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Research article

The impact of brand authenticity on brand attachment, brand loyalty, willingness to pay more, and forgiveness - For Chinese consumers of Korean cosmetic brands -

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ABSTRACT

Despite the corona-virus pandemic, Korean cosmetics maintain brand attachment in the Chinese market. This study identifies critical influencing and outcome factors of brand attachment within this consumer phenomenon. Specifically, it investigates the relationship between Chinese consumers' perceived brand authenticity and brand attachment, brand loyalty, willingness to pay a premium, and forgiveness. To this end, it uses AMOS 21.0 to analyze data collected through a questionnaire, testing the research model. The study reveals several key findings. Firstly, it assesses brand authenticity based on the following five sub-factors: consistency, naturalness, originality, advertisement truthfulness, and reliability. According to the assessment results, originality shows the most significant impact, followed by reliability, consistency, and naturalness. Furthermore, brand attachment significantly enhances brand loyalty, willingness to pay a premium, and forgiveness toward the brand. Higher levels of brand attachment lead to increased brand loyalty. In addition, greater brand attachment correlates with consumers' increased willingness to pay more for products and greater forgiveness towards the brand.

1. Introduction

1.1. Practical background

Economic development, income improvement, and cultural factors, such as valuing beauty, have significantly influenced consumers' purchasing behavior [1,2]. In China, consumption behaviors have considerably changed due to rapid economic growth and improved income levels. In particular, in the Chinese cosmetics market, the overall interest in beauty has increased alongside the middle class's income growth, enhancing purchasing power. For example, while the Chinese cosmetics market plunged in February

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2020 with the outbreak of COVID-19, it demonstrated a sharp recovery since March 2020 [3,4]. Specifically, the skincare market has shown an upward trend, with the sales of Korean cosmetics brand Huwa SK-II increasing by about 300 % in 2019. Simultaneously, mask pack sales also grew dramatically [5].

The Chinese cosmetics market promotes thousands of products using various pricing strategies, brand positioning, and unique functional ingredients [6]. This market involves premium and mid-to low-end segments. As of 2018, premium brands accounted for about 29.9 % of the total cosmetics market in China, with major global beauty brands leading the premium segment [5]. The remaining 70 % constitutes the mid-to low-end general market, where many Chinese native brands have launched new products. Recently, local Chinese brands have started closely following imported premium brands regarding price competitiveness and product quality, intensifying market competition. According to a survey of Chinese consumers' use of cosmetics, 57 % of consumers use foreign cosmetics brands, showing their marked preference for overseas brands [7]. A survey of preferences for overseas cosmetic brands, based on the number of searches on Baidu in 2016, revealed that all top 10 brands were international. LANCOME and Estee Lauder ranked first and second in this list, respectively. Korean brands in the top 10 included Innisfree, Sulwhasoo, and Laneige [7]. To survive in the competitive Chinese cosmetics market, which has become a battleground for global brands, more than simple functional differentiation, pricing policies, and exaggerated image advertisements are required. In an era of distrust toward excessive commercial messages, cosmetics brands must emphasize authenticity. Consumer awareness of brand authenticity is a critical element of brand authenticity and differentiated competitive advantage as it expands into the realm of truth, introducing brand value as a critical factor for products and services.

1.2. Theoretical background

In recent years, research on brand authenticity has been actively developing [8–10]. Previous studies have increasingly focused on the sub-dimensions of brand authenticity elements. They typically identified corporate, product, and sales source authenticity as key sub-dimensions. However, only a few studies have extended the application of authenticity to the broader branding context [11,12]. Furthermore, several studies have examined the authenticity of Chinese consumers' perceptions of Korean cosmetic brands. Unlike the previous studies, this study introduces five sub-dimensions of brand authenticity: naturalness, consistency, originality, advertisement truthfulness, and reliability.

Moreover, this study investigates how these sub-dimensions influence brand attachment, willingness to pay, and forgiveness, which are widely studied in social psychology. Specifically, it explores positive purchase intentions as potential outcomes of forgiveness, a psychological factor influencing Chinese consumers' perceptions of Korean cosmetics in the domestic market. This research is significant due to the rapid increase in the popularity of Korean cosmetics in the Chinese market.

1.3. Research gap

The impact of brand authenticity on brand attachment, loyalty, willingness to pay, and consumer tolerance is a crucial research topic for consumers of Korean cosmetics brands in China. In the Chinese market, where consumers are becoming more discerning about cosmetic brands, authenticity has emerged as a critical factor influencing their purchase decisions. However, a gap remains between current research and practical applications in this field.

Brand authenticity emphasizes the honest and sincere relationship between the brand and consumers, grounded in trust and recognition of the brand's concepts, values, and commitments. However, many Korean cosmetic brands in the Chinese market often prioritize short-term sales effects in their marketing strategies, neglecting to establish enduring emotional connections with consumers. This approach can result in losing consumer trust and loyalty over time, as immediate gains overshadow long-term interests.

Brand attachment refers to consumers' emotional connection and dependence on a brand, rooted in trust, identity, and satisfaction with the brand. However, a significant disparity often exists between the brand image and the commitment of some Korean cosmetic brands in the Chinese market compared to their actual products. This inconsistency hinders consumers from developing a genuine attachment and trust in these brands. Consequently, it impacts consumers' purchasing decisions and can result in negative perceptions of the brand.

Brand loyalty refers to consumers' willingness to purchase and recommend a brand. However, some Korean cosmetic brands in the Chinese market need more accurate and sustainable marketing strategies, hindering consumers from forming stable brand loyalty. Moreover, as market competition intensifies and consumer preferences diversify, maintaining consumer loyalty has become increasingly complex.

Furthermore, brand authenticity significantly influences consumer tolerance. When a brand is authentic, consumers show a high tolerance and leniency during crises and changes. Conversely, if a brand's authenticity is doubtful, consumers may become more demanding and critical, reducing their tolerance for the brand.

Therefore, authenticity significantly affects brand attachment, loyalty, willingness to pay, and consumer tolerance. However, the Chinese market indicates practical gaps in establishing and maintaining the authenticity of Korean cosmetic brands. To bridge this gap, brands must foster genuine and sincere relationships with consumers, the consistency between brand image and commitment, and the accuracy and sustainability of marketing strategies. In addition, brands should concentrate on consumers' needs and feedback, continually optimizing products and services to align with their expectations and preferences.

To address these objectives, this study explores how Chinese consumers perceive the authenticity of Korean cosmetic brands. It investigates the causal relationships between brand authenticity, attachment, loyalty, premium payment intention, and forgiveness. A significant contribution of this study is its emphasis on brand authenticity, defining five dimensions that influence consumers'

purchasing intentions as a psychological factor. Moreover, the study examines whether consumers' brand attachment can foster brand loyalty.

This study has the following structure: The next section provides a practical and theoretical background, followed by a review of relevant literature. Then, Section 3 represents the details of the research methods and subjects (consumers of Korean cosmetics brands in China) and elaborates on the research design. In addition, it provides the results of the data analysis, discusses their practical significance, and explores their alignment or divergence from existing theories. Finally, Section 4 offers research implications based on the findings.

2. Literature review

2.1. Theoretical basis

The theoretical basis of brand authenticity is rooted in consumer behavior, brand management, marketing, and related disciplines. These theories elucidate how brand authenticity impacts consumers' cognition, emotions, and behavior and offer strategic guidance for brand managers.

From the consumer behavior perspective, brand authenticity theory emphasizes how consumers perceive and evaluate brands. Consumers develop an overall impression of a brand through its characteristics, such as communication, product quality, and service experience. When a brand maintains consistency, commitment, and authenticity and demonstrates a unique personality and value, consumers trust and emotionally connect with it, leading to brand attachment and loyalty.

Moreover, brand management theory supports brand authenticity. It encourages brands to establish and maintain their image and reputation through practical strategies, bridging enterprises and consumers. As a crucial aspect of brand management, authenticity requires enterprises to uphold integrity and consistency in brand building to ensure a long-term relationship with consumers.

In addition, marketing theory provides a theoretical basis for brand authenticity. It emphasizes achieving enterprise goals by meeting consumers' needs. As a marketing strategy, brand authenticity enhances brands' competitiveness and market share by offering authentic and reliable products and services and establishing authentic, in-depth emotional ties with consumers.

2.2. Brand authenticity, brand attachment, and brand loyalty

Conscious firms create market offerings that bring consumers closer to authenticity [13]. Marketers increasingly utilize authenticity to leverage their firms' position and enhance their products' attractiveness [14]. To apply and realize the potential of authenticity, marketers have to thoroughly understand the nature of authenticity for its application and realization of its full potential [15]. In this regard, they have made various severe attempts to explain authenticity. Beverland and Farrelly [16] described authenticity as encapsulating "genuineness", "realness", and "trueness". Schallehn et al. [8] attributed authenticity as "original", differing from a "copy". Bruhn et al. [17] suggested continuity, originality, reliability, and naturalness as underlying dimensions of brand authenticity. Based on the previous research, we proposed five dimensions of brand authenticity: naturalness, consistency, originality, advertisement truthfulness, and reliability.

Brand authenticity is crucial in enhancing brand trust among consumers, leveraging both iconic and existential aspects [18,19]. Accordingly, brand authenticity has been a consistent focus of investigation in consumer behavior research and management practices [20]. Many studies confirm that brand authenticity is multidimensional without a specific definition [16,21]. For instance, Deepak and Kim [22] defined authenticity as "the value attached to the concept of objectivity, meaning true and original." Furthermore, Fritz et al. [23] argued that brand authenticity in the marketing literature means "the consistency of brand behavior that reflects brand values and norms and is faithful to itself without damaging the essence or essential character of the brand."

This study posits that brand authenticity is a desirable and crucial brand characteristic that requires significant investment in human and material resources. Furthermore, it assumes that achieving authenticity should not compromise the brand's essence or essential character.

Previous research on brand authenticity has shown that across various industries, perceived brand authenticity positively influences brand equity and consumer behavioral factors [7,8,24,25]. Specifically, perceived brand authenticity can positively influence the quality of relationships between consumers and brands, including brand trust, attachment, commitment, and loyalty [7,8,26–28].

However, Morhart et al. [15] found that, in research on consumer brands and brand authenticity, the effect on consumer brand affinity can considerably vary in different cases. Furthermore, brand authenticity (including corporate authenticity, product authenticity, and sales source authenticity) can significantly affect consumers in terms of brand attachment and brand loyalty [29]. Accordingly, brand authenticity is an essential factor in marketing [23].

While brand attachment represents an emotional bond between consumers and a brand, brand loyalty denotes a behavioral commitment where consumers demonstrate their attachment through actions. Recent studies examining the relationship between brand attachment and brand loyalty often use brand loyalty as an outcome variable of brand attachment [30–33]. For example, Zhou and Deng [34] proposed causal relationships among Chinese university students involving brand attachment, consumption inertia, and brand loyalty. Furthermore, by investigating the relationship between brand attachment and consumers' positive and negative behavior, Japutra et al. [35] found that the stronger the attachment to a brand, the higher the brand loyalty to that particular brand. Based on the analysis, this research formulates the following research hypotheses.

H1. Brand authenticity has a positive effect on brand attachment.

- **H1-1**. Naturalness has a positive effect on brand attachment.
- **H1-2**. Consistency has a positive effect on brand attachment.
- H1-3. Originality has a positive effect on brand attachment.
- **H1-4.** Advertisement truthfulness has a positive effect on brand attachment.
- **H1-5**. Reliability has a positive effect on brand attachment.
- **H2**. The brand attachment has a positive effect on brand loyalty

2.3. Brand attachment and willingness to pay more

The economics and marketing literature extensively explores consumers' willingness to pay more, shaped by their perception of a product or service's value, often influenced by external cues such as price or brand [36–39]. Willingness to pay more refers to a consumer's readiness or inclination to pay a higher price for a product or service [40]. This willingness represents consumers' intention to continuously use a product or service based on favorable judgments of its economic value. In previous research on premium payment intention, Chun et al. [41] investigated significant differences in satisfaction, willingness to pay a premium, and intention to revisit based on consumption propensity. As a result, individuals with a conscious consumption propensity showed the highest satisfaction levels, willingness to pay a premium, and intention to revisit deluxe hotels. In contrast, those with impulsive consumption propensity exhibited the lowest levels of satisfaction, willingness to pay a premium, and intention to revisit deluxe hotels. Furthermore, a study on the purchasing attitudes and behaviors of Muslim consumers targeting halal cosmetics indicated their willingness to pay more for such products [42]. In addition, Bahri-Ammari et al. [43] suggested that customers with a solid attachment to a brand maintain a consistent relationship with it, even if the price of the brand's products increases.

This analysis shows that consumers are willing to attribute new meanings to products or brands beyond their intrinsic value, such as resolving uncertainties, alleviating anxiety, participating in social collaborations, contributing to environmental conservation, and promoting family health. These motivations underscore consumers' willingness to pay a premium. Moreover, evidence suggests that consumers are willing to pay higher prices when they perceive a product as having low risk [44].

Based on these findings, this study hypothesizes that consumers with solid brand attachment demonstrate a higher intention to engage in word-of-mouth promotion for the product and pay a premium price to purchase the brand. Therefore, this analysis proposes the subsequent hypothesis.

H3. Brand attachment has a positive effect on premium payment intentions.

2.4. Brand attachment and forgiveness

Since the 1980s, studies have concentrated on investigating forgiveness from a psychological perspective. For instance, Enright et al. [45] defined forgiveness as "overcoming adverse reactions to the person who hurts deeply and unjustly and responding positively to them." Kaleta and Mróz [46] defined forgiveness as an individual's tendency to reduce negative emotions, perceptions, motivation, and behavior. Forgiveness involves resolving unpleasant feelings and changing one's attitude towards the person who caused the distressing experience. Therefore, forgiveness is an act aimed at maintaining a relationship based on psychological attachment [47].

Previous research showed that brand attachment considerably influences consumers' purchase intention, premium payment intention, and forgiveness. Specifically, consumers with a high brand commitment or attachment level are more likely to forgive the brand [48–51].

In contrast, Kim Kyung-ho [52] confirmed that consumers with a strong brand attachment are less likely to forgive the brand.

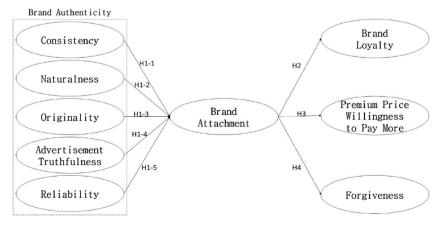


Fig. 1. Research model.

Moreover, the higher the relationship quality between the brand and the consumer, the more negatively affected the consumers' feelings when they perceive a betrayal by the brand [53–56].

Therefore, the relationship between brand attachment and forgiveness involves a complex psychological phenomenon with positive and negative outcomes. Based on Chinese consumers' high attachment to Korean cosmetics, this study predicts that consumers with strong brand attachment are more likely to forgive brands for unintentional oversights.

H4. The more robust the brand attachment, the greater the sense of forgiveness.

3. Research design and results

3.1. Research mode

This study develops the following research model by subdividing brand authenticity into five factors: consistency, naturalness, originality, advertisement integrity, and reliability. Fig. 1 illustrates the research model hypothesizing the relationships among these factors.

3.2. Research design

3.2.1. Sample and data collection

Following Schreiber's [57], this research analyzes the Structural Equation Model (SEM) step by step lucidly and understandably. The questionnaire included items rated on a 5-point Likert scale and questions about respondents' profiles, such as gender, age, marital status, and occupation. The ethical committee of the International Business School, Shandong Jiaotong University, approved this study. Informed consent was obtained from all participants. There is no specific serial number due to national conditions.

We used an online Chinese survey agency to survey Chinese consumers for the empirical analysis. Using purposive and convenience sampling, we collected 623 questionnaires. Data collection's exclusion and inclusion criteria were time spent and continuing response. After filtering, we obtained 501 reliable questionnaires for the final analysis. Most of our participants were female (66.9 %), aged 20–29 years old (48.1 %), married (55.9 %), and university graduates (70.9 %), with an income in the range of 500,000 to 1,000,000 KRW. Since only some people over 50 years old responded to this survey, we combined the age category into over 40 years old.

Table 1Respondents' profile characteristics.

Variable	Characteristic	Frequency	Share (%)
Gender	Male	166	33.1
	Female	335	66.9
Age	20s-29s	241	48.1
_	30s-39s	197	39.3
	over 40s	63	12.6
Marriage	Single	221	44.1
-	Married	280	55.9
Education	Under high school	18	3.6
	Attending in University	35	7.0
	University graduation	355	70.9
	Graduated school	93	18.6
Job	Student	68	13.6
	Employee	291	58.1
	Administration	24	4.8
	Profession	18	3.6
	Housewife	8	1.6
	Self-employed	18	3.6
	Technical	49	9.8
	Etc.	25	5.0
Monthly Income (Unit: KRW)	Less than 500,000 won	62	12.4
	500,000~ Less than 1,000,000 won	173	34.5
	1,000,000~Less than 1,500,000 Won	150	29.9
	Over 1,500,000	116	23.2
Brand	Luxury brands (e.g., Sulwhasoo)	220	43.9
	Intermediate brands (e.g., Laneige)	174	34.7
	Low-cost brands (e.g., Faceshop)	86	17.2
	Other	21	4.2
Purchase	Specialty stores in China	89	17.8
Method	Online shops	98	19.6
	Duty-free shops	102	20.4
	Specialty stores in Korea	71	14.2
	Agency purchase	105	21.0
	Other	36	7.2
Total		501	100.0

According to Pei [58], a luxury brand product is priced between 80000 and 100000 KRW. The price of intermediary and high-end products ranges between 50000 and 80000 KRW, while the price of lower products is between 10000 and 50000 KRW. As for brand preferences, most respondents purchased luxury brands (43.9%), followed by mid-range brands (34.7%) and low-priced brands (17.2%). Regarding the purchase method, proxy purchase was the most common (21.0%), followed by duty-free shops (20.4%), internet (19.6%), Chinese domestic specialty stores (17.8%), Korean domestic specialty stores (14.2%), and other methods (7.2%). Table 1 represents the respondents' profile characteristics.

3.2.2. Measurement and data analysis methods

Given that this study does not involve experimental manipulation, we aimed to enhance the reporting of SEM outcomes by JARSQuant standards by the APA, following the approach outlined by Appelbaum et al. [59]. This study measured brand authenticity (consistency, naturalness, originality, advertisement truthfulness, reliability), brand attachment, brand loyalty, premium payment intention, and forgiveness using a five-point Likert scale (1 = strongly disagree and 5 = strongly agree). Brand authenticity was adopted from Bruhn et al. [60] and Xu et al. [61], and brand attachment, brand loyalty, premium payment intention, and forgiveness were adopted from Sun [62]. The appendix provides specific measurement items of each variable, which were adjusted from previous studies to fit our sample, ensuring content validity. Then, the study analyzed the data using Statistical Product for Social Sciences (SPSS, version 20.1) and Analysis Moment of Structures (AMOS, version 21.0). After that, the fitness level of the model was evaluated using the data, followed by confirmatory factor analysis. Before testing the hypotheses, a reliability analysis was conducted to refine the valid results and check the research hypotheses.

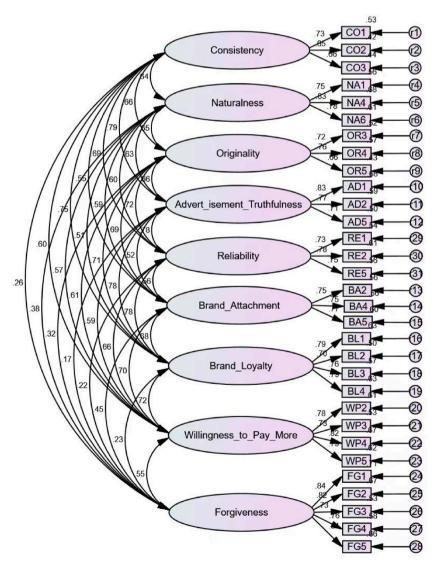


Fig. 2. Measurement model result.

Fig. 2 displays the results of investigating the fitness of the model. According to Fig. 2 and the findings of MacCallum [63], the overall measurement model fit indices indicate that the comprehensive confirmatory factor model fits the data well (χ^2 (df) = 697.941 (398), CMIN/DF = 1.754, GFI = .919, AGFI = .899, IFI = .964, TLI = .957, CFI = .963, χ^2 (df) = 697.941(398), CMIN/DF = 1.754, GFI = .919, AGFI = .899, IFI = .964, TLI = .957, CFI = .963, RMR = .026, RMSEA = .039). Therefore, they confirmed the fitness of the model and the indices.

Table 2 represents the results of examining the model's reliability and indices. According to the results, each variable's Cronbach's α value was .711 or higher, the conceptual reliability value was .835 or higher, and the variance extraction index was .628 or higher. Therefore, the results affirm the reliability and validity of the model and its indices.

To assess discriminant validity among variables, we compared correlation coefficients between variables with their corresponding Average Variance Extracted (AVE) values. Table 3 provides the Gaskin table and the correlation and discriminant validity of the variables. According to the results, all squared correlation coefficients were lower than the AVE values, confirming sufficient discriminant validity [64].

3.3. Results

3.3.1. Hypotheses test

After confirming the reliability and validity of the measurement items through analysis of the measurement model, we utilized AMOS 21.0 to assess the goodness of fit in the SEM. This allowed us to test the research hypotheses concerning the relationships between brand authenticity, brand attachment, loyalty, premium payment intention, and forgiveness—Fig. 3 displays the AMOS graph and Fig. 4 shows the SEM results. The results confirm the goodness of fit in the model since $\chi^2(df) = 913.704(413)$, p = 0.000, CMIN/DF = 2.212, GFI = .890, AGFI = .868, IFI = .939, TLI = .931, CFI = .939, RMSEA = .049, RMR = .037.

3.3.2. Hypotheses test results

Table 4 represents the path analysis results.

3.4. Discussion

3.4.1. Five sub-dimensions of brand attachment

First, the results showed that the coefficient of consistency is .185, which is positive and statistically significant at the 5 % level. It

Table 2
Confirmatory factor analysis.

Variable		Item	Estimate	S.E.	t-statistic	p-value	Cronbach' α	Composite reliability	AVE
Brand authenticity	thenticity Consistency		.728	_	_	-	.711	.835	.628
		CO2	.645	.077	12.619	.000			
		CO3	.661	.081	12.893	.000			
	Naturalness	NA1	.750	-	-	-	.826	.866	.683
		NA4	.826	.072	17.199	.000			
		NA6	.783	.067	16.498	.000			
	Originality	OR3	.721	-	_	-	.751	.835	.628
		OR4	.758	.067	14.639	.000			
		OR5	.657	.064	12.985	.000			
	advertisement truthfulness	AD1	.827	-	-	-	.811	.892	.735
		AD2	.771	.056	18.407	.000			
		AD5	.710	.054	16.641	.000			
	Reliability	RE1	.733	-	_	-	.799	.881	.712
		RE2	.782	.072	16.120	.000			
		RE5	.751	.070	15.550	.000			
Brand attachment		BA2	.748	-	_	-	.800	.845	.644
		BA4	.745	.067	15.334	.000			
		BA5	.773	.064	15.820	.000			
Brand loyalty		BL1	.794	-	_	-	.845	.864	.679
		BL2	.704	.062	16.341	.000			
		BL3	.758	.057	17.858	.000			
		BL4	.794	.058	18.897	.000			
Premium payment in	ntention	PP2	.778	-	_	-	.861	.846	.648
		PP3	.730	.054	16.700	.000			
		PP4	.821	.059	19.118	.000			
		PP5	.788	.056	18.251	.000			
Forgiveness		FO1	.840	-	_	-	.894	.905	.656
		FO2	.817	.046	21.349	.000			
		FO3	.729	.048	18.185	.000			
		FO4	.763	.050	19.385	.000			
		FO5	.812	.046	21.161	.000			

 $[\]chi^2(df) = 697.941(398), \ p = 0.000, \ CMIN/DF = 1.754, \ GFI = .919, \ AGFI = .899, \ IFI = .964, \ TLI = .957, \ CFI = .963, \ RMSEA = .039, \ RMR = .026.$

 Table 3

 Results of the discriminant validity and correlation analysis.

Variable	CO	NA	OR	AD	RE	BA	BL	PP	FO
CO	.628								
N.A.	.415	.683							
OR	.441	.421	.628						
A.D.	.619	.402	.441	.735					
RE	.483	.356	.514	.615	.712				
BA	.300	.342	.472	.269	.316	.644			
B.L.	.557	.261	.506	.612	.608	.461	.679		
P.P.	.355	.324	.367	.349	.440	.494	.513	.648	
F.O.	.067	.144	.100	.029	.048	.199	.055	.306	.656

^{**} Note: All boldfaced diagonal elements appearing in the correlation of the constructs matrix indicate the square roots of AVEs.

^{*}p < 0.05, **p < 0.01.

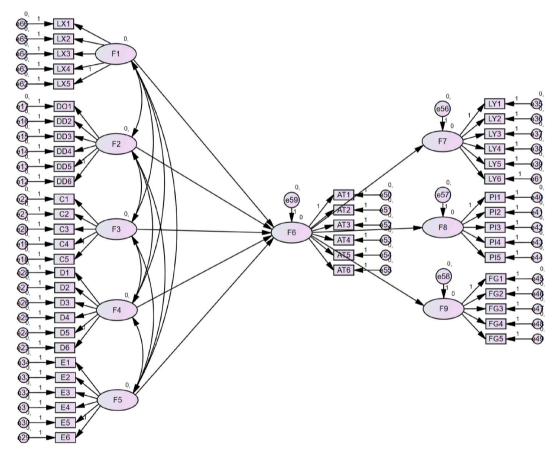


Fig. 3. AMOS graph.

implies that the consistency of brand authenticity subcomponents positively influences brand attachment, which confirms hypothesis H1-1. This finding suggests that the core elements of cosmetics, such as quality, image, and customized services, enhance consumers' affinity toward cosmetic brands when consistent. Therefore, among the analyzed factors (intense competition, rapid market changes, and diverse consumer scenarios), maintaining consistent product values plays the most considerable role in Korean cosmetics to gain a competitive edge.

Secondly, the results indicated that the coefficient of naturalness is .127, which is positive and statistically significant at 5 %. This outcome infers that the naturalness of brand authenticity subcomponents positively impacts brand attachment, supporting hypothesis H1-2. It suggests that higher levels of naturalness in a cosmetic brand enhance consumer affinity towards it. It highlights the importance of understanding natural processing methods that exclude chemical materials or preservatives, ensuring transparency regarding origin, sourcing information, and the authenticity of natural cosmetics through appropriate certifications.

CO: Consistency; NA: Naturalness; OR: Originality; AD: Advertisement truthfulness; RE: Reliability.

BA: Brand attachment; BL: Brand loyalty; PP: Premium payment intention; FO: Forgiveness.

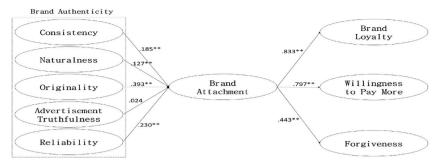


Fig. 4. SEM results.

Table 4Results of the path analysis for the hypotheses.

Hypothesis	Independent variable	Dependent variable	Coefficient	S. E.	t-statistics	p-value	Result
H1-1	Consistency	Brand attachment	.185	.114	2.019 ^a	.044	Supported
H1-2	Naturalness	Brand attachment	.127	.059	2.098 ^a	.036	Supported
H1-3	Originality	Brand attachment	.393	.080	4.878 ^b	.000	Supported
H1-4	Advertisement truthfulness	Brand attachment	.024	.101	.246	.806	Rejected
H1-5	Reliability	Brand attachment	.230	.102	2.635 ^b	.008	Supported
H-2	Brand attachment	Brand loyalty	.833	.059	13.556 ^b	.000	Supported
H-3	Brand attachment	Premium payment intention	.797	.072	13.089 ^b	.000	Supported
H-4	Brand attachment	Forgiveness	.443	.070	8.236 ^b	.000	Supported

Note: $\chi^2(df) = 913.704(413)$, p = 0.000, CMIN/DF = 2.212, GFI = .890, AGFI = .868, IFI = .939, TLI = .931, CFI = .939, RMSEA = .049, RMR = .037.

Thirdly, the outcome revealed that the coefficient of originality is .393, which is positive and statistically significant at the 1 % level. It confirms that originality, as a sub-component of brand authenticity, positively impacts brand attachment, consistent with hypothesis H1-3. When the quality and service level provided by a company or brand responds to expectations or surpasses other products, or when consumers perceive it as the initial product being developed, important variables of authenticity can be felt.

Fourthly, the estimate suggested that the coefficient of advertisement truthfulness is .024 and statistically insignificant. It rejects the impact of advertising authenticity as a subcomponent of brand authenticity on brand attachment, inconsistent with hypothesis H1-4. It indicates that excessive advertising and promotional imagery lead Chinese consumers to question the effectiveness and performance of Korean cosmetics brands, thereby emphasizing the importance of authenticity. Moreover, consumers have moved beyond relying solely on advertising when making purchasing decisions, highlighting the need for companies to manage trust and sincerity through genuine interactions with consumers.

Fifthly, the outcome indicated that the reliability coefficient is .230, which is positive and statistically significant at 1 %. It reveals that the reliability of brand authenticity positively influences brand attachment, aligned with hypothesis H1-5. It suggests that companies or brands enhance consumer trust and reliance by maintaining regular communication and fulfilling commitments, thereby ensuring consumer affinity for cosmetics.

3.4.2. Impact of brand attachment on brand loyalty

According to the results, the coefficient is .833, which is positive and statistically significant at the 1 % level. It shows that brand attachment has a considerable and positive impact on brand loyalty, supporting hypothesis H2. This implies that Korean cosmetics companies aiming to enhance brand loyalty among Chinese consumers should improve their marketing strategies, enhance brand authenticity, increase brand awareness, gain consumer recognition, and foster brand loyalty by cultivating brand affection. This finding aligns with Choo [65], Zhou, and Deng [34], highlighting brand affection's positive impact on brand loyalty. Essentially, positive consumer experiences with cosmetics lead to increased brand loyalty through continued use of the brand's products.

3.4.3. Impact of brand attachment on willingness to pay a premium

Based on the results, the coefficient equals .797, which is positive and statistically significant at a 1 % level. It confirms a strong and positive link between brand passion and willingness to pay a premium, accepting hypothesis H3. It indicates that Chinese consumers who are highly engaged with cosmetics are positively willing to pay a premium when brands implement fast, differentiated, and highlevel marketing strategies that meet consumer needs. Moreover, the findings suggest that Chinese consumers' brand love, influenced by the Korean Wave, leads them to value quality and service highly, motivating them to pay higher prices or additional fees while maintaining brand loyalty.

 $^{^{}a}$ p < 0.05.

p < 0.01

3.4.4. Impact of brand attachment on forgiveness

Regarding the results, the coefficient is .443, which is positive and statistically significant at the 1 % level. It indicates brand attachment's positive and considerable effect on forgiveness, consistent with Park et al. [66] and hypothesis H4. Therefore, cosmetics companies should develop marketing strategies that foster strong consumer relationships and minimize negative emotions. For Chinese consumers, positive emotions or affection towards cosmetic brands incentivize them to forgive the brands, reducing the negative impact on the brand's reputation.

4. Conclusions

4.1. Implications

4.1.1. Theoretical implications

Even during the COVID-19 crisis, the cosmetics market in China has demonstrated a continuous growth trend. In particular, Chinese consumers' brand attachment to Korean cosmetics has steadily increased. The results of this study offer the following theoretical implications:

First, our results demonstrate that four sub-factors of Korean cosmetic brand authenticity (consistency, naturalness, originality, and reliability) positively affect brand attachment. These findings suggest that maintaining the intrinsic value of a cosmetic brand fosters positive consumer emotions. Specifically, higher consistency in the brand's core values and attributes significantly influences consumer attachment. Moreover, greater naturalness in non-artificial cosmetics enhances brand attachment. Brand originality is crucial in capturing consumer attention, while brand reliability significantly precedes and influences brand attachment. Once established through consistent positive experiences, trust becomes a critical factor in strengthening the consumer-brand relationship and positively impacts attachment.

However, our results indicate that advertisement truthfulness could be more effective in the authenticity of Korean cosmetic brands. This finding suggests that excessively high levels of advertisement truthfulness may decrease consumers' brand attachment.

In this respect, most cosmetic advertisements in Korea feature celebrities. While highlighting their attractiveness, physical aesthetics, goodwill, and intimacy, they often need more expert knowledge about the products they promote. Overemphasis on celebrity endorsements can lead to a decreased recall rate of the brand name, brand attributes, and advertisement content. Moreover, the credibility of the advertisements may decline due to the repetitive and overexposed presence of the celebrity models [67].

Second, we found that brand attachment substantially and positively affects brand loyalty. This finding suggests that cosmetic companies should enhance the authenticity and identity of their brands to increase brand loyalty among Chinese consumers, consistent with previous studies [34,65,68]. Consequently, brands' marketing strategies should foster brand attachment as a pathway to inducing brand loyalty. Therefore, brand loyalty increases when consumers have a positive experience of using cosmetics.

Third, our results demonstrated that brand attachment positively affects the willingness to pay a premium. Consumers initially consider the standard price when making premium payments for branded cosmetics. However, if they have a strong affection for a particular brand, they tend to believe that no other brand's products can replace it, leading to a greater willingness to pay more than the proposed price. Our findings indicate that the more vital consumers' attachment formed through positive evaluations after using authentic cosmetics, the greater their sensitivity to cosmetics prices and the higher their willingness to pay a premium.

Finally, brand attachment showed a significant and positive effect on forgiveness, consistent with previous studies [50,69]. In other words, forgiveness is highly complex, suggesting its dependence on relational factors rather than personal characteristics [31]. Therefore, due to Chinese consumers' solid relationship with Korean cosmetics, their attachment to cosmetic brands is robust, positively influencing forgiveness. Consequently, Chinese consumers who harbor strong positive sentiments towards Korean cosmetic products are likely to forgive occasional disappointments in quality or price.

4.1.2. Managerial implications

This study has several practical implications. First, authenticity is escalating in significance in the modern economic landscape as the global shift from a product economy to a service and high-quality experience economy is underway. Consequently, this study's practical relevance lies in its conceptualization and measurement of brand authenticity within Korean cosmetic brands.

The estimated impact of the five authenticity sub-factors (i.e., consistency, naturalness, originality, advertisement truthfulness, and reliability) provides a practical assessment of how Chinese consumers perceive the brand authenticity of Korean cosmetic products. Managing and enhancing these sub-factors can have significant implications for cosmetics industry managers.

Secondly, we discovered that originality is the most influential variable among the sub-factors of brand authenticity. In addition, we confirmed that reliability is the second most influential factor affecting brand attachment. These findings are invaluable in today's fiercely competitive market, emphasizing that marketing experts and managers should prioritize enhancing the originality and reliability of brands to ensure their survival and success.

Thirdly, our study's novelty lies in introducing the concept of forgiveness, previously developed in psychology, into research on brand authenticity. This paves the way for future research. Our findings highlight forgiveness as a significant variable that can elucidate the relationship between brands and consumers in the evolving marketing landscape. Based on these results, corporate and marketing managers should adopt strategies that enhance positive evaluations, attachment, and brand loyalty among consumers through genuine product development to strengthen consumer brand attachment.

Over time, enhanced brand authenticity leads to stronger brand loyalty. Therefore, management and marketing managers should recognize the critical role of antecedent variables in brand attachment. Improving these variables can bolster customer loyalty,

increase willingness to pay premiums, and foster emotional forgiveness among consumers.

4.2. Limitations and suggestions for future work

The present study has several limitations. First, it has collected the data exclusively through online surveys, without face-to-face interaction with respondents. Consequently, it cannot rule out the possibility of untruthful or erroneous responses. Therefore, future studies should consider conducting surveys both online and offline.

Second, based on our literature review, the study has conceptualized brand authenticity with five sub-factors (i.e., consistency, naturalness, originality, advertisement truthfulness, and reliability). However, given the limited previous research on brand authenticity in the context of cosmetic brands, future studies can explore additional sub-factors that may contribute to brand authenticity.

Third, securing a broad customer base amidst intense competition and evolving market dynamics requires understanding consumers' purchasing psychology and values and enhancing brand quality and competitiveness.

Finally, the findings imply the need for efforts in marketing management and communication strategies related to brand experience factors. To serve this need, future studies can investigate a broader range of brands.

5. Contributions

5.1. Theoretical contribution

The study's theoretical contribution primarily lies in its comprehensive understanding and practical guidance in consumer behavior, brand management, and marketing.

First, brand authenticity makes a theoretical contribution to consumer behavior by offering a new perspective on analyzing the interaction between consumers and brands. Traditional consumer behavior research primarily examines consumers' cognition, emotion, and behavior. Brand authenticity extends this by emphasizing how brand authenticity and consistency influence consumer trust and loyalty. This theory underscores the significance of enhancing our understanding of consumer decision-making processes and behavior patterns, fostering genuine and deep relationships between brands and consumers.

Second, the theoretical contribution of brand authenticity to brand management introduces a novel strategy. Traditional brand management revolves around positioning, image crafting, and communication strategies. In contrast, brand authenticity advocates for brands to cultivate sincere and transparent relationships with consumers while adhering to their core values and distinctive identity. This necessitates brand managers to prioritize maintaining consistency between the brand's internal quality and external representation throughout its construction and maintenance process, thereby boosting the brand's competitiveness and appeal.

Finally, brand authenticity contributes theoretically to the marketing field by offering a novel marketing strategy. Traditional marketing strategies typically prioritize meeting consumer needs and boosting product sales. In contrast, brand authenticity advocates for gaining market share by providing authentic and trustworthy products and services and fostering genuine and meaningful relationships with consumers. This approach enables enterprises to distinguish themselves in competitive markets and achieve sustained brand growth and success over the long term.

5.2. Practical contribution

The practical contribution of this study is mainly reflected in the following aspects.

First, brand authenticity enhances the emotional connection between consumers and brands. When a brand exhibits an accurate, consistent, and unique personality, consumers are likelier to trust and emotionally identify with it. This emotional connection strengthens consumer brand loyalty and encourages active participation in brand communication and promotion activities, thereby generating positive word-of-mouth effects for the brand.

Second, brand authenticity enhances brand competitiveness. In a highly competitive market environment, authenticity can serve as a differentiation advantage, shaping a unique impression and perception of the brand among consumers. This distinctiveness helps brands to stand out, attract greater attention, and increase purchases.

Furthermore, brand authenticity can generate long-term commercial value for the brand. By establishing and consistently maintaining a genuine brand image, brands can cultivate lasting trust and recognition among consumers, ensuring the brand's development in the long run. This enduring commercial value manifests in steady sales revenue growth and the continual accumulation and appreciation of brand assets.

Finally, brand authenticity also enhances enterprises' social image and reputation. By adhering to principles of authenticity and integrity, enterprises can build a positive image and reputation in society, thereby enhancing consumer trust and support. Cultivating a strong social image and reputation enables enterprises to achieve long-term development, including market expansion, talent attraction, and partnership establishment.

Supplementary Materials: There are no available online materials.

Data availability statement

The data associated with this study have not been deposited into a publicly available repository. They will be made available on

request.

CRediT authorship contribution statement

Hui Sun: Writing – original draft, Validation, Project administration, Methodology, Formal analysis, Conceptualization. You-Yu Dai: Writing – review & editing, Writing – original draft, Visualization, Validation, Methodology, Funding acquisition, Formal analysis, Conceptualization. Su-Sung Jeon: Supervision, Conceptualization. Rok Lee: Writing – review & editing, Visualization, Validation, Methodology. Hongyun Wang: Investigation. Xing Shi: Investigation. Long Sun: Funding acquisition, Data curation. Yan Wang: Data curation.

Declaration of competing interest

The authors declare the following financial interests/personal relationships which may be considered as potential competing interests: You-Yu Dai reports administrative support was provided by Shandong Jiaotong University. You-Yu Dai reports statistical analysis was provided by China Society of Logistics and China Federation of Logistics & Purchasing. Honyun Wang reports investigation support was provided by Shandong Provincial Office of Philosophy and Social Science Work. Yan Wang reports data curation was provided by Shandong Provincial Bureau of Statistics. The corresponding author sometimes serves as a reviewer for Heliyon - YYD. If there are other authors, they declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix

Consistency

- 1. The Korean cosmetics brand I purchased maintains the same image.
- 2. The Korean cosmetics brand I purchased has consistency (e.g., raw materials).
- 3. The Korean cosmetics brand I purchased has maintained consistent quality and service.
- 4. The Korean cosmetics brand I purchased maintains a consistent price.
- 5. The Korean cosmetics brand I purchased carries out its promise consistently.
- 6. The promise of the Korean cosmetics brand I purchased and the current behavior is consistent.

Naturality

- 1. The Korean cosmetics brand I bought is natural cosmetics.
- 2. The Korean cosmetics brand I purchased leaves a sincere impression.
- 3. The Korean cosmetics brand I bought gives a natural impression.
- 4. The Korean cosmetics brand I purchased does not use chemical materials.
- 5. The Korean cosmetics brand I purchased has a natural image in packaging and design.
- 6. The Korean cosmetics brand I purchased does not use preservatives.

Originality

- 1. The Korean cosmetics brand I purchased is different from other brands.
- 2. The Korean cosmetics brand I purchased is superior to other brands.
- 3. The Korean cosmetics brand I bought is unique.
- 4. The Korean cosmetics brand I purchased is clearly distinguished from other brands.
- 5. The Korean cosmetics brand I purchased provides its products and other services.

Reliability

- 1. The Korean cosmetics brand I purchased keeps my promise in my experience.
- 2. The Korean cosmetics brand I purchased keeps its promise to consumers.
- 3. The promise of the Korean cosmetics brand I purchased is reliable.
- 4. The Korean cosmetics brand I bought did not disappoint me.
- 5. I can respect the promise of the Korean cosmetics brand I purchased.
- 6. The Korean cosmetics brand I purchased is honest.

Advertising authenticity

1. The advertisement of the Korean cosmetics brand I purchased runs responsibly.

- 2. The promise of the Korean cosmetics brand advertisement I purchased is reliable.
- 3. The information delivered by the advertisement of the Korean cosmetics brand I purchased is objective.
- 4. The advertisement of the Korean cosmetics brand I purchased is sincere.
- 5. The advertisement of the Korean cosmetics brand I purchased is responsible for the performance and efficacy of the product.
- 6. The advertisement information of the Korean cosmetics brand I purchased is reliable.

Attachment

- 1. I feel a special feeling about the Korean cosmetics brand that I purchased.
- 2. I feel empty if I do not use the Korean cosmetics brand I bought.
- 3. I feel affection for the Korean cosmetics brand that I purchased.
- 4. I would be distraught if I purchased no Korean cosmetics brand.
- 5. Other brands cannot replace the Korean cosmetics brand I purchased.
- 6. I love the Korean cosmetics brand I bought.

Loyalty

- 1. I will tell others positively about the Korean cosmetics brand I purchased.
- 2. I will recommend the Korean cosmetics brand that I purchased to others.
- 3. I will first consider the Korean cosmetics brand I purchased when I buy cosmetics.
- 4. I will continue to purchase the Korean cosmetics brand that I purchased.
- 5. I want to recommend the Korean cosmetics brand I bought to people around me.
- 6. Even if the price is slightly high, I will buy the Korean cosmetics brand I purchased.

Willingness to pay

- 1. I will pay more to buy Korean-branded cosmetics.
- 2. I am willing to pay extra if I choose Korean cosmetics over other brands when shopping.
- 3. I will pay more if I choose Korean cosmetics when shopping.
- 4. Even if the price of Korean brand cosmetics goes up, I will buy the brand cosmetics that I use continuously.
- 5. I am willing to pay more for sincere Korean cosmetics brands.

Forgiveness

- 1. I can forgive the mistake of purchasing the Korean cosmetics brand.
- 2. I can be generous when the Korean cosmetics brand I purchased makes a mistake.
- 3. I will pay attention to the brand even if the quality of the Korean cosmetics brand I purchased is lower than I thought.
- 4. If the quality of the Korean cosmetics I purchased is not good, this does not leave me with a bad feeling about this Korean cosmetics brand.
- 5 Even if the quality of the Korean cosmetics I purchased was a problem, I still felt friendly toward Korean cosmetic brands.

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