

# How Brand Authenticity Affects Consumers' Willingness to Recommend by Word-of-Mouth? Evidence from the Cell Phone Industry

Lu Suo and Yue Huang\*

*Graduate School, Stamford International University,  
Bangkok 10250, Bangkok, Thailand*

\*Corresponding author's e-mail: [huangyue15877930213@gmail.com](mailto:huangyue15877930213@gmail.com)

**Abstract** Based on the cognitive-affective-behavioral theory and self-congruity theory, this study constructs a theoretical model with four dimensions of brand authenticity (continuity, integrity, credibility and symbolism) as independent variables, willingness to recommend by word-of-mouth (RWOM) as dependent variables and brand attachment as mediating variables to investigate how brand authenticity affects RWOM through brand attachment. Using quantitative methods and snowball sampling, 515 Chinese respondents aged 18+ who purchase and use the top 6 brands of cell phones in China participated in this study. SEM was used to analyze the data and test the hypotheses. The results show that the continuity, integrity, credibility and symbolism all significantly and positively affect RWOM and brand attachment, with brand credibility having the strongest effect on the RWOM and brand attachment; secondly, brand attachment is proven to positively influence RWOM; finally, brand attachment plays a partially mediating role between the four dimensions of brand authenticity and RWOM. The findings enrich the theoretical results of brand authenticity and RWOM, and has certain reference value for enterprises to build authentic brands and enhance consumers' word-of-mouth recommendation intention.

**Keywords** Brand attachment; Brand authenticity; Cognitive-affective-behavioral theory; RWOM; Self-congruity theory

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## Introduction

Currently, due to the increasingly fierce competition in the market, some enterprises have resorted to false propaganda to attract consumer groups, or the production and sale of substandard products to maximize their profit. In September 2021, China's CCTV exposed the excessive levels of phthalates and hexavalent chromium in brands such as 73 hours, Kisscat, and Hot Air's high-heeled sandals, which can be extremely harmful to health when absorbed by the human body in excess. Furthermore, in the realm of mobile phones, certain brands have resorted to cost-cutting measures by incorporating subpar materials and components in their smartphone production, all in an attempt to compete on pricing. Additionally, instances of counterfeit branded smartphones and deceptive marketing practices, such as false claims of 5G capabilities, have become increasingly prevalent. These unscrupulous activities have resulted in an abundance of dissatisfied consumers who have had subpar experiences with their mobile devices. Corporate counterfeiting practices have eroded the trust relationship between consumers and brands, resulting in a decline in the quality of word-of-mouth for these brands. As a result, more and more consumers are seeking authentic and trustworthy brands, and are eager to establish a stable emotional connection with them. In today's fast-paced social environment, people also seek to find themselves and express their identity through authentic brands and products.

Authenticity is crucial in modern marketing, especially in the context of consumer transformation and upgrading, which refers to changes in consumer preferences and behaviors as a result of cultural, social, and economic factors (Beverland et al., 2008). To cultivate a good word-of-mouth effect, companies must focus on the essence of their product and build an authentic and reliable brand. For instance, Toyota has always embraced the brand concept of *to the truth, to the extreme*, while Dell has emphasized the importance of facts and figures. These examples demonstrate how authenticity can help companies enhance their competitive advantage. By creating an authentic brand image, companies can establish psychological resonance and emotional connections with consumers, which can lead to positive behavioral tendencies toward the brand. Moreover, in a market environment where fake brands and products are prevalent, it is essential for companies to maintain their brand image and create authentic brands to enhance their brand equity, shape the market environment, and foster positive interactions.

Theoretical and practical applications of brand authenticity have attracted the attention of many scholars in academia. While previous literature has discussed the connotation, dimensions, formation, and role of brand authenticity, most of these studies are qualitative in nature, with relatively few empirical studies on the influence of brand authenticity on consumers' emotions and behavioral attitudes. Furthermore, research on the impact of brand authenticity on consumers' behavioral intentions has mainly focused on trust and identification, with little consideration given to the mediating role of brand attachment. Currently, some studies have explored the mediating role of brand attachment. For example, studies have found that brand attachment plays an important role in brand engagement and purchase intention (Kumar & Nayak, 2019b), brand image and brand loyalty (Diallo et al., 2020; Kumar & Nayak, 2019a), brand experience and purchase intention (Nierobisch et al., 2017), nostalgic brand positioning and brand equity (Heinberg et al. 2019), materialism and impulse buying (Lim et al., 2020), deontology and brand loyalty (Love et al., 2016), and utilitarian values and impulse buying (Lim et al., 2020). Nevertheless, few studies have discussed the mediating role of brand attachment on the relationship between brand authenticity and consumer behavior. To address this gap, this paper uses cellphone brands as an example and investigates the mechanism of brand authenticity on consumers' willingness to recommend by word-of-mouth (RWOM) through a questionnaire, using brand attachment as an intermediate variable. This study focuses on four dimensions of brand authenticity (continuity, integrity, credibility, and symbolism) to investigate the impact of consumers' word-of-mouth recommendations of cell phone brands. RWOM is an extra-role

behavior of consumers that is highly persuasive to recipients and is an effective way for companies to enhance brand equity and promote product marketing. Therefore, understanding the impact of brand authenticity on RWOM is critical for business development. This study aims to answer the following research questions: (1) What is the strength of the impact of different dimensions of brand authenticity on RWOM and brand attachment? (2) What is the effect of brand attachment on RWOM? (3) Does brand authenticity influence RWOM through brand attachment? The results of this study will not only enrich the theoretical results of brand authenticity and willingness to RWOM, but also provide guidance for companies to build authentic brands and enhance consumers' willingness to RWOM.

### **Literature review**

The literature review in this study thoroughly examined the conceptual meanings, dimensions, and prior research concerning brand authenticity, brand attachment, and RWOM within the academic domain. Based on the Self-Congruity Theory and Cognitive-Affective-Behavioral Theory, it systematically organized the interconnections among these three constructs, proposed the hypotheses underpinning this research, and formulated a theoretical model delineating how brand authenticity influences the inclination to engage in word-of-mouth recommendations.

#### ***Brand authenticity***

Grayson and Martinec (2004) state that brand authenticity is a consumer perception and assessment of the degree of authenticity of a brand, and that brands with deep historical traditions and corporate culture are more likely to be perceived as authentic. Fritz et al. (2017) argue that a brand is authentic if it is driven by a commitment to quality, ethical beliefs, and an intrinsic love for the product. Scholars' definitions of brand authenticity place more emphasis on consistency, and brands choose to remain true to themselves even in the midst of evolving trends. Morhart et al. (2015) classified brand authenticity into four dimensions: continuity, integrity, credibility, and symbolism, and developed a brand authenticity scale containing 15 measurement items. After that, Akbar and Wymer (2017) refined brand authenticity into two dimensions, authenticity and originality, based on collecting and reviewing the existing information about authenticity and brand authenticity, and formed a brand authenticity scale containing eight measurement items. In this research, we refer to Morhart et al.'s (2015) approach to classifying the dimensions of brand authenticity in four dimensions: continuity, integrity, credibility, and symbolism.

#### ***Brand attachment***

In marketing, the concept of attachment was first introduced by Schultz et al. (1989), who defined attachment from a self-concept perspective as the degree of connection between an individual and everything that encompasses three aspects: personalization, integration, and temporal orientation. Some scholars take a brand relationship perspective and argue that brand attachment is the emotional connection that people form with a brand during their consumption experience (Lacoeuilhe & Belaïd, 2010).

Park et al. (2010) state that brand attachment is the cognitive and emotional self-association that consumers themselves form with a brand. The authors point out that brand attachment affects consumers' demand share and purchase share for a brand, and the deeper a person's attachment to a brand, the more likely he or she is to see the brand as part of the self and be willing to invest more resources, including social, financial and time resources, to ensure that the relationship between the brand and the self is not broken. Park et al. (2006) elaborated on the formation basis and results of brand attachment from the perspective of resource exchange theory. The authors argued that brands establish a strong connection between consumers and brands by providing them with hedonic, functional and symbolic resources, and cultivate consumers' emotional attachment to brands.

### ***Willingness to Recommend by Word of Mouth (RWOM)***

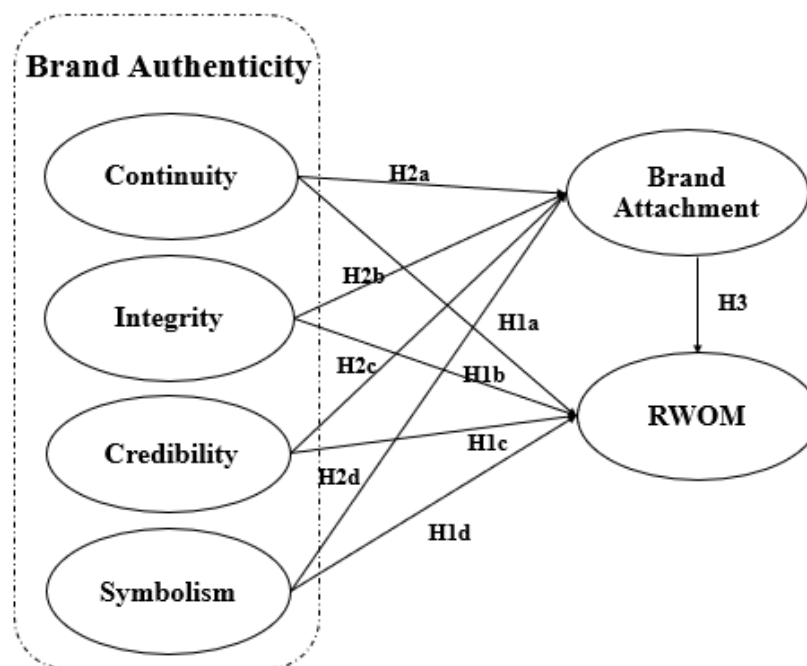
Word of mouth (WOM) is an informal communication between consumers about their experience with a brand or product. In terms of communication methods, word-of-mouth can be divided into traditional WOM and electronic-WOM (EWOM). Traditional WOM is a way for consumers to talk about a brand's products or services through face-to-face communication, while EWOM is a new form of communication in which consumers use online platforms such as social media and shopping websites to share information. According to Zeithaml et al. (1996), RWOM is the behavioral tendency of consumers to actively convey positive brand information to others in order to facilitate the formation of brand preferences of other consumer groups. Liu and Fan (2020) point out that as a direct and active individual behavior, RWOM is more authentic and credible than advertising and has a greater impact on the attitudes and behaviors of others, making it an important strategic tool for corporate marketing. In essence, word-of-mouth referrals are the act of sharing positive information about a brand or product with the goal of helping others or presenting yourself. As an important way of brand information dissemination, word-of-mouth recommendation can attract the attention of new consumers and stimulate potential consumers' curiosity about products or services, while consumers' willingness to purchase is further enhanced by positive word-of-mouth information (Liang, et al., 2021).

### ***Self-Congruity theory***

Self-Congruity theory was proposed by Sirgy (1982), which suggests that when consumers perceive a high degree of match between their self-concept and the image of a brand or product, they will develop a positive attitude toward that brand or product and form an intimate relationship. Sheng et al. (2018) argues that under the influence of Eastern culture, individuals may focus more on interdependent relationships and people want to construct their selves through emotions and connections outside the society. Therefore, in the process of consumer experience, if a brand or product exhibits a certain trait or personality that satisfies consumers to gain an expression of their self-identity and self-image, consumers will prefer that brand and become emotionally connected to the brand.

### ***Cognitive-Affective-Behavioral theory***

Psychology argues that attitude is not a unidimensional concept, but a multidimensional concept that includes cognitive, affective, and behavioral intentions. According to Qiu (2001), cognition is an important source of affection, and affection will in turn promote the development of cognition; affection is an important source of willingness to act, and willingness to act will in turn promote the development of affection, and the three are mutually dependent and interpenetrating. According to Yang, et al. (2017), the different influential relationships between cognitive, affective, and behavioral intentions depend on the type of behavioral decisions consumers make. Cognitive-affective-behavioral has been widely used in the study of consumer-brand relationships. The cognitive processing of brand-related information by consumers may trigger their emotional responses and lead to the establishment of an emotional connection between consumers and the brand, thus stimulating the generation of consumers' behavioral intentions. As a result, this study argues that consumers' perceptions of brand authenticity may lead to a willingness to RWOM by prompting attachment feelings between them and the brand.



**Figure 1** Conceptual framework

### ***Brand authenticity and RWOM***

Continuity specifically refers to the historical heritage and stable consistency of the brand, which conveys to consumers that the brand is of reliable quality and enduring. Xu and Feng (2018) point out that long-established brands with reliable quality and sincere service can effectively enhance consumers' identification with the brand and promote positive WOM communication about the brand. Integrity specifically refers to a brand's adherence to good ethics and genuine concern for consumers. Yao (2019) shows that a brand with business ethics and active social responsibility enhances consumers' sense of security and leads to positive brand attitudes, which makes consumers willing to recommend the brand to others. Credibility refers to the transparency and reliability of a brand's information and whether the brand has the will and ability to deliver on its promises. Transparency and reliability of brand information allows consumers to spend less effort to get information about the brand and strengthen their trust in the brand. Yan et al. (2011) pointed out that relationship commitment and brand trust are important factors that drive consumers' willingness to generate word-of-mouth recommendations. Symbolism specifically refers to a brand's ability to provide reference cues that represent consumers' values, reflect their social roles and social relationships, and help consumers construct their own identities in social groups. An authentic brand image satisfies consumers' need to maintain and enhance themselves, inspires positive emotions, and actively recommends the brand to others. Zhang (2019) confirms that the symbolic nature of brand image can satisfy the social interaction needs of consumers to express themselves and show themselves, prompting them to develop fit behaviors for the brand, such as continuous transactions and RWOM. Therefore.

**H1a:** brand continuity significantly and positively affects RWOM;

**H1b:** brand integrity significantly and positively affects RWOM;

**H1c:** brand credibility significantly and positively influences RWOM;

**H1d:** brand symbolism significantly and positively affects RWOM.

### ***Brand authenticity and brand attachment***

Assiouras et al. (2015) found that brand authenticity significantly and positively influences consumers' brand attachment. Continuity reflects the history and heritage of a brand, and it encourages consumers to form positive brand associations as they get to know and understand the brand, thus making it possible to build emotional connections between consumers and the brand. Thomson et al. (2005) state that the more associations consumers have with a brand, the higher the degree of cognitive and emotional connection between consumers and the brand. Integrity reflects a brand's adherence to good values, fulfillment of social responsibility, and concern for consumers. Sun (2020) confirms that for companies that disregard business ethics for their own benefit, it not only reduces consumers' trust in the brand, but also inhibits the creation of consumer brand attachment. Credibility reflects the honesty and sincerity of the brand, and honest brands satisfy people's sense of security, which leads to attachment to the brand. Wu et al. (2016) confirmed that security is a fundamental motivation leading to attachment. Symbolism reflects values that people consider important, and consumers communicate to others who they were, who they are, and who they want to be in the future by establishing a cognitive and emotional connection between the brand and their selves. The satisfaction of consumers' symbolic value needs can lead to self-association with the brand and consequently to attachment to the brand (Park et al., 2006). Hence,

**H2a:** Continuity significantly and positively affects consumer brand attachment;

**H2b:** Integrity significantly and positively influences consumer brand attachment;

**H2c:** Credibility significantly and positively influences consumer brand attachment;

**H2d:** Symbolism significantly and positively affects consumer brand attachment.

### ***Brand attachment and EWOM***

Fan and Tang (2017) confirmed that tourists' attachment to cities and tourist attractions significantly enhances their RWOM intention. Ludwig et al. (2013) state that attachment is a relatively stable emotion and that consumers' attachment to a brand motivates them to consistently share positive information related to the brand. Zhang and Hou (2013) suggest that when attachment arises, consumers may help others make purchase decisions by sharing positive experiences related to a brand or product, or by sharing information to seek emotional resonance with others and gain support and approval from them. Therefore, whether from an altruistic or self-interest perspective, brand attachment may trigger consumers to actively share and spread positive brand-related information to other groups and promote positive attitudes of others to purchase or participate. Hence,

**H3:** Brand attachment significantly and positively influences RWOM.

### ***The mediating role of brand attachment***

The cognitive-affective-behavioral theory suggests that consumers' cognitive, affective and behavioral attitudes toward brands are interrelated, i.e., consumers' perceptions of brand authenticity may influence their willingness to make word-of-mouth recommendations through brand attachment. Liu (2020a) found that the higher the degree of brand authenticity, the stronger the consumers' trust in the brand and their purchase intention. In studying the relationship between brand personality and consumer WOM, Liu (2020b) pointed out that brand personality provides an effective way for consumers to present themselves, and brands with qualities such as sincerity, excitement, and sophistication tend to promote brand attachment, while consumers will actively share positive information about the brand and their own positive emotional experiences to others in order to reinforce such positive emotions. Jiang et al. (2021) also pointed out that tourists' perceptions of authenticity of film and television tourism places would affect their willingness to recommend by word of mouth and to revisit by influencing their place attachment. Based on this,

**H4a:** brand attachment mediates between brand continuity and RWOM;

- H4b:** brand attachment mediates between brand integrity and RWOM;  
**H4c:** brand attachment mediates between brand credibility and RWOM;  
**H4d:** brand attachment mediates between brand symbolism and RWOM.

Based on the cognitive-affective-behavioral theory and self-congruity theory, this study suggests that consumers' behavioral tendency to recommend word-of-mouth is generated by the cognitive element of brand authenticity and the emotional element of brand attachment, i.e., consumers' perception of brand authenticity influences their RWOM through brand attachment. Consumers may build their perceptions of brand authenticity from four aspects: continuity, integrity, credibility and symbolism, form self-association with the brand, and develop attachment to the brand, while the positive emotions brought by the brand will inspire consumers to share and recommend the brand in return. Therefore, a theoretical model is developed in this study, as shown in Figure 1.

### Research methodology

This study employed a quantitative research approach through a self-administered questionnaire distributed among the target respondents. The questionnaires were distributed from February to March 2023. A total of 548 questionnaires were collected, and after excluding 33 invalid questionnaires, 515 valid questionnaires were finally acceptable. The sample size of 515 respondents is deemed sufficient for Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) analysis, meeting the minimum sample size requirement of 235 (Hair et al., 2014).

### Participants and data collection

*The population of this study are Chinese adult consumers (18+ years old) who purchased and used the top 6 brands of cell phone in China, including Huawei (including honor), vivo (including iqoo), Oppo, Xiaomi (including redmi), Apple, and Samsung.* In this study, the questionnaire was distributed online through snowball sampling, specifically through the *Questionnaire Star* platform, sharing the questionnaire link to WeChat, QQ, and Weibo, inviting family members, friends, and colleagues to participate in the survey, and filling out the questionnaire to draw red packets to increase the enthusiasm and the effectiveness of the responses.

### Measurement

The questionnaire is divided into three parts, the first part lists the main 6 cell phone brands in the market, and respondents fill out the questionnaire according to the cell phone brand they are using; the second part is a survey on basic demographic indicators such as gender, age and income of respondents; the third part is a survey on the four dimensions of brand authenticity, brand attachment and RWOM measurement questions. The questionnaire was designed by referring to previous scholarly research on relevant variables and using existing well-established scales. This paper mainly draws on Morhart et al. (2015), which measured brand authenticity in four dimensions: continuity, integrity, credibility and symbolism, with 14 questions; The measurement of brand attachment is mainly based on the research results of Wu (2017) and Park et al. (2006), with a total of 7 items; the measurement of RWOM is based on the research of Zeithaml et al (1996), with 3 questions. The questionnaire was based on a 5-point Likert scale in which respondents rated their understanding of the items on a scale from 1 to 5 according to their choice of cell phone brand.

### Data analysis

Variables were investigated by Confirmatory factor analysis (CFA) and descriptive statistic (Iqbal & Hameed, 2020). These tests were operated on AMOS and SPSS. The researchers first employed descriptive statistics in the SPSS software to understand the general trend in consumer's

behavior. In addition, this study performed CFA test the measurement model via AMOS. The measurement model was examined to test the reliability and validity in the proposed model. After that, Structural Equation Modeling (SEM) via AMOS was used to verify research hypotheses. Finally, the study adopted mediation test using bootstrapping method to test the mediating role of brand attachment.

## Results

### Demographic factor

The proportion of men and women is balanced, with 47.4% of men and 52.6% of women. Respondents' age group is mainly concentrated in the 21-40 years old (83.41%), and this group is the main consumer of electronic products. Most of the respondents are with bachelor's degree, accounting for 78.73%. From the perspective of occupation, more than 60% of the respondents are in private enterprises and institutions (66.35%), and most of them have a monthly income of more than 5,000 yuan (75.45%). In terms of the use of cell phone brands, Huawei + Glory, Apple, and Xiaomi + redmi users account for the majority (78.52%). Therefore, the sample distribution of this study is quite reasonable and representative.

### Measurement model analysis

CFA was used to examine how well the theoretical specification of the six factors (a priori) matched the actual data. According to a CFA item-deletion process, all observable items were kept due to their good goodness-of-fit values (Table 1) and squared multiple correlations.

Measurement reliability and validity were assessed as follows. To measure the reliability of internal consistency, Cronbach's alpha values and composite reliability (CR) should be calculated for all constructs of the study (Heale & Twycross, 2015). The accepted range of reliability scores should be equal to or greater than 0.7 (Hair et al., 1995). As can be seen from Table 1, all variables are reliable and meet the criteria set above, as they all have factor loadings above 0.7. To examine convergent validity, we calculated the average variance extracted (AVE). As per the criterion set by Fornell and Larcker (1981), a construct is said to have established convergent validity when its average variance extracted (AVE) is equal to or greater than 0.5. This indicates that the construct explains more than half of the variance in its items. In this study (Table 1), all constructs have AVE values that exceed the threshold limit of 0.5, implying that the convergent validity of the constructs is well-established. Discriminant validity was tested according to the criteria suggested by Fornell and Larcker (1981), and the results showed that the square root of AVE for each potential variable was higher than its correlation (Table 2).

### Structure model

The SEM in this study was performed by AMOS 23.0 and the results showed  $\chi^2/df. = 1.108 < 3$ , GFI = 0.948 > 0.9, AGFI = 0.901 > 0.9, NFI = 0.925 > 0.9, TLI = 0.972 > 0.9, CFI = 0.975 > 0.9, IFI = 0.975 > 0.9, RMSEA = 0.046 < 0.05. All these results are higher than the suggested goodness-of-fit values (Kline, 2011). Thus, the results confirm the good fit of the tested model.

### Hypothesis testing

Figure 2 shows the results of the hypotheses. The study shows significant support for all hypotheses, highlighting the important role of brand authenticity in brand attachment and consumer behavior. Specifically, a significant positive correlation between brand authenticity including continuity ( $\beta = 0.506$ ,  $p < 0.001$ ), integrity ( $\beta = 0.468$ ,  $p < 0.001$ ), credibility ( $\beta = 0.552$ ,  $p < 0.001$ ) and symbolism ( $\beta = 0.496$ ,  $p < 0.001$ ) and RWOM can be seen, which implies that H1a, H1b H1c and H1d were supported. Similarly, there was a positive association between relational brand attachment and



brand authenticity, including continuity ( $\beta = 0.376$ ,  $p < 0.001$ ), integrity ( $\beta = 0.396$ ,  $p < 0.001$ ), credibility ( $\beta = 0.425$ ,  $p < 0.001$ ) and symbolism ( $\beta = 0.363$ ,  $p < 0.001$ ), thus, H2a, H2b, H2c and H2d were supported. When examining H3, brand attachment was found to be positively associated with RWOM ( $\beta = 0.356$ ,  $p < 0.001$ ), supporting H3.

**Table 1** Results of validity and reliability analysis

Construct	Items	Factor Loadings	CR	AVE	Alpha
Brand Continuity (BCO)	BCO1	0.756	0.838	0.564	0.839
	BCO2	0.769			
	BCO3	0.778			
	BCO4	0.698			
$\chi^2$ /df = 1.273, GFI = 0.988, AGFI = 0.987, IFI=0.991, TLI=0.990, CFI =0.991, RMSEA = 0.049					
Brand Integrity (BI)	BI1	0.782	0.845	0.579	0.845
	BI2	0.815			
	BI3	0.787			
	BI4	0.649			
$\chi^2$ /df = 2.514, GFI = 0.999, AGFI = 0.997, IFI=1.001, TLI=1.003, CFI =1.000, RMSEA = 0.002					
Brand Credibility (BCR)	BCR1	0.724	0.830	0.622	0.829
	BCR2	0.757			
	BCR3	0.876			
Brand Symbolism (BS)	BS1	0.855	0.893	0.736	0.896
	BS2	0.844			
	BS3	0.874			
Brand Attachment (BA)	BA1	0.871	0.958	0.763	0.955
	BA2	0.852			
	BA3	0.885			
	BA4	0.866			
	BA5	0.878			
	BA6	0.863			
	BA7	0.898			
$\chi^2$ /df = 1.963, GFI = 0.996, AGFI = 0.981, IFI=0.998, TLI=0.994, CFI =0.998, RMSEA = 0.041					
Willingness to Recommend by Word-Of-Mouth (RWOM)	RWOM1	0.847	0.899	0.747	0.898
	RWOM2	0.861			
	RWOM3	0.885			

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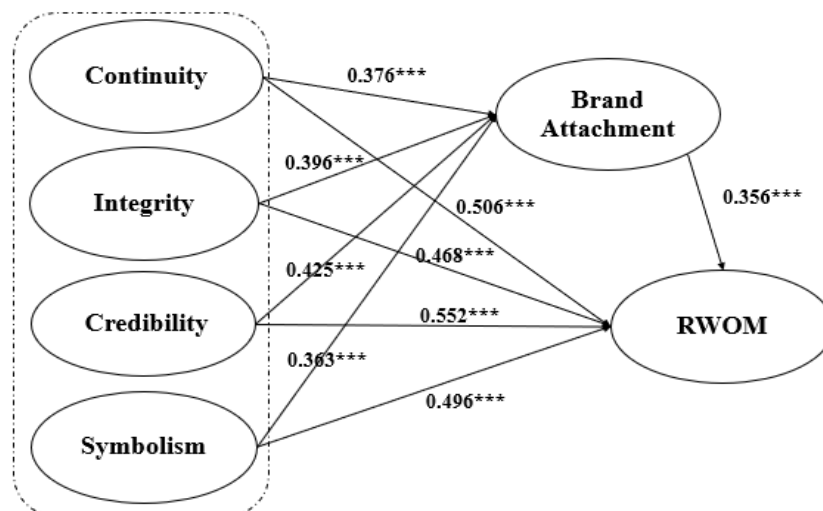
were supported. When examining H3, brand attachment was found to be positively associated with RWOM ( $\beta = 0.356$ ,  $p < 0.001$ ), supporting H3.

**Table 2** Discriminant validity

	BCO	BI	BCR	BS	BA	RWOM
BCO	<b>0.751</b>					
BI	0.682	<b>0.761</b>				
BCR	0.463	0.385	<b>0.858</b>			
BS	0.616	0.572	0.481	<b>0.789</b>		
BA	0.404	0.426	0.448	0.391	<b>0.873</b>	
RWOM	0.513	0.472	0.547	0.488	0.231	<b>0.864</b>

**Note:** BCO= Brand Continuity, BI= Brand Integrity, BCR= Brand Credibility, BS= Brand Symbolism, BA= Brand Attachment, RWOM= Willingness to Recommend by Word-Of-Mouth

#### Brand Authenticity



**Figure 2** Results of Analysis of Structural Modeling with Hypotheses

**Note:** RWOM= Willingness to Recommend by Word-Of-Mouth

\* $P < 0.05$ ; \*\* $P < 0.01$ ; \*\*\* $P < 0.001$

#### Mediation effect of brand attachment

In this study, the mediation effect of brand attachment was tested for 5000 iterations using AMOS 23.0 software and Bootstrapping method, and the results are shown in Table 4. For the first path, the 95% confidence interval (CI) for the bootstrapping method is (0.020, 0.124), which does not

contain 0, indicating that the mediation effect of brand attachment between brand continuity and RWOM is significant, so H4a was verified. Similarly, for the second path, the Bootstrap 95% CI is (0.021, 0.118), which does not contain 0, indicating that the mediating effect of brand attachment between brand integrity and RWOM is significant, so H4b is verified. Furthermore, for the third path, Bootstrap's 95% CI is (0.014, 0.134), which does not contain 0, indicating that the mediating effect of brand attachment between brand reputation and RWOM is significant, so H4c is verified. Finally, the fourth path shows that the Bootstrap 95% CI is (0.026, 0.141), which does not contain 0, indicating that the mediating effect of brand attachment between brand symbolism and RWOM is significant, so H4d is also verified.

**Table 4** Analysis of mediating effect

Paths	Effect	Bias-corrected 95% CI		Whether Mediating?
		Lower	Upper	
H4a: BCO→BA→RWOM	0.134	0.020	0.124	Yes
H4b: BI→BA→RWOM	0.141	0.021	0.118	Yes
H4c: BCR→BA→RWOM	0.151	0.014	0.134	Yes
H4d: BS→BA→RWOM	0.129	0.026	0.141	Yes

**Note:** BCO= Brand Continuity, BI= Brand Integrity, BCR= Brand Credibility, BS= Brand Symbolism, BA= Brand Attachment, RWOM= Willingness to Recommend by Word-Of-Mouth

### Discussion and conclusion

Based on the cognitive-affective-behavioral theory and self-congruity theory, this paper investigates the relationship between brand authenticity and RWOM and the mechanism of its influence. The following conclusions are drawn:

First, Continuity, integrity, credibility and symbolism all significantly and positively influence RWOM. The strengths of the effects are, in descending order, credibility, continuity, symbolism, and integrity. Among them, brand credibility has the greatest influence on RWOM, and plays a decisive role in stimulating RWOM. This finding also supports the previous studies of Xu and Feng (2018), Yao (2019), Yan et al. (2011) and Zhang (2019).

Second, all four dimensions of brand authenticity significantly and positively influence consumers' brand attachment, with the strengths of influence ranging from credibility, integrity, continuity, and symbolism in descending order. Among them, brand credibility has the greatest impact on consumers' brand attachment and plays a decisive role in the process of brand attachment formation. The results of this study are consistent with previous scholarly studies of Thomson et al. (2005), Sun (2020) and Wu et al. (2016). The result shows that whether it is an emotional or behavioral attitude, the credibility of a brand is crucial for consumers. A highly credible brand enhances consumers' sense of security and identity, leading them to become emotionally attached to the brand and willing to recommend it to others.

Moreover, brand attachment significantly and positively affects RWOM. Consumers' attachment to a brand indicates that they develop a sense of belonging to the brand and that this sense

of belonging is strengthened during brand use, which helps users deepen their understanding and love for the brand, which in turn promotes RWOM. The findings are consistent with those of Fan and Tang (2017), Ludwig et al. (2013), and Zhang and Hou (2013).

Finally, brand attachment plays a partially mediating role in the influence of the four dimensions of brand authenticity on RWOM. This result also proves that the relationship model based on cognitive-affective-behavioral theory is reasonable, and the higher the consumers' perception of brand authenticity, the more likely they are to establish an emotional connection with the brand, and then become willing to RWOM. The findings are consistent with those of Liu (2020a), Jiang et al. (2021) and Liu (2020b). Among them, brand attachment has the highest mediating effect between symbolism and RWOM, followed by credibility and RWOM, and the lowest mediating effect between continuity and integrity and RWOM, indicating that symbolism and credibility are more likely to act on RWOM through brand attachment than other dimensions. Therefore, when companies want to enhance RWOM by strengthening emotional ties with them, they can focus on both brand symbolism and credibility.

### Implications

The theoretical contribution of this study is mainly manifested in the introduction of brand attachment as a mediating variable to test the mediating effect of brand attachment between brand authenticity and RWOM. At present, most studies on the influence of brand authenticity on consumers' behavioral intentions have been conducted from the perspective of trust and identification, while the mediating role of brand attachment has rarely been considered. Several studies have delved into the mediating influence of brand attachment in various contexts. For instance, research has indicated that brand attachment significantly factors into brand engagement and purchase intention (Kumar and Nayak, 2019b), brand image and brand loyalty (Diallo et al., 2020; Kumar and Nayak, 2019a), brand experience and purchase intention (Nierobisch et al., 2017), nostalgic brand positioning and brand equity (Heinberg et al., 2019), materialism and impulse buying (Lim et al., 2020), deontology and brand loyalty (Love et al., 2016), and utilitarian values and impulse buying (Lim et al., 2020). However, there remains a dearth of studies that have specifically addressed the mediating role of brand attachment in the relationship between brand authenticity and consumer behavior. This study analyzes the influence of brand authenticity on RWOM from the perspective of brand attachment, and constructs a theoretical model with four dimensions of brand authenticity as independent variables, brand attachment as mediating variables, and RWOM as dependent variables, which complements the theoretical model of the relationship between brand authenticity and consumer behavior and is somewhat innovative. This research extends the theoretical model of the impact of brand authenticity on consumer behavior, which is innovative for the study of brand authenticity.

The present research also has important practical implications for marketing professionals and managers. First, companies should pay attention to the excavation and construction of brand authenticity elements to enhance consumers' perception of brand authenticity. In the process of brand construction and development, enterprises should pay attention to the excavation and construction of brand continuity, integrity, credibility and symbolism, and pay particular attention to the creation of brand trustworthiness. On the one hand, cellphone companies can show the level of brand fulfillment of promises by providing quality and reliable products and attentive services, and strive to improve consumers' perception of the level of brand trustworthiness; on the other hand, cellphone companies can openly conduct product performance tests to enhance information transparency, break the information asymmetry problem between brands and consumers, and establish a good trust connection under the premise of complying with industry norms.

Second, companies should pay attention to the emotional appeal of consumers and strengthen their attachment to the brand. On the one hand, companies can stimulate consumers' emotional resonance and promote their attachment to the brand by enhancing the social experience of the brand. For example, the Huawei cell phone brand is positioned as made in China, symbolizing national consciousness and national pride, which greatly satisfies consumers' need for social image expression, thus inspiring them to love and empathize with the brand. Specifically, the mobile phone marketing practitioners should take into consideration that they can establish brand communities and guide consumers to share their experiences in brand communities or encourage them to participate in new product ideas. While bringing consumers closer to the brand, it can also help companies understand consumers' individual needs and meet their increasingly diverse figurative expressions, thus enhancing consumers' brand stickiness and promoting word-of-mouth recommendations for the brand. On the other hand, enterprises can strengthen product innovation and service innovation from the functional experience and service experience of the brand to enhance consumers' satisfaction and recognition of the brand and prompt consumers to develop brand attachment. Before the sale, enterprises should fully understand consumers' demand preferences, and help consumers choose the most suitable products from consumers' interests; after the sale, enterprises should do a good job of guaranteeing products and services, make regular visits to customers' usage, pay attention to the management and analysis of consumers' feedback information, and strengthen the improvement of products and service quality. The positive feel and experience which they have obtained after using their cell phones also influence their brand RWOM. Moreover, companies should consciously maintain the market order, achieve genuine concern for consumers, establish a stable emotional connection between consumers and brands, and inspire consumers to take the initiative to spread positive brand-related information to other consumer groups and recommend others to buy.

Finally, companies should increase the publicity of brand advantages according to the needs of the target consumer groups. Different mobile phone manufacturing companies like Huawei, Apple, Nokia, Samsung, Sony, Ericsson and others in order to build a strong brand word-of-mouth should try to promote cell phones with good styles, improved technology and higher quality. Besides, enterprises can also put creative posters in subways, bus stops or major shopping malls to increase the communication of brand culture, brand value, brand story and other elements to trigger consumers' attention to the brand, stimulate consumers' memory and association about the authenticity of the brand, enhance consumers' recognition and appreciation of the brand, promote positive brand communication among consumer groups, and form a good word-of-mouth effect.

### **Limitation and suggestions for future study**

The study has some limitations. First, this study takes cell phone brands as an example, and the findings are of reference value to the marketing activities of cell phone brands, but whether the findings and insights of this study are still applicable to other types of brands such as apparel, food, and beauty industries need to be further explored and verified. Therefore, the research area of brand authenticity can be extended in the future to explore the performance of brand authenticity in other industries. Second, this study takes RWOM as the dependent variable to study the influence of brand authenticity on consumers' behavioral attitudes, while there are other influencing factors between the willingness to recommend word-of-mouth and the behavior of word-of-mouth recommendation, including the environment of word-of-mouth recommendation and the way of word-of-mouth recommendation. Therefore, future research can further explore the influence of brand authenticity on consumers' actual behaviors to provide more accurate guidance for enterprise development and brand building. Lastly, the impact of brand authenticity on RWOM may be moderated by some factors, such as brand familiarity and consumers' brand involvement, etc. Future research can

introduce some moderating variables to improve the research model and expand the research and application of brand authenticity in the marketing field.

## References

- Akbar, M. M., & Wymer, W. (2017). Refining the conceptualization of brand authenticity. *Journal of Brand Management*, 24(1), 14-32.
- Assiouras, I., Liapati, G., Kouletsis, G., & Koniordos, M. (2015). The impact of brand authenticity on brand attachment in the food industry. *British Food Journal*, 117(2), 538-552.
- Beverland, M. B., Lindgreen, A., & Vink, M. W. (2008). Projecting Authenticity Through Advertising: Consumer Judgments of Advertisers' Claims. *Journal of Advertising*, 37(1), 15-5.
- Diallo, M. F., Moulins, J., & Roux, E. (2020). Unpacking brand loyalty in retailing: a three-dimensional approach to customer-brand relationships. *International Journal of Retail & Distribution Management*, 49(2), 204-222.
- Fan, Z. Y., & Tang, X. W. (2017). Service remediation, place attachment and tourists' willingness to spread positive word-of-mouth--an empirical study based on 402 questionnaires. *Survey World*, 29(5), 18-23.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Fritz, K., Schoenmueller, V., & Bruhn, M. (2017). Authenticity in branding – exploring antecedents and consequences of brand authenticity. *European Journal of Marketing*, 51(2), 324-348.
- Grayson, K., & Martinec, R. (2004). Consumer perceptions of iconicity and indexicality and their influence on assessments of authentic market offerings. *Journal of Consumer Research*, 31(2), 296-313.
- Hair, J., Hult, T., Ringle, C., & Sarstedt, M. (2014). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Thousand Oaks, CA: Sage Publications.
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1995). *Multivariate data analysis with readings*. Englewood Cliffs, NJ: Prentice-Hall.
- Heale, R., & Twycross, A. (2015). Validity and Reliability in Qualitative Studies. *Evidence-Based Nursing*, 18(3), 66-67.
- Heinberg, M., Katsikeas, C. S., Ozkaya, H. E., & Taube, M. (2019). How nostalgic brand positioning shapes brand equity: Differences between emerging and developed markets. *Journal of the Academy of Marketing Science*, 48(5), 869-890.
- Iqbal, J., & Hameed, W. U. (2020). *Open innovation challenges and coopetition-based open-innovation empirical evidence from Malaysia*(pp.144-166). In Pablos, P. O., Zhang, X., Chui, K. T. (Eds.). *Innovative management and business practices in Asia*. US: IGI Global.
- Jiang, Y. B., Zhang, H., Zhang, C. H., & Wang, Y. W. (2021). The influence of perceived authenticity, nostalgic emotion and local attachment on behavioral intention of film and television tourists: The case of Bai Lu yuan film and television city in Xi'an. *Journal of ZheJiang University (Science Edition)*, 48(4), 508-520.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3<sup>rd</sup> eds.). New York, NY: The Guilford Press.
- Kumar, J., & Nayak, J. K. (2019). Brand engagement without brand ownership: A case of non-brand owner community members. *Journal of Product & Brand Management*, 28(2), 216-230.
- Kumar, J., & Nayak, J. K. (2019). Consumer psychological motivations to customer brand engagement: a case of brand community. *Journal of Consumer Marketing*, 36(1), 168-177.
- Lacoeuilhe, J., & Belaïd, S. (2007). Quelle(s) mesure(s) pour l'attachement à la marque? *Revue Francaise du Marketing*, 213, 7-25.

- Liang, J. P., Wu, L., & Rong, J. X. (2021). How does internet word of mouth promote purchase intention? --A moderated mediation model based on consumer inspiration, *Business Economics and Management*, 41(2), 56-67.
- Lim, X. J., Cheah, J., Cham, T. H., Ting, H., & Memon, M.A. (2020). Compulsive buying of branded apparel, its antecedents, and the mediating role of brand attachment. *Asia Pacific Journal of Marketing and Logistics*, 32(7), 1539-1563.
- Liu, J. X., & Fan, X. C. (2020). What's in the heart, what's in the mouth? A study on the influence of psychological ownership on consumer word-of-mouth recommendation. *Nankai Management Review*, 23(1), 144-157.
- Liu, M. H. (2020b). The mechanism of brand personality on word-of-mouth communication: The formation and expression of brand attachment. *Enterprise Economics*, 39(3), 67-75.
- Liu, Y. (2020a). *A study on the influence of brand authenticity of newly created services on consumers' purchase intention* (Doctoral dissertations). Shandong, China: Shandong University.
- Love, E., Staton, M., & Rotman, J. D. (2016). Loyalty as a matter of principle: The influence of standards of judgment on customer loyalty. *Marketing Letters: A Journal of Research in Marketing*, 27(4), 661-674.
- Ludwig, S., de Ruyter, K., Friedman, M., Brügger, E. C., Wetzels, M., & Pfann, G. A. (2013). More than words: The influence of affective content and linguistic style matches in online reviews on conversion rates. *Journal of Marketing*, 77(1), 87-103.
- Morhart, F., Malär, L., Guèvremont, A., Girardin, F., & Grohmann, B. (2015). Brand authenticity: An integrative framework and measurement scale. *Journal of Consumer Psychology*, 25(2), 200-218.
- Nierobisch, T., Toporowski, W., Dannewald, T., & Jahn, S. (2017). Flagship stores for FMCG national brands: Do they improve brand cognitions and create favorable consumer reactions? *Journal of Retailing and Consumer Services*, 34, 117-137.
- Park, C. W., MacInnis, D. J., & Priester, J. R. (2006). Beyond Attitudes: Attachment and Consumer Behavior. *Seoul National Journal*, 12(2), 3-36.
- Park, C. W., MacInnis, D. J., Priester, J. R., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74(6), 1-17.
- Qiu, D. H. (2001). *Mathematical and emotional science*. Changsha, China: Hunan People's Publishing House.
- Schultz, S. E., Kleube, R. E., & Kernan, J. B. (1989). These are a few of my favorite things: Toward an explication of attachment as a consumer behavior construct. *Advances in Consumer Research*, 16(1), 359-366.
- Sheng, G. H., Ge, W. D., & Yue, B. B. (2018). Implementing the spirit of the 19<sup>th</sup> National Congress and building a beautiful China--the influence of consumer self-concept on green purchasing behavior. *Business Research*, 61(12), 1-10.
- Sirgy, M. J. (1982). Self-concept in consumer behavior: A critical review. *Journal of Consumer Research*, 9(3), 287-300.
- Sun, X. H. (2020). The influence of corporate moral hazard behavior on customers' behavioral choices - based on the mediating role of brand attachment. *Business and Economic Research*, 39(20), 79-82.
- Thomson, M., Macinnis, D. J., & Park, C. W. (2005). The ties that bind: Measuring the strength of consumers' emotional attachments to brands. *Journal of Consumer Psychology*, 15(1), 77-91.
- Wu, J., Chen, Y., Chien, S., & Wu, W. (2016). Attachment relationship study of trust and trust transfer. *Journal of Service Theory and Practice*, 26(5), 681-695.

- Wu, J. Q. (2017). *Research on the influence of brand experience on brand attachment: the role of brand trust and consumer involvement* (Doctoral dissertation). Guangzhou, China: South China University of Technology.
- Xu, W., & Feng, L.Y. (2018). A study on the mechanism of the influence of authenticity of old brands on the intention of word-of-mouth communication. *Journal of Central University of Finance and Economics*, 38(1), 93-101.
- Yan, X. Q., Zhou, T. R., & Li, Y. C. (2011). Trust, commitment, relationship behavior and relationship performance: A buyer's perspective. *Management Review*, 23(3), 71-81.
- Yang, Y. W., Sun, G. H., & Tu, J. B. (2017). A study of country brand effect under high-intervention purchase decision. *Journal of Management*, 14(4), 580-589.
- Yao, G. A. (2019). Mechanisms by which experience and corporate reputation affect consumers' trust in e-commerce companies. *Soft Science*, 33(7), 47-50+57.
- Zeithaml, V. A., Berry, L. L., & Parasuraman, A. (1996). The behavioral consequences of service quality. *Journal of Marketing*, 60(2), 31-46.
- Zhang, C. B., & Hou, R. J. (2013). An empirical study on the influence of self-concept consistency on online brand loyalty - the mediating role of brand identity and commitment. *Soft Science*, 27(4), 136-140.
- Zhang, Z. (2019). *Research on the influence of symbolic brand image on customer fit behavior* (Doctoral Dissertation). Liaoning, China: Liaoning University.