The Mediating Effect of Brand Awareness on the Relationship between Online Shopping Mall Quality Factors and Consumer Satisfaction

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Abstract

Purpose: The development of e-commerce in the marketplace is becoming a big trend, but there is a handful of research about the unique characteristics of e-commerce. Online distribution has several differences from offline, such as consumer approach, payment, and product assortment. In addition to the relationship between quality factors and e-commerce satisfaction, this study research how brand awareness affects consumer satisfaction and which quality factor affects brand awareness. **Research design, data, and methodology:** This study conducted a survey on 457 customers using top online shopping malls. As for the analysis method, multiple regression analysis to verify the mediating effect. **Results:** All quality factors and brand awareness affect consumer satisfaction. Among the quality factors, only price, payment, and delivery had an effect among the four factors. As a result of verifying the mediating effect of brand awareness in the relationship between online shopping mall quality factors and consumer satisfaction, price, payment, and delivery showed mediating effects. **Conclusion:** Online shopping mall satisfaction affects the satisfaction of brand awareness consumers perceive aside from consumers' direct experience. The result showed that price, payment, and delivery were significant in the relationship of quality factor and brand awareness of an online shopping malls.

Keywords: Service Quality, Customer Satisfaction, Brand Awareness, E-commerce

JEL Classification Code: L8, M1, M3

1. Introduction

With the development of digital technology, the importance of online shopping malls has grown. Due to online distribution, the flow of trend accelerated as it went through Covid-19 pandemic. According to Statista, Korea's online distribution market sales proportion is forming 3.7% in GDP (Alfonso et al., 2021). Accordingly, in the research of the distribution field, the online distribution has become a major research field, not a particular part.

Online distribution has several differences from offline, such as consumer approach, payment, and product assortment. In turn, many researchers have been studying how online shopping malls differ from offline shopping malls since the early 2000, when the internet first appeared (Jun et al., 2004; Kim et al., 2006; Wolfinbarger & Gilly, 2003). We are going to conduct research on consumer satisfaction, surveying recent consumers in the 2020s. Consumer satisfaction is the key factor that influences repurchase rate, high economic benefits, and positive word of mouth (Heskett et al., 1994). However, the criteria of

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consumer satisfaction vary depending on the individual, situation, type of product and service and so on. And sometimes multiple criteria may affect it complexly (Joan & Joseph, 2000). As a result, consumer satisfaction must be accompanied by research on individual situations and characteristics as well as product and the quality of service.

In this study, we consider the quality of online shopping malls as a service quality and study the impact that the quality of an online shopping mall influences to the customer satisfaction. It's because what the consumers consume in online shopping malls is not only the product but the overall process of searching, paying and delivering products, which differs from manufacturers, and the time and target of consumer satisfaction development are scattered throughout the purchase and consumption process (Endo et al., 2012). This is because it is different from the general view that the consumer satisfaction is formed after the purchase (Oliver, 1980), and the distributed timing of consumer satisfaction formation is a characteristic of service quality (Taylor, 1993).

If we view the quality of online shopping malls into service quality, we can substitute online shopping mall's quality into the attitude that customers have to the online shopping mall, from the point of view of Taylor (1993). Attitude can get influenced by various complex factors such as learning, family, and social situations on top of direct experience. Among the characteristics of this attitude, we will focus on the psychological point of view and examine how the social perception of online shopping malls works together with the individual service quality that the customer thinks of, in the process where the quality of online shopping malls is perceived by customers.

2. Theoretical Consideration

2.1. Consumer Satisfaction

Consumer satisfaction is formed according to how much the product or service is consistent with consumer's expectation and is viewed as an emotional or cognitive response of the product or service. In general, consumer satisfaction is formed after the consumption is made, but according to the research, it may be affected at another point, and the satisfaction formerly created can affect the formation of consumer's later attitudes (Joan & Joseph, 2000; Oliver, 1980).

Consumer satisfaction can be generated from a variety of focal points. Bitner and Hubbert (1994) stated that consumer satisfaction can be divided into the satisfaction of specific events during the transaction and the overall satisfaction of products and services. Joan and Joseph (2000) further stated that the focal point the customer finds satisfied

can be diversified depending on various situations, and if the questioner does not set specific range and time, the response to satisfaction can change according to the chameleon effect. Therefore, for quality factors, it is appropriate to use various quality measures that meet diverse situational conditions, not quality factors that affect satisfaction used in every industry and channels (Joan & Joseph, 2000).

Online shopping malls also have various factors affecting consumer satisfaction, depending on each situation and conditions. For example, since online shopping malls differed from various factors, like items of acquisition, the characteristics of online shopping malls that the consumer prioritize also differed from product category in detail (Trabold et al., 2006). Therefore, we are targeting the users of major domestic online shopping malls, such as Naver Shopping (Lee et al., 2019), Coupang, Gmarket, which deal with most product categories in a single platform. Based on the study of Cheung and Lee (2005), we defined satisfaction as a comparison between the expected performance of an online shopping mall before a consumer visits and the performance after shopping.

2.2. Consumer Satisfaction in Online Shopping Malls

According to OECD, E-commerce means ordering and trading goods and services through a computer network (OECD, 2011). Online shopping malls refer to the platforms E-commers take and show different characteristics which differ with the existing offline shopping malls. First, it is not constrained in time and space, second, it has high price competitiveness due to low store operation and stock cost. Third, the product display is made online so it is possible to deliver large amounts of information easily. And finally, customers can access online shopping malls to order products and gain experience, but not tangible things. After shopping, you receive the purchased product through parcel delivery, but this is an offline form, so e-commerce shows a similar form of intangible service (Cox & Dale, 2001).

Consumer satisfaction in online shopping malls has a difference with general consumer satisfaction. The time when consumer satisfaction is formed in an online shopping mall is when customers search for the product and get customer service after purchasing the product. This differs from the view that the previous consumer satisfaction is formed in the agreement and disagreement of pre-purchase expectation and post-purchase satisfaction (Endo et al., 2012; Oliver, 1980). This also leads to the perspective of viewing online shopping malls as a service, and it is because when service quality affects satisfaction, it takes place in overall purchase, not in specific period. When customer satisfaction in an online shopping mall is viewed from a service perspective, we can view consumer satisfaction in the same

way as attitude, according to the perspective of the previous study (Taylor, 1993).

If we look at consumer satisfaction in online shopping mall as an attitude of customers in online shopping mall, we can study factors that affect the formation of consumer satisfaction in online shopping malls, using the factors that influence the formation of attitudes. Among the various characteristics of attitudes, we would like to apply the characteristic that attitude is formed by learning, other than one's own experience.

2.3. Leading Factor in Customer Satisfaction

Before we prove the effect of brand awareness on consumer satisfaction of online shopping mall, we are going to define and examine the theoretical background of four factors that influence consumer satisfaction, apart from brand awareness, which is product, price, payment and delivery. Yuen and Chan (2010) stated that in addition to the service quality of the retailer, the product characteristics handled by retailers can give significant influence on the customer loyalty. This study stated that among the product characteristics, the number of products, product reliability, and perceived product quality can influence customer loyalty. The higher the consumer's awareness of product quality in shopping mall for shopping, the more positive view of the shopping mall (Laroche et al., 2005), and we define products as the overall quality of the product in this study. Also, Ahn et al. (2004) asserted that among the offline characteristics of online shopping malls, the quality and assortment of products affect attitudes attitude toward shopping and intention to use them.

Price is also a major factor that affects customer satisfaction. Consumer value studies based on Rational Action Theory view the value perceived by customers as a ratio of what the consumers paid to obtain the product or service, and the benefits they gained (Sánchez-Fernández et al., 2009). In addition, Sweeney and Soutar (2001) stated that price is one of the important values to the consumers as a sub-factor of functional value along with quality value, and influences customer satisfaction in distribution, etc. Price is a measure of how reasonable the amount presented to the retail price is, and the effect on consumer satisfaction is determined by the subjective feeling of a consumer, not by an objective standard. Vasić et al. (2019), also stated that low price is an important factor in selecting product and service.

In offline distribution studies, payment characteristics are a key factor that affects consumer satisfaction. Early offline shopping mall studies saw ease of payment as a sub factor of policy, but as the online payment process is more complex and diverse than offline, it is thought that the importance of online payment process will get bigger

(Dabholkar et al., 1996; Siu & Cheung, 2001). Previous offline distribution studies have defined payment characteristics that affect consumer satisfaction as safe, untroublesome and various payment methods allowed. Also, the study of Özkan et al. (2010) emphasized the importance of payment in online shopping mall and stated the payment characteristic of online shopping mall as trust, usability, and security.

There have been various studies on the factors of online shopping malls that affect consumer satisfaction. Some studies based on internet website quality research divided the quality of online shopping malls into website design, delivery and reliability, security and customer service (Kim et al., 2009; Wolfinbarger & Gilly, 2003). However, according to the previous studies, all four factors do not always affect customer satisfaction, and although the impact varies depending on the customer's situation, delivery and reliability always affect satisfaction regardless of the situation. Ahn et al. (2004) stated online shopping mall delivery as arriving on time, fast arriving, and arriving at an agreed time.

2.4. Brand Recognition and Classical Conditioning Theory

In addition to the direct experience of consumers, this study examines brand awareness as a factor that affects consumer satisfaction in online shopping malls. As mentioned earlier, when viewing the consumer satisfaction of online shopping mall as an attitude, attitudes can also be formed by learning through classical conditioning apart from direct experience with objects (Olson & Fazio, 2001).

Classical conditioning is a learning that associates unconditioned stimulus with a conditioned stimulus so that the response accompanying the unconditioned stimulus appears with the conditioned stimulus. Unconditioned stimulus is a stimulus which humans react instinctively even though they do not learn. For example, when hearing a loud noise, a frightened or surprised reaction comes out naturally without learning. If you make a loud noise every time you show a rabbit doll, just looking at it might make someone get afraid or surprised by classical conditioning. Olson and Fazio (2001)'s experiment proved that by exposing positive words with the character, a positive attitude toward the character was formed without any additional information or experience about the character. We predict that classical conditioning occurs equally in the quality of online shopping malls, and even though there is no direct experience to the brand, if there is a positive reputation, positive attitude will be formed toward the brand.

Brand awareness refers to the characteristics of potential customers recalling or re-recognizing the brand for a product category. Brand awareness is the very first step of

building brand loyalty, which plays an important role in purchasing a product, but does not play a sufficient role, and when images of brand and product characteristics are combined with purchase neutral stimulation, it plays an important role in evaluating. In previous studies of hotels and festivals, brand awareness was measured by how famous and familiar it is. In this study, the same measurement question was used when measuring brand awareness.

Keller (2013) also said that in the brand knowledge structure that forms brand assets, it is important not only to brand recognition, but also to how it is associated when the brand is recalled or re-recognized (Keller, 2013). Afterwards, Boo et al. (2009) suggested the concept of brand awareness to include other consumers' brand awareness by taking the concept of brand awareness more broadly. Kim et al. (2018)'s study took over Boo et al. (2009)'s expanded concept of brand awareness, testing relationships with other factors such as brand loyalty and attachment. Using the brand awareness scale of Kim et al. (2018), we try to define and measure it as a concept that includes associations with brand characteristics or reputation, beyond that consumers easily recall or re-recognize a brand.

According to the classical conditioning theory, when an unconditioned stimulus that already produces an unconditioned response and a neutral stimulus that does not produce any response are repeatedly associated, an unconditioned response can be elicited only with the neutral stimulus. This can be equally applied to the attitude toward an object, and even though there is no direct experience, a positive attitude toward the object is often formed only with the positive words exposed with the object (McSweeney & Bierley, 1984; Olson & Fazio, 2001). We believe that when a positive image that elicits consumer response (positive attitude) is associated with a brand, it can lead to a positive attitude toward the brand even though there is no direct experience with the brand. In the retail industry, the brand and brand equity of products handled in stores are important factors for customer satisfaction, which has a significant impact on the image and equity of retail brands (Martenson, 2007). And as online shopping malls have a characteristic of service, it is argued that positive attitude can be replaced by consumer satisfaction. We regard brand awareness as the ability that consumers can easily recall of a specific brand, and it means a shopping mall brand that comes to mind when choosing an online shopping mall (Aaker, 1996).

3. Research Model and Hypothesis Setting

3.1. Research Model and Hypothesis Setting

Through previous studies, we found that the satisfaction

of online shopping malls can be replaced by the consumer's attitude that occurs throughout the consumption experience, and the attitude can be changed by the image exposed and associated with the object in addition to the person's direct experience through classical conditioning. Therefore, based on the previous studies, Therefore, based on the previous studies, we expect that the positive perception of the brand in addition to the consumer's direct experience with the brand will have a positive effect on consumer satisfaction. In addition, since factors that previously affect brand satisfaction can help form a positive image of the brand, it is assumed that each factor such as product, price, payment, and delivery will partially mediate brand awareness and affect consumer satisfaction. Accordingly, the model shown in <Figure 1> below was established.
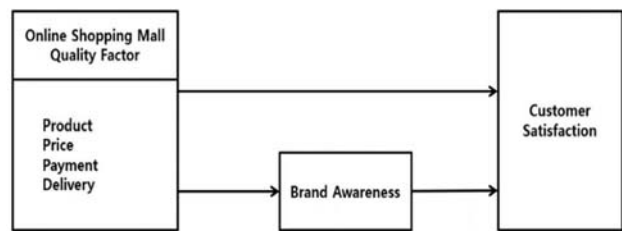

Figure 1: Research Model

3.2. Operational Definitions and Hypotheses

Consumer satisfaction is divided into satisfaction identified as one of the processes of experiencing the item or the characteristics of the product, and overall satisfaction with the product (Jiang & Rosenbloom, 2005; Taylor & Baker, 1994). In this study, we defined customer satisfaction as the overall satisfaction with the service, and measured the satisfaction based on it (Oliver, 1980). Quality factors that affect consumer satisfaction vary depending on the product and purchase situation, but through previous studies, we suggest the following quality factors as leading factors affecting consumer satisfaction.

In this study, product factors affecting consumer satisfaction are divided into product quality and assortment according to the definition of product among online quality factors by Ahn et al. (2004). Product is defined as the difference in quality between the specifications of the products presented by the online shopping mall and the products purchased by consumers, and how many different types of products are handled. In general, product price and quality affect customer loyalty through customer satisfaction, so we believe that the characteristics of the previous products will also affect customer satisfaction (Singh & Sirdeshmukh, 2000), and the following hypothesis was established.

According to the definition of Vasić et al. (2019), we defined the price characteristics of online shopping malls that affect consumer satisfaction as relative prices felt by consumers compared to product quality or competitive distributors and established the following hypothesis. According to Özkan et al. (2010)'s studies, we define consumer satisfaction that affects online shopping mall as reliability in the payment system, usability, and security, and thinking that the payment characteristics of online shopping malls will not be much different from offline, we asserted the following hypothesis. Ahn et al. (2004) stated that the purpose of online shopping mall delivery is fast delivery, convenient time, and arriving at an agreed time. In this study, according to the purpose of such delivery, delivery was defined as safe delivery, accuracy of delivery time, ease of return, and delivery speed. And accordingly, the following hypotheses was established for the relationship with consumer satisfaction.

H1a: Products of online shopping mall quality factor will have a positive (+) effect on consumer satisfaction.
H1b: The price of the online shopping mall quality factor will have a positive (+) effect on consumer satisfaction.
H1c: Payment of online shopping mall quality factors will have a positive (+) effect on consumer satisfaction.
H1d: Delivery of online shopping mall quality factors will have a positive (+) effect on consumer satisfaction.

Selnes (1993) stated that the performance quality of a product creates a positive reputation for a brand. Also, Barreda et al. (2015) said that the system or quality of information perceived by consumers about a brand in online shopping affects the definition of brand awareness. According to Mahaputra (2021), product quality refers to product quality indicators such as product durability and reliability, which are related to brand awareness. Khurram et al. (2018) argued that when consumers make purchase decisions, they are influenced by their level or price consciousness, and price promotion plays a role in increasing brand awareness. Chattopadhyay et al. (2010) reported that 10 marketing activities, including price, store image, and advertisement, had an impact on brand awareness. According to Farías et al. (2022), online payment availability and safety play a vital role in the reliability of online retail brand equity. We hypothesized that the quality factors of online shopping malls will have a positive effect on brand awareness, as in the study of Selnes (1993), by expanding brand awareness to the extent that includes reputation according to the concept of Boo et al. (2009).

H2a: Products of online shopping mall quality factor will have a positive (+) effect on brand recognition.

H2b: The price of the online shopping mall quality factor will have a positive (+) effect on brand recognition.
H2c: Payment of online shopping mall quality factor will have a positive (+) effect on brand recognition.
H2d: Delivery of online shopping mall quality factors will have a positive (+) effect on brand recognition.

Bilgili et al. (2015) argued that brand awareness affects consumer satisfaction through brand personality. Ilyas et al. (2020) also said that brand awareness affects repurchase intention, and that consumer satisfaction mediates the two relationships. According to the previous study, we thought that brand awareness affects consumer satisfaction.

H3: Brand awareness will have a positive (+) effect on customer satisfaction.

In addition, although the characteristics of online shopping malls may affect positive brand recognition and thus can affect consumer satisfaction (Board & Meyer-ter-Vehn, 2013), this is only partial and regardless of the characteristics of online shopping malls, there will be parts that affect satisfaction. Hafez (2018) argue that brand awareness and corporate image mediate the relationship between CSR and brand equity. Shahbaz et al. (2010) also argue that brand awareness and corporate image, both are mediating the relationship between cause related marketing campaigns and consumer purchase intentions. Rahman et al. (2021) said that brand awareness affect purchase intention in fashion brand.

H4a: Brand awareness will play a mediating role in the relationship between products of online shopping mall quality factor and consumer satisfaction.
H4b: Brand awareness will play a mediating role in the relationship between the price of online shopping mall quality factor and consumer satisfaction.
H4c: Brand recognition will play a mediating role in the relationship between payment of online shopping mall quality factors and consumer satisfaction.
H4d: Brand recognition will play a mediating role in the relationship between delivery of online shopping mall quality factors and consumer satisfaction.

Table 1: Constructs and Survey Items Used in Empirical Research

Factor	Items	Cronbach's α
Product	This shopping mall deals with products of higher quality than others	0.699
	The product of this online shopping mall is reliable.	
	This online shopping mall deals with genuine products.	

Factor	Items	Cronbach's α
Price	This online shopping mall saves money compared to other online shopping malls.	0.798
	This online shopping mall is cheaper than other online shopping malls.	
	This online shopping mall can reduce additional costs compared to other online shopping malls.	
	This online shopping mall offers more discounts than other online shopping malls.	
Payment	The ordering process for this online shopping mall is simple.	0.817
	It is convenient to check and pay for orders from this online shopping mall.	
	You can trust the payment system of this online shopping mall.	
	This online shopping mall can use various payment methods such as credit card, account transfer, and mobile phone payment.	
Delivery	This online shopping mall safely packs and delivers products.	0.709
	This online shopping mall delivers on a designated date.	
	The delivery speed is faster than other shopping malls in this online shopping mall.	
Awareness	This shopping mall is well known in this country	0.757
	This shopping mall is recognized by my neighbors	
	This shopping mall is easily distinguishable from other shopping malls	
	I am familiar with the features of this shopping mall	
Satisfaction	I'm satisfied with this online shopping mall.	0.793
	I have no regrets about choosing this online shopping mall.	
	This online shopping mall always satisfies my needs.	
	I will continue to use this online shopping mall most often.	

4. Analysis of Actual Proof and the Result

4.1. Characteristics of the Study Subjects

In this study, responses from a total of 457 people using Naver, Coupang, Gmarket, 11street, and WeMakeprice were collected as a random sample through a survey company. The survey was conducted online for two days from December 1 to 2, 2021. The survey was not biased in demographic characteristics such as age, occupation, and gender. This study focused on the shopping malls with the highest market share in the e-commerce market among domestic online shopping malls (Jang, 2017).

The general characteristics of the study subjects were 225 men (49.2%) and 232 women (50.8%). As for the age, 120 people (26.3%) were aged 20 to 29, 124 people (27.1%) were aged 30 to 39, 104 people (22.8%) were aged 40 to 49, and 109 people (23.9%) were aged 50 or older. Online shopping malls showed 167 Naver shopping users (52.7%), 150 Coupang users (47.3%), 58 Gmarket users (12.7%), 67 11street users (14.7%), and 15 WeMakePrice users (3.3%).

Table 2: Demographic Characteristics of the Respondents

Category	Classification	N	%
Gender	Male	225	49.2%
	Female	232	50.8%
Age	20 ~ 29	120	26.3%
	30 ~ 39	124	27.1%
	40 ~ 49	104	22.8%
	50~	109	23.9%
Shopping mall	Naver shopping	167	36.5%
	Coupang	150	32.8%
	Gmarket	58	12.7%
	11st	67	14.7%
	Wemakeprice	15	3.3%

4.2. Reliability and Validity of Measurement Variables

Since we brought the factors of online shopping malls that affect customer satisfaction from different studies, we verified whether each item was distinguished from each other and had an appropriate structure using factor analysis. For factor analysis, SPSS 22.0 was used, and Varimax rotation was applied. As a result, items 2 and 4 of product and item 1 of delivery showed an inappropriate structure with inappropriate items, so they were excluded from the analysis. As a result of running the factor analysis with the corrected factors again, the KMO sample fit was .872, and the result of Bartlett's sphericity test was also significant ($p<.001$). It was found that 64.946% of the total variance can be explained when the questions are divided into products, prices, payments, and delivery.

Table 3: Validity of Online Shopping Mall Quality Factors

Item	Component			
	1	2	3	4
Product 3	0.782	0.135	0.242	0.066
Product 5	0.771	0.146	0.101	0.047
Product 1	0.682	0.237	-0.018	0.117
Price 2	0.092	0.822	0.121	0.09
Price 1	0.128	0.783	0.285	-0.006
Price 3	0.302	0.683	0.061	0.154
Price 4	0.166	0.659	0.276	0.153

Item	Component			
	1	2	3	4
Payment 2	0.001	0.166	0.809	0.203
Payment 1	0.09	0.274	0.78	0.149
Payment 4	0.069	0.141	0.728	0.133
Payment 3	0.358	0.167	0.673	0.117
Delivery 4	0.023	0.152	0.128	0.867
Delivery 3	0.152	0.115	0.282	0.8
Delivery 2	0.366	0.043	0.409	0.435
KMO=.872, Bartlett χ^2=2272.325(p<.001)				

Cronbach's α coefficient was calculated to test the internal consistency of the items for each factor. In general, the Cronbach's α coefficient is considered to secure reliability when it is higher than 0.6 or 0.7 (Bland & Altman, 1997), and as shown in Table 1, the Cronbach's α coefficient of all factors is 0.699, so each item is judged to have internal consistency.

4.3. Hypothesis Test Results

In this study, regression analysis and Sobel Test were conducted to test the hypothesis of the research model (Sobel, 1982). First, in order to verify hypothesis H1, regression analysis was performed on the quality factors of online shopping mall products, price, payment, delivery, and customer satisfaction, respectively. As a result of multiple regression analysis, it was found that all four online shopping mall quality factors had a significant positive (+) effect on customer satisfaction. Comparing and analyzing the standardization coefficient Std beta in Table 4 shows that it has an effect in the order of payment, price, delivery, and product. Multiple regression analysis was conducted to verify the following hypothesis H2, and the results showed that online quality factors and delivery had positive (+) effect on brand awareness. Comparing and analyzing the standardization coefficient Std beta value, it was found that the effect was in the order of payment, delivery, and price. Regression analysis was performed to test hypothesis H3, which is the relationship between brand awareness and customer satisfaction. As a result, it was found that brand awareness had a significant positive (+) effect on customer satisfaction. Finally, to verify the mediating effect of hypothesis H4's brand awareness in the relationship between online shopping mall quality factors and customer satisfaction, Baron and Kenny (1986)'s three-step verification was used. As a result of the test, it was found that brand awareness had a partial mediating effect between payment and delivery of online shopping mall quality factors and customer satisfaction. In addition, as a result of the Sobel Test, the mediating effect of brand awareness on the relationship between payment and customer satisfaction, and delivery and customer satisfaction were significant as shown in Table 5. Among hypothesis H4, H4a were rejected and H4b, H4c and H4d were accepted.

Table 4: Relationship and Mediation Effect of Online Shopping Mall Quality Factor, Brand Awareness, and Consumer Satisfaction

Step	Independent Variable	Dependent Variable	Std beta	t	p-value	R^2	Durbin-watson	F
Step 1	Products	Consumer Satisfaction	.185	5.335	.000	0.587	1.965	160.425***
	Price		.217	5.909	.000			
	Payment		.396	10.287	.000			
	Delivery		.197	5.424	.000			
Step 2	Products	Brand Awareness	.055	1.525	.128	0.544	1.880	134.737***
	Price		.076	2.107	.036			
	Payment		.485	12.168	.000			
	Delivery		.235	6.854	.000			
Step 3 (INDEPENDENT)	Products	Consumer Satisfaction	.173	5.104	.000	0.608	1.919	139.955***
	Price		.200	5.543	.000			
	Payment		.289	6.695	.000			
	Delivery		.141	3.774	.000			
Step 3 (MEDIATOR)	Brand Awareness		.216	4.959	.000			

***p<0.01, **p<0.05, *p<0.1

Table 5: Sobel Test

Path to Variable	Ba	Std. error a	Bb	Std. error b	Zab	p-value
Price - Brand Awareness - Consumer Satisfaction	.076	.036	.215	.043	1.94	0.03**
Payment - Brand Awareness - Consumer Satisfaction	.485	.040	.215	.043	4.62	0.00***
Delivery - Brand Awareness - Consumer Satisfaction	.235	.034	.215	.043	4.04	0.00***

***p<0.01, **p<0.05, *p<0.1

Table 6: Analysis of Mediating Effects

Independent Variable	INDIRECT	DIRECT	TOTAL
Price - Brand Awareness - Consumer Satisfaction	0.018	0.200	0.217
Payment - Brand Awareness - Consumer Satisfaction	0.106	0.289	0.396
Delivery - Brand Awareness - Consumer Satisfaction	0.057	0.141	0.197

Next, direct and indirect effect analysis were conducted in order to analyze the total effect with mediators. Price, payment, and delivery all play an indirect mediating role in the relationship between brand awareness and customer satisfaction. In the case of price, although the route through brand awareness appeared significantly, the effect of the indirect effect was not larger than the direct effect, and in the case of payment, the indirect effect was relatively higher than the direct effect compared to other factors.

5. Analysis of Actual Proof and the Result

5.1. Summary

Online distribution is becoming a global trend in the consumer market, and it is growing faster especially in Korea. In the Korean e-commerce market, Gmarket and Auction of eBay, which are the traditional e-commerce companies, Naver Shopping, which grows based on portal sites, and Coupang, which is rapidly eroding the online shopping market with fast delivery, are fiercely competing. This study attempted to confirm the service quality perspective on consumer satisfaction of online shopping malls in the fiercely competitive Korean e-commerce market and confirm how brand awareness affects consumer satisfaction.

To achieve the purpose of this study, we examined the mediating effect of brand awareness on the relationship between online shopping mall quality factors and consumer satisfaction in December 2021, targeting 457 major online shopping mall users in Korea. As a result of the analysis, it was found that all the online shopping mall quality factors had a significant effect on customer satisfaction, and that brand recognition also had a positive (+) effect on customer satisfaction. As a result of examining the mediating effect of brand awareness, it was found that payment and delivery had a partial mediating effect between consumer satisfaction.

This study confirmed that brand awareness of the brand had a significant effect on the satisfaction of online shopping malls, separately from the relationship between each quality factor and the customer satisfaction of the online shopping mall. Therefore, consumers' positive perception of the online shopping mall, such as the perception that the brand is famous by other people, can increase customer satisfaction, and we could see that positive brand awareness plays a separate role from the online shopping mall we

explored.

5.2. Significance of the Study

The academic significance of this study suggests, in addition to consumers' direct experience regarding online shopping mall satisfaction, it is implied that consumers' perception of clues, which makes them positively evaluate online shopping malls, can affect satisfaction. This is a different result from the perspective that satisfaction is formed by the consistency and inconsistency of actual experience with expectations of existing products, and security, etc. (Oliver, 1980), and is a characteristic of the service brand's satisfaction that equates satisfaction with attitude (Taylor, 1993).

In practice, our research results suggest that online shopping mall brands may have a positive effect on consumer satisfaction by forming a positive perception of each online shopping mall through advertising and marketing activities. Such positive perception can be formed by improving the characteristics of the online shopping mall itself, but it can also be formed through marketing activities other than the characteristics of the shopping mall itself. Also, it is estimated that the characteristics of the shopping mall itself and the positive perception of the brand play a separate role from the characteristics of the shopping mall only for the factors we investigated. The results showed that only payment and delivery were significant in the relationship between quality factors and brand recognition. When consumers think of online shopping mall brands while shopping, how easy and safe the payment is and how fast and accurate delivery is are important factors.

Considering that the order of payment, price, delivery, and product influenced the relationship between online shopping mall quality factors and customer satisfaction, the importance of products that were traditionally important in marketing business was pushed down by the nature of e-commerce that sells products in cyberspace. E-commerce consumers viewed the convenience, stability, and diversity of payment as the most important factors. In the past, the process of going many complicated steps when making online purchases on a PC hindered the development of online shopping, but with the transition to mobile shopping using smartphones, consumers want faster and safer payments. E-commerce platforms and retail companies should prioritize building a simple and secure payment system. And price is also becoming an important factor for

online shoppers. Because online shopping is easier to compare prices than offline distribution, price factors have a big impact, and a competitive pricing policy than other online shopping malls is an important point to attract online users.

In particular, marketers need to pay attention to payment. To increase brand awareness or consumer satisfaction in the recent online shopping market, it was found that consumers are most interested in payment among the four quality factors, and payment was also the most important in the mediating effect of brand awareness in the relationship between quality factors and consumer satisfaction.

5.3. Limitations of Research and Future Challenges

In this study, product, price, payment, delivery, and brand awareness were selected as factors of online shopping malls that affect consumer satisfaction. The R value of these factors on satisfaction was quite high at 0.575, but not all factors on consumer satisfaction were included. Therefore, there is a possibility that other factors of online shopping malls that we did not include in our model may fully mediate brand awareness and affect customer satisfaction. So, at the present stage, it is difficult to confirm that the positive perception of the online shopping mall is completely independent of the consumer's experiences, and the possibility has only been confirmed.

In addition, since our study is not an experimental study, we could not prove the relationship between consumer satisfaction and positive perception of the brand. Previous studies suggest the possibility that consumer satisfaction is not a concept that ends with a single experience, but that consumers continue to transact with companies over time and affect various factors on products and services again (Bei & Chiao, 2001; Joan & Joseph, 2000; Oliver, 1980). Therefore, it is necessary to introduce additional methodologies such as time series studies or experimental studies.

Lastly, one of the important factors in classical conditioning is the association of the unconditioned stimulus and the neutral stimulus through repetition, and our study only confirmed the union of neutral stimulation of online shopping malls and the unconditioned stimulus of positive brand recognition through positive brand recognition but did not confirm how learning was conducted until the combination was achieved. Therefore, it is considered that further research is needed.

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