIC1	.755	0.88	0.923
	SMIC2	.738		
	SMIC3	.740		
	SMIC4	.778		
	SMIC5	.767		
	SMIC6	.737		
	SMIC7	.748		
	SMIC8	.773		

Construct	Item	Factor Loading	Cronbach's alpha	CR (Above .7)
	SMIC9	.764		
	SMIC10	.772		
	SMIC11	.778		
	SMIC12	.755		
	SMIC13	.738		
	SMIC14	.720		
CBL	CBL1	.729	0.907	0.919
	CBL2	.737		
	CBL3	.704		
	CBL4	.773		
	CBL5	.757		
	CBL6	.742		
	CBL7	.727		
	CBL8	.751		
	CBL9	.750		
	CBL10	.754		
	CBL11	.754		
	CBL12	.756		
	CBL13	.770		
	CBL14	.783		
	CBL15	.736		
	CBL16	.756		
	CBL17	.748		
	CBL18	.767		
	CBL19	.749		
	CBL20	.771		

Table 6. (*Continued*)

Table 6 indicates that the composite reliability (CR) values for all variables in the measurement model (.909, .889, .923, .919) above the acceptable threshold of 0.70 (Lai, 2021).These experiments demonstrate that the final measurement model possesses sufficient convergent validity.

4.4.2. Convergent validity

Convergent validity denotes the extent to which indicators of a specific construct converge or exhibit a significant degree of shared variance. Convergent validity is assessed through the items (factor loadings), reliability, and average variance extracted (AVE).

In this study, all constructs were assessed using validated instruments. The study indicates that the acceptable threshold for factor loading should be 0.6 or higher. Nevertheless, the research indicates that any item exhibiting a factor loading below 0.60 and a multiple squared correlation (R^2) under 0.40 ought to be excluded from the measurement model. In this investigation, the factor loadings for all items were determined to exceed 0.6, with only two items falling below 0.7. The R^2 for all items exceeded 0.40.

Consequently, the model in this investigation was well-suited, necessitating no item removal, and the fitness index satisfied the minimal necessary threshold.

Table 7. Factor loading, r-square, AVE.

Construct	Item	Factor Loading	R-square	AVE
CSRI	CSRE1	.730	0.702	0.671
	CSRE2	.745		
	CSRE3	.762		
	CSRE4	.772		
	CSRE5	.730		
	CSRE6	.707		
	CSRS1	.731	0.470	0.706
	CSRS2	.766		
	CSRS3	.697		
	CSRSH1	.724	0.596	0.686
	CSRSH2	.754		
	CSRSH3	.758		
	CSRSH4	.771		
	CSRSH5	.758		
CSRSB	WOM1	.797	0.533	0.741
	WOM2	.712		
	WOM3	.782		
	CM1	.651	0.571	0.727
	CM2	.788		
	CM3	.718		
	CP1	.727	0.702	0.723
	CP2	.728		
	CP3	.729		
	CP4	.713		
SMIC	TW1	.755	0.621	0.722
	TW2	.738		
	TW3	.740		
	TW4	.778		
	EP1	.767	0.542	0.712
	EP2	.737		
	EP3	.748		
	EP4	.773		
	SM1	.764	0.478	0.727
	SM2	.772		
	SM3	.778		

Construct	Item	Factor Loading	R-square	AVE
	AT1	.755	0.519	0.714
	AT2	.738		
	AT3	.720		
CBL	BI1	.729	0.505	0.705
	BI2	.737		
	BI3	.704		
	BI4	.773		
	PQ1	.757	0.548	0.671
	PQ2	.742		
	PQ3	.727		
	PQ4	.751		
	PQ5	.750		
	CS1	.754	0.492	0.678
	CS2	.754		
	CS3	.756		
	CS4	.770		
	CS5	.783		
	BL1	.736	0.579	0.672
	BL2	.756		
	BL3	.748		
	BL4	.767		
	BL5	.749		
	BL6	.771		

Table 7. (*Continued*)

Table 7 indicates that the convergent validity of this study is satisfactory, determined through the unidimensionality of items (factor loadings), reliability, multiple squared correlations (R^2), and average variance extracted (AVE). All items in this investigation exhibited factor conformity above 0.6, composite reliability (CR) surpassing 0.8, multiple squared correlations (R^2) greater than 0.4, and average variance extracted (AVE) exceeding 0.6.

4.5. Establishing higher-order constructs

Higher-order constructs (HOC) in structural equation modeling (SEM) provide a broader conceptual framework by integrating multiple lower-order constructs (LOC). These constructs can be either reflective or formative, depending on their relationship with lower-order components. This study adopts a reflective model, wherein higher-order constructs are indicated by multiple lower-order constructs.

Confirmatory Factor Analysis (CFA) was conducted to validate the measurement model and assess whether observed data align with the theoretical constructs. CFA is crucial for ensuring measurement invariance, confirming that constructs are assessed consistently across different groups. The results of CFA, presented in **Table 8**, demonstrate strong model fit.

The Chi-square statistic (5115.092, p = 0) is sensitive to large sample sizes, making reliance on this metric alone insufficient. Instead, Chi-square/df (1.959) falls within the recommended range (<3), indicating a good fit. The RMSEA value (0.042) is below the threshold of 0.06, confirming a well-fitting model. The SRMR score (0.039) is within acceptable limits (<0.08), further supporting model adequacy. Additionally, the CFI (0.901) meets the standard threshold (>0.90), reinforcing model validity.

These results confirm that the CFA model exhibits strong goodness-of-fit, supporting the validity and reliability of the higher-order constructs in this study.

Table 8. CFA analysis.

	Estimated model
Chi-square	5115.092
Degrees of freedom	2611
P value	0
ChiSqr/df	1.959
RMSEA	0.042
RMSEA LOW 90% CI	0.04
RMSEA HIGH 90% CI	0.043
SRMR	0.039
CFI	0.901

N=550

4.6. Direct relationship – the two stage approach

SEM was employed to examine the 6 hypotheses proposed in this thesis. The analytical results were utilized to determine whether to accept or reject the hypotheses, based on the standardized path coefficients of the associations and the significance level of the C.R values. The findings of these hypotheses are provided in the following sections.

Path analysis is a technique employed in SEM to examine causal connections between variables. Path plotting and path coefficient estimation assist researchers in comprehending and quantifying the impacts of various factors by illustrating the relationships between variables. By graphing the model and conducting linear regression analysis. Utilizing the route coefficients, the researcher can ascertain the magnitude of the correlation between the variables and present it in the table shown below.

Table 9. Path analysis.

Causal Path	Path coefficients
CBL -> BI	0.711
CBL -> BL	0.761
CBL -> CT	0.702
CBL -> PQ	0.74
CSRI -> CBL	0.176
CSRI -> CH	0.772
CSRI -> CI	0.838
CSRI -> CS	0.685
CSRI -> CSRSB	0.667

Causal Path	Path coefficients
CSRI -> SMIC	0.685
CSRI -> SMIC	0.372
CSRSB -> CBL	0.232
CSRSB -> CM	0.755
CSRSB -> CP	0.838
CSRSB -> SMIC	0.472
CSRSB -> WM	0.73
SMIC -> AT	0.721
SMIC -> CBL	0.209
SMIC -> EP	0.736
SMIC -> SM	0.691
SMIC -> TW	0.788

Table 9. (*Continued*)

Using the table above, one can evaluate the path coefficients between variables. Given that SmartPLS is unable to directly compute the significance between variables, it will be computed via Bootstrapping. Subsamples of 5000 will be chosen for parallel processing.

Table 10. Structural equation modelling.

Causal Path	β	S.E.	t	P values	Status
CSRI -> CBL	0.176	0.042	4.223	0.000	Significantly positively related
CSRI -> CSRSB	0.667	0.024	27.538	0.000	Significantly positively related
CSRI -> SMIC	0.685	0.036	13.793	0.000	Significantly positively related
CSRSB -> CBL	0.232	0.043	5.425	0.000	Significantly positively related
CSRSB -> SMIC	0.472	0.034	13.793	0.000	Significantly positively related
SMIC -> CBL	0.209	0.043	4.830	0.000	Significantly positively related

The present work employed structural equation modelling to examine the causal relationships among variables. The path coefficients (β) represent the standardized magnitude of the impact of the independent factors on the dependent variable. The standard error (S.E.) quantifies the accuracy of estimating the coefficients, and the t-value is employed to evaluate the significance of these coefficients. A p-value less than 0.05 is regarded to be statistically significant.

The structural equation modeling results indicated statistically significant positive correlations across all pathways, supporting the hypotheses and confirming the strong interrelations among the variables.

The CSR initiative (CSRI) variable has a significant impact on CSR supportive behavior (CSRSB), with a standardized path coefficient of 0.667 and a t-value of 27.538 (p<0.001). This indicates that consumers are more likely to adopt supportive behavior when they hold a positive attitude towards CSR initiatives.

The study found that CSRSB has a significant impact on the credibility of social media influencers, with a standardized path coefficient of 0.472 and a t-value of 13.793 (p<0.001). This indicates that influencers who actively participate in corporate social responsibility support behavior are considered more credible,

further confirming the view that corporate social responsibility participation can enhance the legitimacy and credibility of social media influencers.

The path coefficient between SMIC and Consumer Brand Loyalty (CBL) is 0.209, with a t-value of 4.830 (p=0.001), confirming that the credibility of social media influencers has a significant positive impact on brand loyalty. When consumers believe that influencers are more trustworthy, their loyalty to the recommended brand will increase accordingly.

The direct impact of CSRSB on CBL is significant, with a path coefficient of 0.232 and a t-value of 5.425 (p<0.001). This indicates that CSR support behavior can directly enhance brand loyalty, and consumers who actively participate in CSR activities often show stronger loyalty to socially responsible brands.

The research results indicate that corporate social responsibility (CSR) initiatives can not only enhance brand loyalty through direct interaction between consumers and brands, but also strengthen this loyalty by enhancing the credibility of social media opinion leaders, highlighting the key role of opinion leader credibility in CSR driven brand interaction.

Overall, the findings indicate that CSRI have a direct impact on CBL. Additionally, they indirectly influence brand loyalty through mediating factors such as improving increasing the credibility of social media influencers. The approaches offer crucial empirical evidence to inform future studies on the correlation between CSR and CBL. In SEM, a direct relationship refers to a link that exists directly between an exogenous latent variable and an endogenous latent variable. Consequently, six hypotheses that align with the research topics has been validated. Overall, CSR initiatives exert substantial direct and indirect influences on CSR supportive behavior and consumer brand loyalty. The effect is further intensified by the mediating roles of social media influencer's credibility. The social media influencer's credibility plays crucial roles in fostering consumer brand loyalty. CSR-supportive behaviors significantly influence many routes, including social media influencer's credibility and consumer brand loyalty.

4.7. Testing the mediating effect of employee-organization relationship (EOR)

Indirect or mediated interactions occur when a third variable intervenes between exogenous and endogenous latent variables. This section examines the mediating effects of the latent components of this study: social media influencer's credibility. Two possibilities are given regarding the mediating variables:

H7: Social media influencer's credibility mediates the relationship between CSR initiatives and consumer brand loyalty.

H8: Social media influencer's credibility mediates the relationship between CSR supportive behavior and consumer brand loyalty.

This work employed SmartPLS4 structural equation modeling to investigate hypothesis 7 and 8. The bootstrap method was employed in this study to assess the mediation effect. To comprehend the mediating function of the credibility of social media influencers on the influence of CSR activities and CSR supportive behaviors on consumer brand loyalty, distinct indirect effects were examined. The following are the confidence intervals for each indirect effect:

Table 11. Confidence intervals for each indirect effect.

Causal Path	Confidence Interval
CSRI -> SMIC -> CBL	(0.045,0.114)
CSRSB -> SMIC -> CBL	(0.058,0.143)

This study investigated the influence of social media influencers as mediating variables by analyzing the direct, indirect, and total effects of CSR activities and CSR-supportive behaviors on consumer brand loyalty. Comprehensive results for each pathway are shown below:

Table 12. Comprehensive results for each pathway.

Causal Path	Direct Effect (t-value)	Indirect Effects (t-value)	Total Effects (t-value)	P	VAF	interpretation	Results
CSRI -> SMIC -> CBL	0.176 （4.223）	0.078 （4.345）	0.477 （15.002）	0	44%	Partial Mediation	H7 supported
CSRSB -> SMIC -> CBL	0.232 （5.425）	0.099 （4.511）	0.198 （7.74）	0	43%	Partial Mediation	H8 supported

The confidence interval for the specific indirect effect of CSRI on CBL through SMIC is (0.045, 0.114). This further suggests that the indirect effect is both positive and statistically significant. The direct effect of CSRI on SMIC and subsequently on CBL was 0.176, accompanied by a t-value of 4.223; the indirect effect was 0.078 with a t-value of 4.345; and the total effect was 0.477 with a t-value of 15.002. A p-value of 0 and a VAF of 44% suggested the existence of partial mediation. Hypothesis H7 received support.

The confidence range for the specific indirect impact of CSRSB on CBL through SMIC was (0.058, 0.143). The findings demonstrated that this indirect effect was both positive and significant. The direct effect of CSRSB on SMIC and subsequently on CBL was 0.232, accompanied by a t-value of 5.425. The indirect effect was 0.099, with a t-value of 4.511, while the total effect was 0.198, supported by a t-value of 7.74. The p-value was 0, and the Variant Allele Frequency was 43%, indicating a partial mediating impact. Consequently, hypothesis H8 was validated.

The findings indicated that SMIC partially moderated the impacts of CSRI and CSRSB on CBL across all routes. Elevated VAF values further corroborated the existence of a mediating effect, and all hypotheses were validated by statistical significance ($p < 0.01$).

5. Conclusions and limitations

5.1. Conclusions of direct hypotheses

This study delves into the direct correlation between corporate social responsibility (CSR) initiatives, supportive behavior, social media influencer credibility, and consumer brand loyalty. All direct hypotheses are supported by structural equation modeling analysis results. Research data shows that the standardized path coefficient of CSR measures on CSR support behavior is 0.667 (t=27.538, p<0.001), indicating that when consumers recognize and appreciate the positive actions of brands in the CSR field, they are more inclined to express support through spreading positive word-of-mouth, advocating brand social values, and other means. This result confirms that the investment of enterprises in the field of CSR not only benefits society, but also effectively enhances consumer participation and builds a good social interaction foundation for brands.

The study also found that corporate social responsibility (CSR) initiatives can significantly enhance the credibility of social media influencers, with a standardized path coefficient of 0.685 (t=13.793, p<0.001). Consumers often believe that internet celebrities who actively promote brands with strong CSR commitments are more authentic and reliable. This indicates that CSR practices indirectly enhance the credibility and endorsement of internet celebrities by conveying the moral values and social responsibility of the brand, thereby strengthening consumers' trust chain in the brand. CSR measures have a positive impact on consumer brand loyalty (β=0.176, t=4.223, p<0.001). Although the path coefficient is relatively small, it

still confirms the fundamental role of CSR measures in cultivating brand loyalty - CSR practices help to enhance consumer trust and brand retention, while other factors such as internet celebrity credibility play a stronger amplifying role in shaping long-term loyalty.

Further research confirms that the credibility of social media influencers has a significant impact on consumer brand loyalty (β=0.209, t=4.830, p<0.001). Consumers are more inclined to trust and continue to support brands that have gained the endorsement of trusted internet celebrities, highlighting the core value of internet celebrities as intermediaries of trust between brands and consumers. The positive impact of CSR support behavior on the credibility of internet celebrities is significant (β=0.472, t=13.793, p<0.001), indicating that internet celebrities who actively participate in CSR related activities are seen as more trustworthy and in line with ethical values, and their opinions are more persuasive. The final results showed that CSR support behavior had a significant direct impact on consumer brand loyalty (β=0.232, t=5.425, p<0.001), confirming that consumers can deepen their emotional connection with the brand and form long-term stable brand loyalty by supporting brand social responsibility initiatives.

5.2. Conclusions of indirect hypotheses: The mediating role of social media influencer's credibility

The results of the mediation test on the credibility of social media influencers in this study show that hypotheses H7 and H8 are supported, indicating that SMIC partially mediates between CSRI and CBL, as well as between CSRSB and CBL. From the data, the indirect effect of CSRI on CBL through SMIC is 0.078 (t=4.345, p<0.001), and the variance explained ratio (VAF) is 44%; The indirect effect of CSRSB on CBL through SMIC is 0.099 (t=4.511, p<0.001), and the VAF is 43%, indicating that SMIC can significantly transmit the impact of CSRI and CSRSB on brand loyalty, and the mediating effect accounts for a considerable proportion of the total effect.

From a theoretical perspective, this result aligns with the core viewpoint of source credibility theory: highly credible sources (trustworthy internet celebrities) can enhance the persuasiveness of information dissemination. CSR initiatives themselves convey the social values and moral commitments of a brand, but consumers' perception of such abstract values is easily influenced by the credibility of information sources. When trusted internet celebrities act as intermediaries to spread CSR information, on the one hand, it reduces the cost of information screening for consumers, and on the other hand, it strengthens the authenticity of CSR measures through the professionalism, attractiveness, and other characteristics of internet celebrities, thereby promoting consumers' trust in the brand and converting it into loyalty. The intermediary path through which CSR support behavior affects brand loyalty by enhancing the credibility of internet celebrities reflects the transmission logic of "behavior cognition attitude" - when consumers observe that internet celebrities actively participate in CSR support behavior, they will strengthen their recognition of the ethical stance and values of internet celebrities, enhance their credibility cognition, and this cognition will be transferred to their attitude towards the brands recommended by internet celebrities, ultimately consolidating brand loyalty.

Based on the above research results, brands should adopt more actionable strategies in practice: establish a matching mechanism between CSR measures and internet celebrity traits, prioritize selecting internet celebrities who align with the brand's CSR values and have sustained attention to environmental protection, public welfare, and other fields for cooperation, such as inviting internet celebrities who focus on sustainable lifestyles to promote brand environmental CSR projects and enhance the fit of information dissemination; Design CSR activities that involve internet celebrities, encourage them to deeply participate in CSR projects through personal experience, on-site visits, and other means, and transform CSR support behaviors into tangible content output, such as allowing internet celebrities to record the entire process of

brand public welfare donations and environmental production, enhancing consumers' trust in the authenticity of CSR initiatives; Build a hierarchical communication system for CSR information, and design differentiated CSR communication content for different levels of internet celebrities (head, waist, and tail). Head level internet celebrities focus on the widespread popularization of CSR concepts, waist level internet celebrities focus on the detailed interpretation of CSR measures, and tail level internet celebrities focus on word-of-mouth communication based on real entities, forming a comprehensive credibility endorsement network; Establish a feedback mechanism for consumer CSR participation, display and respond to consumer CSR support behaviors (such as public welfare donations and environmental suggestions) through influencer channels, strengthen the emotional connection between consumers, brands, and influencers, such as publicizing the results of consumer CSR activities through influencer platforms, and enhancing consumer participation and identification.

5.3. Limitations and future research directions

Although this study provides important insights, several limitations still need to be noted. The study focuses on the credibility of internet celebrities, but does not include other key factors that affect consumer loyalty, such as brand reputation, peer recommendations, and digital interaction strategies. Future research can integrate these factors and construct more comprehensive models, such as exploring the impact of the interaction between brand reputation and internet celebrity credibility on the effectiveness of CSR initiatives. The study only used quantitative methods, which may be effective in statistical analysis, but may not fully reflect consumers' perception of the credibility of internet celebrities. Through qualitative methods such as interviews or focus groups, we can gain a deeper understanding of how consumers evaluate the credibility and authenticity of internet celebrities, such as exploring whether consumers pay more attention to the professionalism, past behavior, or content presentation form of internet celebrities when judging their CSR communication credibility. This study is a cross-sectional study and failed to track the dynamic changes in the credibility of internet celebrities and consumer loyalty. Adopting a longitudinal research method can more accurately evaluate the evolution process of internet celebrity credibility and its lasting impact on consumer brand loyalty, such as tracking the differences in the impact of the same CSR initiative on consumer loyalty at different stages of internet celebrity dissemination. The study only focuses on Chinese sports brands, which may limit the generalizability of the research results to other markets, cultures, and industries.

Future research should break through the limitations of the sportswear industry and delve into the impact of internet celebrity credibility on brand loyalty driven by corporate social responsibility in different fields such as luxury goods, technology products, and healthcare. A longitudinal study can track the dynamic changes in the credibility of internet celebrities and their moderating effect on consumer behavior. It is necessary to compare and analyze the differences in credibility, trust, and user engagement between micro influencers and virtual influencers. The rise of artificial intelligence driven internet celebrities and interactive digital experiences may inject new vitality into corporate social responsibility marketing, and these phenomena deserve our continued attention.

Cross cultural research can reveal how different regions and cultural backgrounds affect consumers' trust in social media influencers. Given that the credibility of internet celebrities is shaped by cultural norms, a comparative analysis of the role of internet celebrity trust in brand loyalty driven by corporate social responsibility can be conducted by examining the Western, Middle Eastern, or Southeast Asian markets.

Declaration of conflicting interests

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Appendix 1: Questionnaire

Dear Participants

Corporate Social Responsibility (CSR) initiatives are now an important part of business operations and strategy, with companies and brands no longer competing solely through price and quality of goods. Whether better CSR initiatives are recognized by consumers is a matter of concern. Especially in the sportswear industry, health is an important topic for consumers and sportswear brands have been focusing on environmental protection and health. In addition to CSR, social media influencers may also be important factors influencing consumer loyalty.

Your answers are important to have a better understanding of the factors that influence consumer brand loyalty and the relationship between business, society, and consumers. The results of your answers can help companies to improve their CSR initiatives and create a healthy competitive environment between them. Your participation is completely voluntary.

It will take approximately 15 minutes to complete this survey. The information you provide, as well as your contact information, will be kept strictly confidential. If you have any questions, would like more information, or would like to see a summary of the results Please contact me via zhuteng47@gmail.com.

Thank you very much for your contribution!

ZHU TENG

	General Information								
	Genders	Male		Female					
	Age	18-30	31-45		45above				
	Number of sports brands purchased online	Once a month	1- 4 a month		More than 4				
	Frequency of use of social media	Once a month	Once a week	At least once a day	At least in every hour				
	Social economic status	3000-5000 （RMB）	5000-8000 （RMB）		8000above （RMB）				
	Academic qualification	Secondary Education	Undergraduate		Postgraduate				
	Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree					1	2	3	4	5
	Corporate social responsibility initiatives CSR to environment								
CSRE1	The sports brand promotes environmental protection to its customers.								
CSRE2	The sports brand has an environmentally friendly design to protect the natural landscape.								
CSRE3	The sports brand implements special program to reduce consumption, such as reducing the use of disposable items.								
CSRE4	The sports brand implements special program to improve public safety.								

CSRE5	The sports brand implements special program to effectively conserve energy.					
CSRE6	The sport's brands implement special program to reduce waste emissions.					
	CSR to society					
CSRS1	The sports brand contributes to activities that promote the well-being of society.					
CSRS2	The sports brand invests in creating a better life for future generations.					
CSRS3	The brand aims for sustainable growth.					
	CSR to stakeholders					
CSRSH1	This sports brand respects the rights of consumers.					
CSRSH2	This sports brand provides customers with comprehensive information about its products.					
CSRSH3	Customer satisfaction is important to this sports brand.					
CSRSH4	The sports brand provides a healthy working environment for its employees.					
CSRSH5	The sports brand is fully and legally compliant.					
	CSR Supportive Behavior Word of mouth					
WOM1	I Speak well of the sports brand to others.					
WOM2	I encourage friends and relatives to do business with the sports brand.					
WOM3	I recommend the sports brand to people who ask for my advice.					
	Commitment					
CM1	I am loyal to the sports brand.					
CM2	I am willing to go the extra mile to remain a customer of the sports brand.					
CM3	I will continue to buy the sports brand even if it is more difficult to buy it.					
	Consumer participation					
CP1	If I have a useful idea about how to improve my favorite sports brand, I will tell the company about it.					
CP2	I would give constructive suggestions to my favorite sports brand about how to improve its products.					
CP3	I will tell the sports brand what I want.					
CP4	I spend a lot of time-sharing information about that sports brand with others on social media platforms.					
	Social Media Influencers' Credibility Trustworthiness					
TW1	I feel the endorser was honest.					
TW2	I consider the endorser trustworthy.					
TW3	I feel the endorser was truthful.					
TW4	I consider the endorser earnest.					
	Expertise					
EP1	I feel the endorser knows a lot about the product.					
EP2	I feel the endorser is competent to make assertions about the product.					
EP3	I consider the endorser an expert on the product.					
EP4	I consider the endorser sufficiently experienced to make assertions about the product.					
	Similarity					
SM1	The endorser and I have a lot in common.					
SM2	The endorser and I are a lot alike.					

SM3	I can easily identify with the endorser.					
	Attractiveness					
AT1	I consider the endorser very attractive.					
AT2	I consider the endorser very stylish.					
AT3	I think the endorser is good looking.					
	Customer brand loyalty Brand Image					
BI1	I believe the brand image that I choose is outstanding gives me a good impression.					
BI2	I believe the brand I choose has a high reputation for quality.					
BI3	This brand comes to my mind immediately when I want to purchase a sportswear.					
BI4	The value of this brand gives me confidence to its products.					
	Perceived Quality					
PQ1	The likely quality of the brand is extremely high.					
PQ2	I believe the performance of the brand is compatible to my expectation.					
PQ3	Product attributes can fulfill my functional emotional needs.					
PQ4	I believe that product's country of origin does determine the quality of the product.					
PQ5	The brand I choose has overall better quality than other brands.					
	Consumer Satisfaction					
CS1	I am satisfied with specific experience with the brand.					
CS2	I am satisfied with my decision to purchase from this brand.					
CS3	My choice to use this brand has been a wise one.					
CS4	I think that I did the right thing when I used this brand.					
CS5	This brand does a good job of satisfying my needs.					
	Brand Loyalty					
BL1	This brand would be my first choice.					
BL2	I consider myself to be loyal to this brand.					
BL3	I would like to use the current brand more than another brand.					
BL4	I recommend this brand to someone who seeks my advice.					
BL5	I say positive things about this brand to other people.					
BL6	I am willing to pay premium price over competing products to be able to purchase this brand again.					