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A study on the structural relationship between sportswear brand authenticity and customer satisfaction, brand attachment, repurchase intention, and word of mouth intention

[1]Mi-Jeong Kim, [2]Kyung-Won Byun

[1]*Ph D. Student of Physical Education, Dankook University, Korea*
[2]*Assistant Professor, Department of graduate school of business Administration,*
Dankook University, Korea
mijeong10@naver.com, changewon125@ dankook.ac.kr

Abstract

The purpose of this study is to investigate the effect of consumer's authenticity perception on brand repurchase intention and word-of-mouth intention through customer satisfaction and brand attachment. For this purpose, a structural equation model was established based on previous studies and an empirical study was conducted. The survey was conducted offline and online, and samples were collected using a convenient sampling method. A total of 267 questionnaires were sampled, and 255 questionnaires were used as final valid samples, except for 12 questionnaires with errors. For the final data, SPSS Win ver. 23.0 and AMOS 20.0 statistical programs were used to analyze the personal characteristics of the subjects, verify the research model, and confirm the reliability and validity of the measurement model and the suitability of the research model.As a result, all six hypotheses were adopted, and the correlation between each factor was observed in the research model.

1. INTRODUCTION

The distribution environment changed rapidly in the 21st century due to the emergence of online and digital channels. The paradigm of multichannel shopping, in which consumers use multiple distribution channels, has emerged, and the proportion of it continues to increase [1-2]. Due to the COVID-19 pandemic that occurred in 2019, this change was accelerated as daily consumption activities were directed toward untact.

Despite the economic recession caused by the COVID-19 pandemic, the sportswear brand industry is showing growth due to the interest in health and the demand to enjoy leisure in nature. It is recording a higher growth rate than other clothing industries. This increase in demand has led to fierce competition among global sportswear brand companies, and stronger brand equity is needed to build customer satisfaction and trust.

Modern consumers are also called smart consumers. As the level of brand knowledge of consumers increased, the value judgment of brands was strengthened, and at the same time, it played a role as the subject and producer of consumption. Through these changes, trust and authenticity in the brand have become

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important factors in value judgment [3]. The modern consumer no longer accepts plausible packaging of products, brands and services.

Authenticity, unlike pretense, false, fake, etc., refers to the agreement between the inner state and the behavior [4] In a broad sense, it means 'true and correct nature'. This authenticity is a concept related to honesty, genuineness, truthfulness, facts, actuality, trustworthiness, etc. and is covered in various fields such as marketing, geography, sociology, pop culture, and tourism [5-6]. It is an important topic throughout society, including politics, society, culture, and industry [7].

Brand Authenticity refers to a subjective evaluation of the true things that consumers give to a brand. Looking at the definition of brand authenticity, brand authenticity is not a judgment of a company, but a concept that encompasses the promised business and value orientation perceived by consumers and fulfills a company's essential obligations and responsibilities [8]. Therefore, this study aims to establish a structural equation model for the causal relationship between the authenticity and performance variables of sportswear brands that have not been dealt with in these industrial trends and to present implications through empirical research.

2. STUDY HYPOTHESIS

2.1   Relationship Between brand authenticity and customer satisfaction

Among the previous studies on brand authenticity and customer satisfaction, Hun and Son's study reported that service authenticity of sports center had a statistically significant effect on customer satisfaction. In addition, Ahn's study on airline service showed that service authenticity had a positive effect on customer satisfaction. Therefore, the following hypotheses were established regarding the relationship between brand authenticity and customer satisfaction [9-10].

Hypothesis 1. Brand authenticity will have a positive effect on the customer satisfaction .

2.2   Relationship Between brand authenticity and brand attachment

Among the previous studies on brand authenticity and brand attachment, first of all, Lee and Lim's study on brand authenticity of golf balls, golf ball brand authenticity had a statistically significant effect on brand loyalty [11]. In addition, Choi and Byun's study of fitness center customers showed that the higher the customer's perception of authenticity about fitness center, the more positive effect on brand attachment. In this way, the authenticity of the product and service in the previous research shows that the brand attachment can be strengthened [12]. Therefore, the following hypothesis was established on the relationship between brand authenticity and brand attachment.

Hypothesis 2. Brand authenticity will have a positive effect on the brand attachment

2.3   Relationship Between customer satisfaction and Repurchase intention

Among previous studies on customer satisfaction and repurchase intention, first, a study on the effect of Dang and Li's bowling club's use of bowling alleys reported that customer satisfaction had a significant effect on repurchase intention [13]. In addition, Lee and Park reported that customer satisfaction had a significant effect on repurchase intention in a study on the relationship between Taekwondo gym customer satisfaction and repurchase intention. Therefore, the following hypothesis was established for the relationship between customer satisfaction and repurchase intention [14].

Hypothesis 3. Customer satisfaction will have a positive effect on the repurchase intention.

2.4   Relationship Between customer satisfaction and Word of mouth

Exploring a study that revealed the effect of customer satisfaction on oral intention, first, in a study by Hwang, it was said that customer satisfaction with fitness centers improves positive oral intention [15]. In addition, Kim and Kim's study reported that customer satisfaction had a statistically significant effect on word of mouth intention in a study on the effect of service quality of personal trainers on customer satisfaction, exercise continuity, and word of mouth intention [16]. Therefore, the following hypothesis was established for the relationship between customer satisfaction and word of mouth intention.

Hypothesis 4. Customer satisfaction will have a positive effect on the word of mouth.

2.5   Relationship Between brand attachment and Repurchase intention

Attachment to a brand means the power of bond connected to a brand by a customer. Brand attachment has the greatest influence on brand formation. Attachment to a brand increases revenue for an entity by increasing lifetime customer value [17].
Looking at the empirical study on brand attachment and repurchase intention, first, it was reported that brand attachment had a significant effect on brand support behavior in a study on the relationship between brand attachment, brand consistency, and brand support behavior by KPGA player characteristics [18]. In addition, it was said that the customer's brand attachment to the fitness center has a positive effect on the intention to continue using it [19]. Therefore, the following hypothesis was established for the relationship between customer satisfaction and repurchase intention.

Hypothesis 5. Brand attachment will have a positive effect on the repurchase intention.

2.6   Relationship Between brand attachment and Word of mouth

The nature of consumers' attachment to a brand is explained by the psychological dependence and feelings of love on a particular brand that consumers experience in their relationship with the brand [20]. This brand attachment is likely to talk about the brand in favor of others. In fact, empirical studies also suggest a positive causal relationship between brand attachment and word of mouth intention. Previous studies on jewelry brands stated that brand attachment has a positive effect on positive word of mouth intention on SNS [21]. In a study on the relationship between brand attachment to golf clubs and brand identification, brand emotion, and brand support behavior, it was reported that brand attachment had a significant effect on brand support behavior [22]. Therefore, the following hypothesis was established for the relationship between brand attachment and word of mouth intention.

Hypothesis 6. Brand attachment will have a positive effect on the word of mouth.

3. RESEARCH METHOD

3.1   Research Subjects

IThe subject of this study is adults who have purchased and used sportswear brands over the past year. A sample survey was conducted on the population. As for the sampling method, samples were extracted through

the convenience sampling method among the non-probability sampling methods, and it is targeted at men and women. Athletes from the current sports business team were selected as a population and data were collected using the non-probability sampling method, a meaningful sampling method. Insincere data were removed from the collected 360 surveys and a total of 368 questionnaires were processed.

3.2   Research Tools

In this study, the questionnaire was used as a research tool. Based on previous studies, it was modified and supplemented according to the purpose of the study. The personal characteristics survey consisted of four items: gender, age, brand, and purchase cost. Brand authenticity as an independent variable consisted of five items, customer satisfaction as a parameter consisted of four items, and brand attachment was five items. The dependent variable, repurchase intention, was composed of 3 questions and word of mouth intention was 3 questions.

4. RESULTS

4.1   Validity and Reliability Analysis of Research Tools

Confirmatory factor analysis(CFA) was conducted using Amos 21.0 to verify the construct validity of the measurement model of 20 items, five dimensions of the relationship between sportswear brand authenticity and customer satisfaction, brand attachment, repurchase intention, and word of mouth intention.

Table 1. Confirmatory Factor Analysis Results for Measurement Model

measurement item	B	β	s.e	t	Cronbach's α	AVE	C.R.
Brand authenticity1	1	.861	.259				
Brand authenticity2	.814	.747	.442	14.217***	.909	.720	.911
Brand authenticity 4	1.161	.890	.208	19.022***			
Brand authenticity 5	1.153	.889	.210	19.018***			
Customer satisfaction1	1	.898	.194				
Customer satisfaction 2	.914	.907	.177	21.936***	.926	.811	.928
Customer satisfaction 3	1.007	.896	.197	21.379***			
Brand attachment2	1	.921	.152				
Brand attachment 3	.921	.806	.350	17.815***	.913	.788	.917
Brand attachment 4	.995	.931	.133	24.423***			
Repurchase intention1	1	.892	.204				
Repurchase intention 2	1.004	.875	.234	19.930***	.918	.790	.919
Repurchase intention 3	.964	.899	.192	21.113***			
Word of mouth1	1	.889	.210				
Word of mouth 2	.915	.907	.177	21.327***	.920	.796	.921
Word of mouth 3	.978	.880	.226	20.045***			

***p<.001

It was found that questions 3 on brand authenticity, questions 4 on customer satisfaction, and questions 1 and 5 on brand attachment hinder validity. Accordingly, after removing four items, a confirmatory factor analysis was conducted. Looking at the suitability of the modified measurement model, TLI was found to be .969 ($\geq$.90), CFI was .975 ($\geq$.90), and RMSEA was .064 ($\geq$.1) and met the suitability criteria suggested by Bae' study [23]. Next, to verify convergence validity, the statistical significance of the standardized factor load connecting each component and the latent variable was analyzed, and whether the construct reliability exceeded the reference value of 0.7, and the average variance extracted value (AVE) exceeded the reference value of 0.5. The standardization factor load is p<.01 it was found to be statistically significant, and both conceptual reliability and AVE exceeded each reference value. The specific results are shown in Table 1 below.

Next, the discriminant validity was analyzed whether AVE exceeded the square value (Φ^2) of the correlation coefficient between concepts. As a result of the analysis, the AVE values of the concept were higher than the square values of the 10 correlations existing in the measurement model, indicating that there was discriminant validity [24]. The analysis results on the correlation are shown in Table 2 below.

Table 2. Correlation analysis results

Factor	Brand authenticity	Customer satisfaction	Brand attachment	Repurchase intention	Word of mouth
Brand authenticity	1				
Customer satisfaction	.733(.537)**	1			
Brand attachment	.728(.530)**	.726(.527)**	1		
Repurchase intention	.688(.473)**	.794(.630)**	.714(.510)**	1	
Word of mouth	.710(.504)**	.728(.530)**	.729(.531)**	.855(.731)**	1

**p<.01, (   )=correlation coefficient squared value

Cronbach's α reliability analysis of the measurement variable for the latent variable whose validity was verified through confirmatory factor analysis was conducted. The reliability coefficient is .909~926, and it is judged that the measurement variables have internal consistency as they exceed the general standard of .7 so it is judged that the measurement variables have internal consistency [25].

4.2   Fitness of study model

TLI, CFI, RMSEA, and indices were used to find out the suitability of the research model. Looking at the specific analysis results, it was found that TLI was .941 ($\geq$.90), CFI was .952 ($\geq$.90), and RMSEA was .087 (less than .1), which satisfies the suitability criteria [23].

5. RESULTS

As suggested in the previous research results, hypotheses 1 to 6 were verified based on the judgment that the research model was suitable. The specific results are shown in Table 3 below.

Table 3. Path analysis verification results

	Paths	B	β	s.e	t	Adoption status
H1	Brand authenticity → Customer satisfaction	.710	.765	.054	13.058***	Adopt
H2	Brand authenticity → Brand attachment	.899	.757	.069	13.017***	Adopt
H3	Customer satisfaction → Repurchase intention	.675	.605	.067	10.121***	Adopt
H4	Customer satisfaction → Word of mouth	.278	.320	.049	5.721***	Adopt
H5	Brand attachment → Repurchase intention	.573	.468	.074	7.774***	Adopt
H6	Brand attachment → Word of mouth	.416	.435	.057	7.308***	Adopt

***$p<.001$

6. CONCLUSION

This This study attempted to study the authenticity, which is a topic of conversation in each field of society. As a subject of the study, the sportswear brand industry, which is growing even under the COVID-19 pandemic situation, was targeted. This is because the brand industry, including sportswear brands, is intensifying competition due to the diversification of online and offline channels. Accordingly, the authenticity perceived by consumers for sportswear brands was selected as an independent variable. As for the performance variable of brand authenticity, the theoretical relationship of previous studies was reviewed and customer satisfaction and brand attachment were selected as parameters. In addition, repurchase intention and word of mouth intention related to brand loyalty were selected as dependent variables. By combining these, a structural equation model was established. The survey was conducted in parallel with online and offline surveys under social distancing and non-face-to-face situations, and samples were collected using the convenience sampling method. There are six hypotheses established in this study, and all hypotheses were adopted as a result of empirical analysis. Through these results, research results that can support and support previous studies have been achieved.

The following implications are presented through the verification of the research model and the verification of the research hypothesis.

First, in sportswear brands, authenticity was found to have a strong positive effect on customer satisfaction and brand attachment. Accordingly, sportswear brand companies should strive to be more authentic in products and services. The meaning of authenticity means real, not fake, and it should have sincerity that can feel love and dedication beyond what other companies or brands provide. In addition, customer satisfaction strongly influenced the intention to repurchase compared to brand attachment. On the contrary, it was found that brand attachment had a stronger effect on word of mouth than customer satisfaction. In recent years, the influence on word of mouth intention in consumption is increasing. Accordingly, it is expected to provide love marks and Serendipity to strongly build attachment to the brand as well as customer satisfaction.

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