

The Impact Mechanism of Sports Scandals on Consumer Brand Attitudes: A Study Based on the Affective Arousal Theory

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Abstract: This paper, based on the theory of emotional arousal and with brand image as a mediating variable, constructs a theoretical model of the impact of sports scandals on consumer brand attitudes. It collects 212 valid data through questionnaires and conducts empirical research using regression analysis and the Bootstrap method for mediating effect testing. The results show that: (1) Sports scandals have significant negative impacts on both brand image ($\beta=0.687$, $p<0.001$) and brand attitude ($\beta=0.712$, $p<0.001$); (2) Brand image has a significant positive effect on brand attitude ($\beta=0.760$, $p<0.001$); (3) Brand image plays a partial mediating role between sports scandals and brand attitude, with an indirect effect value of 0.4299 (the Bootstrap 95% confidence interval is [0.2839, 0.5659]). The study further reveals that emotional arousal influences consumer brand attitudes through both a “direct path” (negative emotions \rightarrow brand attitude) and an “indirect path” (negative emotions \rightarrow brand image \rightarrow brand attitude). It also finds that individual differences, such as the level of attention to sports, moderate the intensity of emotional arousal. This research provides theoretical basis and practical insights for brand owners in managing the risks of sports endorsers, dealing with crises, and repairing brand images.

Keywords: Sports Scandals; Brand Image; Brand Attitude; Affective Arousal Theory

1. Introduction

1.1 Research Background

In today's era, the sports industry is showing a vigorous development trend, and its position in the global economy is becoming increasingly prominent. With people's pursuit of a healthy

lifestyle and the increasing enthusiasm for watching sports events, the sports industry covers many fields, including professional sports competitions, fitness clubs, sports equipment manufacturing, sports event broadcasting, etc., forming a large and diversified industrial chain.

In the process of the prosperity of the sports industry, brands play a crucial role. Take sports events as an example. Top-tier events such as the Olympic Games and the FIFA World Cup not only attract the attention of billions of viewers worldwide but also bring together numerous internationally renowned sponsors. Their brand values reach billions of US dollars or even more, becoming important platforms for global cultural exchange and business cooperation. Sports brands like Nike and Adidas, with their excellent product quality, innovative design concepts, and powerful brand marketing strategies, dominate the global market. They lead the trend of sports consumption and shape unique brand cultures and images, winning the loyalty and trust of consumers. In addition, the value of athletes' personal brands is also on the rise. Outstanding athletes, with their competitive performance, charming image, and commercial operations, have become indispensable star resources in the sports industry. Their commercial value and brand influence can even rival those of top-tier event brands and sports brands.

However, accompanying the vigorous development of the sports industry is the frequent occurrence of sports scandals. In recent years, a series of shocking scandal events have been exposed in the sports world, such as doping scandals, referee bribery scandals, athlete sex scandals, and match-fixing scandals. These scandals not only seriously damage the fairness and justice of sports competitions and undermine the healthy image of the sports industry, but also cause great psychological shock to the vast number of consumers.

1.2 Current Research Status at Home and Abroad

The concept of sports scandals was first proposed by Hughes and Shank^[1], who defined sports scandals as “illegal or unethical behavior by sports-related parties (including athletes, coaches, teams, etc.), which may occur both on and off the field and have a negative impact on the integrity of sports and related stakeholders (such as sponsors, fans, media, etc.).” In China, scholars have also conducted research on the impact of sports scandals on endorsed brands. Zhao Jingsheng and Wang Xiaohua^[2] found that negative news about sports stars has a significant negative impact on the effectiveness of the advertisements they endorse. Wang Runbin^[3] further pointed out that the risk of sports star brand endorsements lies in the vulnerability of their public image. Once involved in a scandal, the endorsed brand may face huge reputational risks. In addition, Zhang Zhu and Su Jiguo^[4] explored the corporate public relations strategies after the public image of sports star endorsers is damaged, pointing out that brand managers need to take effective crisis management strategies to deal with the impact of sports scandals on brands.

Research on brand attitude can be traced back to the 1950s, when Gardner and Levy first introduced the concept of “brand image,” laying the foundation for subsequent studies. Since then, numerous scholars have conducted multidimensional research on consumers' attitudes toward brands. Mittal^[5] re-examined the relative roles of brand beliefs and advertising attitudes in the formation of brand attitude, proposing a model in which brand beliefs and advertising attitudes jointly influence brand attitude. Nayeem et al.^[6] explored the interplay between brand experience and brand attitude and its impact on brand attitude. The study found that brand credibility plays a full mediating role between brand experience and brand attitude. Specifically, brand credibility is the underlying mechanism through which brand experience affects brand attitude. In addition, the study found that brand experience has no direct impact on brand attitude.

The research on brand attitude in China started relatively late but has developed rapidly. Early studies mainly focused on the introduction of foreign theories and their localization validation. In recent years, Chinese scholars have begun to

conduct more targeted research by combining the unique market environment and cultural background of China. Li Haitao et al.^[7] explored the impact of brand credibility on consumers' brand preferences, pointing out that brand credibility is one of the important factors affecting consumers' brand attitudes. The study found that the higher the brand credibility, the stronger the consumers' preference for the brand. Li Qiong et al.^[8] reviewed the mechanisms of advertising attitude and brand attitude, and explored how advertising attitude affects brand attitude through brand familiarity and information involvement. The study pointed out that advertising attitude has a significant mediating effect on brand attitude.

1.3 Significance of the Study

Against this backdrop, it is of great practical significance to deeply explore the impact mechanism of sports scandals on consumer brand attitudes. First, from the perspective of brand management, clarifying the impact path of sports scandals on consumer brand attitudes helps sports brand managers to formulate effective crisis response strategies in advance, repair brand images in a timely manner, mitigate the negative effects generated by sports scandals, and maintain the long-term stable development of the brand. Second, in terms of the sustainable development of the sports industry, understanding the patterns of changes in consumer brand attitudes can prompt all links in the sports industry to pay more attention to standardized operations and integrity building, reduce the occurrence of sports scandals from the root, and create a healthy and positive sports industry ecosystem. Third, considering from the perspective of consumer rights protection, researching this issue helps consumers to view sports brands more rationally, improve their ability to identify and resist sports scandals, and also provides a theoretical basis for consumer rights protection, safeguarding their legitimate rights and interests in the process of sports consumption. Therefore, the study of the relationship between sports scandals and consumer brand attitudes not only has profound theoretical value but also has important guiding significance for the practical development of the sports industry.

2. Theoretical Construction and Research Hypotheses

2.1 Theoretical Framework

This study is based on the Affective Arousal Theory to deeply explore the impact mechanism of sports scandals on consumer brand attitudes. The Affective Arousal Theory emphasizes that external stimuli (such as negative events) can induce emotional reactions in individuals, which in turn affect their cognition and decision-making behavior (Mehrabian, 1965). As a highly arousing negative event, sports scandals are very likely to trigger negative emotions in consumers (such as anger and disappointment), thereby affecting their image perception and overall attitude towards the endorsed brand.

Based on the above situation, this study introduces brand image as a mediating variable to construct the theoretical path of “Sports scandals → Brand image → Brand attitude.” Brand image, as the overall perception and association consumers have of a brand (Keller, 1993), may become a key mediating mechanism between emotional reactions and attitude formation in negative events.

2.2 Research Hypotheses

In this study, the higher the score of the sports scandal variable, the stronger the negative perception of it by the respondents; the higher the scores of brand image and brand attitude, the more positive the evaluations.

2.2.1. The direct impact of sports scandals on brand image

As a negative event with high exposure, sports scandals can directly impact consumers' perception of the endorsed brand image. Consumers may associate the misconduct of sports stars with the endorsed brand, forming negative associations and thereby reducing their evaluation of the brand image. Based on this, the following hypothesis is proposed:

H1: Sports scandals will significantly influence consumers' evaluation of brand image.

2.2.2. The direct impact of sports scandals on brand attitude

The negative emotions triggered by sports scandals may directly lead to a deterioration in consumers' attitudes towards the brand. Consumers may develop a negative attitude towards the brand based on emotional aversion or moral judgment. Based on this, the following hypothesis is proposed:

H2: Sports scandals have a significant negative

impact on brand attitude

2.2.3. The direct impact of brand image on brand attitude

Brand image is a core dimension of consumers' perception of a brand. A positive brand image can enhance consumers' trust and loyalty to the brand, thereby improving brand attitude. Based on this, the following hypothesis is proposed:

H3: Brand image has a significant positive impact on brand attitude

2.2.4. The mediating role of brand image

Sports scandals may indirectly affect consumers' brand attitudes by damaging the brand image. That is, sports scandals first have a negative impact on the brand image, and then affect brand attitude through the mediating role of brand image. Based on this, the following hypothesis is proposed:

H4: Brand image plays a mediating role between sports scandals and brand attitude

2.3 Model Construction

Based on the above theoretical framework and research hypotheses, this study constructs the following structural equation model (SEM) to verify the direct and indirect effects between variables:

Independent Variable: sports Scandal

Mediating Variable: Brand Image

Dependent Variable: Brand Attitude

The model paths include:

Sports Scandal → Brand Image (H1)

Sports Scandal → Brand Attitude (H2)

Brand Image → Brand Attitude (H3)

Sports Scandal → Brand Image → Brand Attitude (H4)

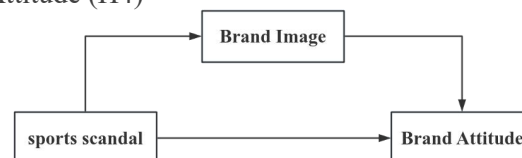


Figure 1. The Mediating Effect Model of the Study

3. Empirical Analysis

3.1 Questionnaire Design and Data Analysis

Based on the relevant domestic and international literature, this study designed a survey questionnaire that includes several core variables. The measurement items for the perception of sports scandals (including severity, credibility, and exposure) were adapted from the scale developed by Le^[9] and others. For the emotional

reaction part, that is, the measurement of pleasure and arousal, the PAD (Pleasure-Arousal-Dominance) scale by Mehrabian and Russell^[10] was referred to. The measurement items for brand image, which cover dimensions such as reliability, credibility, healthy image, and overall impression, were adapted from the research by Yuan Denghua et al.^[11]. The items for brand attitude (including favorability, evaluation, purchase intention, and recommendation intention) were comprehensively referred to the scale by Nancy Spears and Singh^[12]. In addition, for the three types of sports scandal scenarios set in this study (athletic, personal morality, and personal character), some items were adapted and self-compiled to ensure the content validity and situational applicability of the scale.

The questionnaire was distributed online via the "Wenjuanxing" platform, using a combination of convenience sampling and snowball sampling. It was mainly promoted through social media (such as WeChat and Weibo) and academic forums. The data collection period was from June to July 2025, lasting for four weeks. To ensure data quality, a minimum answering time of 120 seconds was set. A total of 230 questionnaires were collected. After removing invalid questionnaires (those with too short answering time, patterned responses), 212 valid questionnaires were obtained, with an effective recovery rate of 92.2%.

This study distributed questionnaires through an online questionnaire platform (Wenjuanxing) and collected data by combining convenience sampling with snowball sampling. A total of 230 questionnaires were collected, and after eliminating invalid questionnaires with too short response times and patterned answers, 212 valid questionnaires were obtained, with an effective recovery rate of 92.2%. The demographic background distribution is as follows: In terms of gender, there were 95 males (44.81%) and 117 females (55.19%), with a relatively balanced proportion. The age distribution was mainly among young and middle-aged people, with the highest proportion in the 26–30 age group (30.66%), followed by the 31–40 age group (21.70%). The education level was dominated by higher education, with a combined proportion of 61.79% for those with junior college and undergraduate degrees. In addition, the overall attention of the respondents to sports events and stars was at a medium to high level, indicating

that the sample had a certain cognitive basis for sports-related information, which met the requirements of the study.

This study employed SPSS 19.0 for descriptive statistics, reliability analysis, and regression analysis. The Bootstrap mediation effect test was conducted using the PROCESS macro (Model 4) developed by Hayes. The Bootstrap sampling was set at 5,000 times with a 95% confidence interval to verify the mediating role of brand image between sports scandals and brand attitude.

3.2 Reliability Analysis

In this study, the Cronbach's Alpha coefficients of each variable were tested using SPSS19.0 statistical software to confirm the reliability of the developed measurement scales. The results are shown in Table 1.

Table 1. Reliability Analysis of the Scales

Variable	Cronbach's Alpha (Sub-scale/Total scale)	
Sports Scandal	0.865	0.871
Brand Image	0.868	
Brand Attitude	0.868	

As shown in Table 1, the Cronbach's Alpha coefficients of each latent variable in the scales of this study range from 0.865 to 0.868, indicating a high level of reliability. Additionally, the consistency result for the total scale is 0.871, which is also satisfactory. Therefore, it can be concluded that the survey questionnaire designed in this study has good reliability.

3.3 Regression Test Analysis

3.3.1. Hypothesis H1: sports scandals have a significant influence on brand image.

It should be noted that in this study, the coding direction of the sports scandal variable is such that the higher the score, the stronger the negative perception of the scandal by the respondents. The higher the brand image score, the more positive the evaluation.

This study employs hierarchical regression analysis to examine the impact of demographic variables, the degree of attention to sports, and sports scandals on brand image. The dependent variable for both models is brand image. Model 1 (M1) includes only four control variables: gender, age, education level, and the degree of attention to sports. Model 2 (M2) further incorporates the variable "sports scandals" on the basis of the control variables.

The results show that the adjusted R^2 for Model

1 is 0.518, with an F value of 57.682 ($p < 0.001$), indicating that the control variables have a significant explanatory power on brand image, accounting for 51.8% of the variance. After the inclusion of the "sports scandals" variable in Model 2, the adjusted R^2 increases to 0.772, with an F value of 143.706 ($p < 0.001$), suggesting a significant enhancement in the model's explanatory power and an important predictive role of the sports scandals variable on brand image.

In Model 1, age ($\beta = 0.299$, $p < 0.001$), education level ($\beta = 0.354$, $p < 0.001$), and the degree of attention to sports ($\beta = 0.445$, $p < 0.001$) all have significant positive impacts on brand image, while the impact of gender is not significant. In Model 2, after the inclusion of the "sports scandals" variable, its standardized

regression coefficient β is 0.687 ($p < 0.001$), indicating that sports scandals have a very strong positive predictive effect on brand image. That is, the stronger the respondents' perception of sports scandals, the more positive (or negative, depending on the coding direction of the items) their perception of brand image is. Therefore, Hypothesis H1 is supported. Meanwhile, the coefficient values of age, education level, and the degree of attention to sports have all decreased, suggesting that sports scandals partially mediate or mask the impact of these variables on brand image. The VIF values of all variables are below 2.0, far lower than the common threshold for multicollinearity ($VIF > 10$), indicating that there is no serious multicollinearity problem in the model. As shown in Table 2.

Table 2. Regression Analysis Results of the Impact of Sports Scandals on Brand Image

Regression Test Results (n=212)						
Variable	M1(Brand Image)			M2(Brand Image)		
	B	β	VIF	B	β	VIF
Constant	1.354			0.289		
Gender	0.05	0.033	1.008	0.026	0.017	1.009
Age	0.145***	0.299	1.007	0.052**	0.107	1.155
Education Level	0.227***	0.354	1.118	0.085**	0.133	1.313
Attention	0.303***	0.445	1.118	0.101***	0.148	1.471
Sports scandal				0.697***	0.687	1.888
R2	0.527			0.777		
Adjusted R2	0.518			0.772		
F	F(4,207)=57.682***			F(5,206)=143.706***		
Note: * indicates significance at the p < 0.05 level, ** indicates significance at the p < 0.01 level, and *** indicates significance at the p < 0.001 level.						

3.3.2. Hypothesis H2: Sports scandals have a significant influence on brand attitude.

Similarly, the higher the score of the sports scandal variable, the stronger the negative perception. The higher the brand attitude score, the more positive the attitude.

To analyze the impact of sports scandals on brand attitude, the regression test results are shown in Table 3. Model 1 (M1) includes only four control variables: gender, age, education level, and the degree of attention to sports. Model 2 (M2) further incorporates the variable "sports scandals" based on the control variables. The adjusted R^2 for Model 1 is 0.478, with an F value of 49.226 ($p < 0.001$), indicating that the control variables have a certain explanatory power on brand attitude, accounting for 47.8% of the variance. After the inclusion of the "sports scandals" variable in Model 2, the adjusted R^2 significantly increases to 0.750, with an F value

of 127.37 ($p < 0.001$), suggesting that sports scandals have a very strong explanatory power on brand attitude, with the overall model accounting for 75.0% of the variance. In Model 1, age ($\beta = 0.269$, $p < 0.001$), education level ($\beta = 0.347$, $p < 0.001$), and the degree of attention to sports ($\beta = 0.431$, $p < 0.001$) all have significant positive impacts on brand attitude, while the impact of gender is not significant.

In Model 2, after the inclusion of the "sports scandals" variable, its standardized regression coefficient β is 0.712 ($p < 0.001$), indicating that sports scandals have a very strong positive predictive effect on brand attitude. Therefore, Hypothesis H2 is supported. Meanwhile, the impact of age changes from significant to marginally significant ($\beta = 0.07$, $p < 0.05$), and the effects of education level and the degree of attention to sports remain significant but with a marked decrease in their coefficients (from

0.347 to 0.119 and from 0.431 to 0.123, respectively). This suggests that sports scandals play a dominant role in the formation of brand attitude, partially mediating or masking the influence of other variables. The variance

inflation factors (VIF) for all variables are below 2.0, far lower than the critical value of 10 for multicollinearity, indicating that there is no serious multicollinearity problem in the model.

Table 3. Regression Analysis Results of the Impact of Sports Scandals on Brand Attitude

Regression Test Results (n=212)						
Variable	M1 (Brand Attitude)			M2 (Brand Attitude)		
	B	β	VIF	B	β	VIF
Constant	1.377			0.294		
Gender	0.136	0.093	1.008	0.112	0.076	1.009
Age	0.128***	0.269	1.007	0.033*	0.07	1.155
Education Level	0.218***	0.347	1.118	0.075**	0.119	1.313
Attention	0.288***	0.431	1.118	0.082**	0.123	1.471
Sports scandal				0.709***	0.712	1.888
R ²	0.488			0.76		
Adjusted R ²	0.478			0.75		
F	F(4,207)=49.226***			F(5,206)=127.37***		

Note: * indicates significance at the $p < 0.05$ level, ** indicates significance at the $p < 0.01$ level, and *** indicates significance at the $p < 0.001$ level.

3.3.3. Hypothesis H3: Brand image has a positive impact on brand attitude.

To analyze the impact of brand image on brand attitude, the regression test results are as shown in Table 4. Model 1 (M1) includes only four control variables: gender, age, education level, and the degree of attention to sports. Model 2 (M2) further incorporates the brand image variable based on the control variables. The adjusted R² for Model 1 is 0.478, with an F value of 49.226 ($p < 0.001$), indicating that the control variables have a certain explanatory power on brand attitude, accounting for 47.8% of the variance. After the inclusion of the brand image variable in Model 2, the adjusted R² significantly increases to 0.755, with an F value of 130.741 ($p < 0.001$), suggesting that brand image has a very strong explanatory power on brand attitude, with the overall model accounting for 75.5% of the variance. In Model 1, age ($\beta = 0.269$, $p < 0.001$), education level ($\beta = 0.347$, $p < 0.001$), and the degree of attention to sports ($\beta = 0.431$, $p <$

0.001) all have significant positive impacts on brand attitude, while the impact of gender is not significant.

In Model 2, after the inclusion of the brand image variable, its standardized regression coefficient β is 0.760 ($p < 0.001$), indicating that brand image has a very strong positive predictive effect on brand attitude. Therefore, Hypothesis H3 is supported. Meanwhile, the impacts of age and education level become insignificant, and although the impact of the degree of attention to sports remains significant, its coefficient drops significantly (β from 0.431 to 0.093), suggesting that brand image plays a dominant role in the formation of brand attitude, partially mediating or masking the influence of other variables. The variance inflation factors (VIF) for all variables are below 2.2, far lower than the critical value of 10 for multicollinearity, indicating that there is no serious multicollinearity problem in the model.

Table 4. Regression Analysis Results of the Impact of Brand Image on Brand Attitude

Regression Test Results (n=212)						
Variable	M1(Brand Attitude)			M2(Brand Attitude)		
	B	β	VIF	B	β	VIF
Constant	1.377			0.367		
Gender	0.136	0.093	1.008	0.099	0.067	1.01
Age	0.128***	0.269	1.007	0.02	0.042	1.196
Education Level	0.218***	0.347	1.118	0.049	0.078	1.383
Attention	0.288***	0.431	1.118	0.062*	0.093	1.537
Sports scandal				0.746***	0.76	2.115
R ²	0.488			0.76		

Adjusted R2	0.478	0.755
F	F(4,207)=49.226***	F(5,206)=130.741***
Note: * indicates significance at the $p < 0.05$ level, ** indicates significance at the $p < 0.01$ level, and *** indicates significance at the $p < 0.001$ level.		

3.3.4.Hypothesis: H4: Sports scandals mediate the relationship between brand image and brand attitude

To delve into the mechanism through which sports scandals affect brand attitude, this study uses Hayes's (2013) Bootstrap method to test mediating effects (Model 4). With a sample size of 212, it conducts 5,000 bootstrap resamples and calculates a 95% confidence interval. The mediating variable is brand image. The analysis results are shown in Table 5.

Table 5. Mediating Effect Test of Brand Image Between Sports Scandals and Brand Attitude

Outcome Variable	Predictor Variable	R ²	F	p
Sports Scandal	Brand Image	0.7426	605.828	$p < 0.001$
Sports Scandal	Brand Attitude	0.7923	398.6552	$p < 0.001$
Brand Image	Brand Attitude			
Sports Scandal	Brand Attitude	0.7278	561.3978	$p < 0.001$

From Table 5, we see that the model fit involves three regression equations. The regression model

Table 6. Analysis of the Mediating Effect of Brand Image Between Sports Scandals and Brand Attitude

Path	Type of Effect	coeff	se	t	p	LLCI	ULCI
Sports Scandal->Brand Image(a)		0.8744	0.0355	24.6136	$p < 0.001$	0.8043	0.9444
Brand Image->Brand Attitude(b)		0.4917	0.061	8.0593	$p < 0.001$	0.3714	0.6119
Sports Scandal->Brand Attitude(c')		0.42	0.0619	6.785	$p < 0.001$	0.298	0.542
Sports Scandal->Brand Attitude(c)	Direct Effect	0.42	0.0619	6.785	$p < 0.001$	0.298	0.542
Sports Scandal->Brand Image ->Brand Attitude (a×b path)	Indirect Total Effect	0.4299	0.072			0.2839	0.5659
	Total Effect	0.8499	0.0359	23.6937	$p < 0.001$	0.7792	0.9206

4. Analysis of the Impact Mechanism of Sports Scandals from the Perspective of Affective Arousal

4.1 Sports Scandals as a Source of High-Arousal Emotional Stimuli

As a negative event with high visibility, sports scandals have significant characteristics of affective arousal. According to Russell's PAD (Pleasure-Arousal-Dominance) model of affect, emotional responses can be measured along three dimensions: pleasure, arousal, and dominance. In this study^[13], the scenarios of

of sports scandals on brand image is significant ($R^2 = 0.7426$, $F = 605.828$, $p < 0.001$), indicating that sports scandals explain 74.26% of brand image variance. The total effect model of sports scandals on brand attitude is also significant ($R^2 = 0.7278$, $F = 561.3978$, $p < 0.001$). The model where sports scandals and brand image jointly predict brand attitude is significant too ($R^2 = 0.7923$, $F = 398.6552$, $p < 0.001$), with an explanation rate of 79.23%.

The path coefficients and effect decomposition are shown in Table 6. As can be seen from Table 6, after controlling for the mediating variable brand image, the direct effect of sports scandals on brand attitude remains significant ($c' = 0.4200$, $p < 0.001$), and its 95% confidence interval does not include 0. The indirect effect of sports scandals on brand attitude through brand image is 0.4299. Most importantly, the Bootstrap 95% confidence interval for this indirect effect is [0.2839, 0.5659], which does not include 0, indicating that the mediating effect of brand image is significant. The total effect of sports scandals on brand attitude is also significant ($c = 0.8499$, $p < 0.001$).

sports scandals (including those related to sportsmanship, personal morality, and personal character) all tend to elicit higher levels of arousal and lower levels of pleasure among consumers. This state of high arousal and low pleasure makes consumers more likely to experience intense negative emotional reactions, such as anger, disappointment, and disgust. The research data shows that the direct effect coefficient of sports scandals on brand image is 0.687 ($p < 0.001$), and the direct effect coefficient on brand attitude is 0.712 ($p < 0.001$), which confirms the high effectiveness of sports scandals as an emotional stimulus. Negative

events with high arousal can quickly capture consumers' attention, activate their emotional processing systems, and thereby influence their cognitive evaluation of the relevant brands.

4.2 The Dual-Path Impact Mechanism of Affective Arousal

This study reveals the mechanism by which affective arousal influences brand attitude through dual paths:

Direct path: The negative emotions triggered by sports scandals directly lead to the deterioration of brand attitude. Consumers have an emotional aversion to the scandal-related brand. This "affect-behavior" direct link is in line with the "Affective Primacy Hypothesis" proposed by Zajonc (1980), which states that affective reactions can independently of cognitive processing directly influence attitudes and behavioral intentions.

Indirect path: Sports scandals indirectly influence brand attitude by damaging brand image. The analysis of mediating effects shows that brand image plays a partial mediating role between sports scandals and brand attitude (with an indirect effect value of 0.4299). This path is consistent with the traditional "affect-cognition-behavior" model, indicating that affective arousal first affects consumers' cognitive evaluation of the brand (brand image) and then influences the final attitude formation through these cognitive changes.

4.3 The Emotional Filtering Role of Brand Image

Brand image plays an important role as an "emotional filter" in the process of emotional arousal. The study shows that the impact coefficient of brand image on brand attitude is 0.760 ($p < 0.001$), indicating that consumers' overall perception of the brand can significantly regulate the final effect of emotional arousal. When brand image is good, consumers may buffer their emotional response to scandal information to some extent, reducing the impact of negative emotions. Conversely, when brand image is weak, the negative impact of emotional arousal is amplified.

This finding extends Keller's brand image theory^[14], showing that brand image is not only a product of cognitive construction but also plays a key role in emotional processing. Dimensions of brand image such as reliability and credibility are especially susceptible to

emotional arousal and act as key mediators in the conversion of emotion to attitude.

4.4 The Emotional Modulation Role of Individual Differences

The study also found that demographic variables and the level of attention to sports have a moderating effect on the process of emotional arousal. Age, education level, and attention to sports all showed significant positive effects on brand image and brand attitude in the control model ($p < 0.001$), but after adding the sports scandal variable, the influence of these variables was significantly weakened. This indicates that high-intensity emotional arousal can largely overshadow the influence of individual differences, supporting the view in emotional arousal theory that "high-arousal stimuli can weaken cognitive differences".

However, the level of attention to sports still had a significant impact in the full model ($\beta = 0.123$, $p < 0.01$), indicating that consumers with a high level of attention to sports may have a deeper emotional involvement with scandal information, a higher degree of emotional arousal, and more pronounced changes in brand attitude. This finding provides important insights into understanding the differences in reactions to sports scandals among different consumer groups.

5. Marketing Implications

Based on regression analysis and employing structural equation modeling, this study empirically examines the underlying mechanisms by which negative information about brand endorsers influences consumers' purchase decisions. The results show that consumers' attribution of the negative information (whether internal or external attribution) ultimately points to the company, forming a "corporate attribution," which significantly increases perceived risk and has a negative impact on purchase intention. Meanwhile, consumers' pre-existing brand trust plays a key buffering role in this process. These research findings provide in-depth theoretical support and practical guidance for corporate brand endorser management and crisis response. Based on this, the study proposes the following marketing implications and management suggestions:

5.1 Establish a Full-Cycle Endorser Risk

Management System and Strengthen the Preventive Mechanism Before the Event.

Enterprises should fundamentally change their concepts of endorser selection and management, and build a full-cycle risk management system that covers entry evaluation, process supervision, and exit accountability.

First, in the entry stage, implement a veto system based on moral character. Form a professional evaluation team composed of brand, legal, public relations and other departments to conduct a comprehensive background check on potential endorsers, covering aspects such as historical public opinion analysis, moral character assessment, and social image investigation, with particular attention to whether they have had any controversial behaviors or potential risk factors in the past.

Second, establish a dynamic monitoring mechanism for endorser behavior. Use digital public opinion monitoring systems to track the statements and actions of endorsers in real time, and set risk warning thresholds to ensure that potential risks are detected in time.

Third, improve contractual constraints and exit mechanisms. Clearly stipulate moral clauses, liability for breach of contract, and compensation standards in endorsement contracts. At the same time, preset rapid response and termination clauses in crisis situations to ensure that enterprises can take swift action in accordance with laws and regulations when facing negative events involving endorsers, and minimize brand losses.

5.2 Construct a Tiered Response Crisis Management Mechanism to Enhance the Efficiency of Response During the Event.

When a negative event involving an endorser occurs, enterprises need to construct a scientific tiered response and handling mechanism.

First, establish a rapid assessment and decision-making mechanism. Form a dedicated crisis management team to quickly determine the response level and strategy based on the nature, severity, and scope of the event. For events that violate moral and legal standards, cooperation should be terminated resolutely and a clear distinction should be made. For controversial events, a measured response strategy should be adopted after careful evaluation.

Second, implement a multi-dimensional communication strategy. Adopt differentiated communication methods for different

stakeholders: for consumers, issue statements through official channels in a timely manner to clarify the company's position and attitude; for the media, proactively provide accurate information to guide public opinion; for distributors and partners, promptly inform them of the situation to stabilize channel confidence.

Finally, strengthen legal rights protection and evidence preservation. In the face of malicious rumors and defamation, resolutely use legal means to safeguard brand rights and interests. At the same time, pay attention to preserving relevant evidence to prepare for possible litigation.

5.3 Refine the Brand Trust Repair System with an Emphasis on Long-Term Value Reconstruction

After dealing with negative events, enterprises need to systematically carry out brand trust repair and image reconstruction work.

First, implement sincere apologies and compensation measures. Express regret through press conferences, apology letters and other means. At the same time, launch substantial compensation plans for affected consumers, such as product discounts and service upgrades, to show the company's sense of responsibility.

Second, carry out brand value reshaping activities. Rebuild consumers' positive perception and emotional connection with the brand through holding public welfare activities, releasing brand social responsibility reports, and strengthening emotional interaction with consumers. Pay special attention to highlighting the brand's own product advantages and cultural values, and reduce excessive dependence on the endorser model.

Finally, establish a long-term trust monitoring mechanism. Regularly assess the recovery of brand trust through consumer surveys and public opinion analysis, and continuously track the changes in brand image to adjust the repair strategy in time. At the same time, strengthen internal management optimization, improve the selection and management system of brand endorsers, and fundamentally enhance the brand's risk prevention and control capabilities.

6. Conclusion

This study, grounded in Affective Arousal Theory, empirically investigates the impact mechanism of sports scandals on consumer brand attitudes, with brand image as a mediating

variable. Through questionnaire data from 212 respondents and analyses via regression and Bootstrap methods, the results confirm all hypotheses: Sports scandals exert significant negative effects on brand image ($\beta=0.687$, $p<0.001$) and brand attitude ($\beta=0.712$, $p<0.001$), while brand image positively influences brand attitude ($\beta=0.760$, $p<0.001$). Brand image partially mediates the relationship between sports scandals and brand attitude, with an indirect effect of 0.4299 (95% CI [0.2839, 0.5659]). Furthermore, affective arousal operates through dual paths-direct (negative emotions to brand attitude) and indirect (via brand image)-with individual differences like sports attention moderating arousal intensity.

Theoretically, this research extends Affective Arousal Theory to the sports scandal context, highlighting brand image's role as an emotional filter and providing insights into consumer behavior under negative stimuli. Practically, it offers strategies for brands to mitigate scandal risks, such as proactive endorser management and crisis response, fostering sustainable sports industry development and consumer protection. Limitations include the sample's focus on Chinese consumers and reliance on self-reported data, potentially limiting generalizability. Future research could incorporate longitudinal designs, cross-cultural comparisons, or experimental methods to explore long-term effects and additional moderators like scandal type severity.

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