

The Effect of Consumers' Technological Readiness on Perceived Shopping Value and Word-of-Mouth in Fashion AR Store

Heesoon Yang · Sumin Choi · Jinju Park[†]

Assistant Professor, Fashion and Textiles Major, Sangmyung University, Seoul, South Korea

Student, Fashion and Textiles Major, Sangmyung University, Seoul, South Korea

Student, Fashion and Textiles Major, Sangmyung University, Seoul, South Korea

Abstract The purpose of this study is to investigate the effects of consumers' technological readiness on perceived shopping value and word-of-mouth intention for fashion augmented reality (AR) stores. After female consumers aged 20-40 watched a video of a consumer trying on clothes virtually through a smart mirror in a fashion store, they responded to the questionnaire previously conducted for the present analysis. Finally, data stemming from a total of 322 respondents were used for analysis. Partial Least Squares (PLS) analysis was performed using SmartPLS 3.0, leading to the following results. First, optimism and innovativeness were both found to have a significant effect on hedonic and utilitarian shopping values as well. Second, discomfort and insecurity only affected the utilitarian shopping. Third, the analysis concluded that only hedonic value had a significant effect on word-of-mouth intention in fashion augmented reality stores. In other words, it was revealed that hedonic shopping value perceived by consumers in a fashion store, where augmented reality was applied, had a significant effect on word-of-mouth intention.

Keywords Fashion augmented reality store, Technological readiness, Perceived shopping value, Word-of-Mouth

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Introduction

Due to the development of IT and the worldwide spreading of smartphones, retail environment is constantly seeking consumer-centric changes, while shoppers are rapidly changing as well (Min & Jang, 2022). Recently, consumers value direct experiences in various areas of life, including shopping, aiming to express their individuality and uniqueness, even during the process of purchase (Kim, Fiore, Niehm, & Jeong, 2010; Lao, Vlad, & Martin, 2021; Lemon & Verhoef, 2016). In addition, their shopping desires have been diversified according to their higher living standards; therefore, offline (i.e., physical) stores need to develop to

stay competitive in contemporary times (Wang, 2017). Due to these environmental changes and the introduction of IT, the fashion retail field is seeking new strategies more actively than ever before. One of them might be deemed as the introduction of augmented reality technology in physical stores. Augmented reality (thereafter AR) is a technology enabling interactions in a 3D virtual world using simulation, providing a sense of presence and immersion. As this

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[†] Corresponding Author: pji2367@naver.com

technology is applied to the fashion retail field as well, it induces consumers' interest by providing a sense of pleasure for shopping in a transformed and innovative store shopping environment. For the introduction of such an AR technology in the fashion retail area, it is important to investigate consumer responses and implement a matching strategy thereafter.

On the other hand, when consumers are exposed to such a new innovation, they may show differences in terms of their reaction speed and technology acceptance. This phenomenon can be explained by technological readiness, which is an individual's attitude or tendency to accept and use new technologies, aiming to achieve his/her goals in the context of home or work life (Parasuraman, 2000). Since AR requires interaction with consumers, their responses may vary depending on the degree of their technological readiness. Therefore, in stores with AR technology implemented, the degree of consumer readiness for this technology may affect their shopping experience. Thus, the introduction of a new technology might stimulate the shopping value perceived by consumers based on their technological readiness. Shopping value refers to factors perceived by consumers during the process of shopping experience (Hirschman & Holbrook, 1982), composed of hedonic and utilitarian shopping values. The fundamental reason lying behind the shopping preferences of consumers pursuing hedonic values is not the instance of obtaining a physical object or process work, but the pleasure itself, which they acquire from the shopping process (Ozen & Kodaz, 2012). In other words, such consumers enjoy this pleasure, even if they do not purchase the product in the end of this process. Moreover, Sherry (1990) suggested that another reason behind this enjoyment is that consumers might forget their problems throughout this process as well. Utilitarian purchase motivation is solution-oriented, rational, and cognitive, aiming to purchase products efficiently and rationally. On the other hand, hedonic purchase motivation reflects experiential values such as fantasy, excitement, sensory stimulation, fun, enjoyment, curiosity, and escapism (Scarpi, 2006). In the case of fashion AR stores, which can be considered as innovative, equipped with this newly introduced technology, the characteristics of consumers'

technological readiness are expected to affect perceived shopping value. In particular, technological readiness is a mix of optimistic, innovative positive factors and negative factors, such as insecurity and discomfort. Each of these factors seems to have a different influence on perceived shopping value. Stores with existing fashion AR technology are not yet common. Therefore, Word-of-Mouth (WOM) is a tool, which can help in spreading information among consumers about the existence of such technology. Consumers' voluntary WOM is expected to have a significant impact on the expansion of stores equipped with this new technology. Consumers may respond positively or negatively to consumption through WOM, which plays an important role in consumers' attitudes (Brown & Reingen, 1987). Recognizing non-commercial online Word-of-Mouth as more a reliable source of information than commercial advertisements (Richins, 1983), online WOM such as social network services (SNSs) seems to have a considerable impact on consumers' decision-making.

Therefore, this study aims to examine the effect of consumers' technological readiness on perceived shopping value and Word-of-Mouth intention in a fashion store with applied AR technology. Based on these results, this study is expected to help in proposing future expansion strategies for fashion stores equipped with augmented reality technology.

Literature Review

Fashion AR store

Simulation-based technology is used in various fields of the Industry 4.0, leading to powerful economic and time cost savings. According to Milgram and Kishino (1994), both virtual reality (VR) and augmented reality (AR) belong to mixed reality in the reality-virtuality continuum, in which virtual and real experiences are mixed. Such setting allows one to encounter a space where they coexist (Milgram & Kishino, 1994). They are similar in allowing consumers to experience a space where they both coexist (Milgram & Kishino, 1994). VR technology is immersive, allowing people to enter and interact with the virtual world by building it in 3D through simulation (Wu & Kim, 2022). VR users

may control and explore their actions within a virtual world being a simulation of the real one, whereas augmented reality (AR) merges the real world with the virtual one (Beck & Crié, 2018). As Azuma (1997) states, augmented reality (AR) is a mixed reality in which the real world and the virtual one is seamlessly connected in real time, while being defined as a technology enabling users to feel a higher sense of immersion. These AR technologies are being applied in various fields including advertising, entertainment, education, and exploration. Fashion industry is also deploying AR technology to provide consumers with a more immersive experience. As an example, Zara, a SPA brand, conducted fashion marketing using AR technology in its stores in 2018. When a customer selects a clothing item in the store and projects it on his/her mobile phone, an augmented reality model poses while wearing the item for a few seconds and shows the price. Outdoor brand Nepa signed a business agreement with KT in 2017 and unveiled an 'AR fitting zone' using AR technology in its stores. It recognizes consumers' movement and body shape; therefore, they can perceive the selected piece of item, as if they were wearing it, without doing so in real life. After choosing the sneakers in the Gucci application, customers may point their feet at the smartphone camera, thereby seeing the selected product virtually worn by them from various angles.

In other words, consumers can feel the sense of immersion through an AR service, while perceiving fun and interest through expanded contents, escaping from the one-dimensional information provision (Lee & Ku, 2020). As seen above, AR has been used in various studies, evoking an amplitude of interest and positive responses in buyers. According to Silvestri (2020), who analyzed how augmented reality (formed by virtual and augmented reality) and artificial intelligence are affecting the fashion field, AR, VR, and AI will become standards in the fashion media and technology ecosystem in the near future. Such innovations have the potential to become industry standards, indicating an intensification of the process of digitization in this economic sector.

Technological Readiness

Parasuraman (2000) proposed technology readiness (TR) to

explain a phenomenon related to consumer psychology, defined as an individual's attitude or tendency to accept and use new technologies with the aim to achieve goals in the context of home or work life. According to Parasuraman (2000), TR is divided into four sub-dimensions: optimism, innovativeness, discomfort, and insecurity (Parasuraman, 2000; Parasuraman & Colby, 2015). Collectively, these four dimensions demonstrated to be strong predictors of technology-related behaviors. Optimism and innovativeness are factors associated with positive emotions related to technology (i.e., with consumers embracing them), while discomfort and insecurity are associated with negative emotions. Optimism refers to a positive attitude towards new technologies that may provide flexibility, control and efficiency to consumers. Innovativeness refers to the tendency of that of early adopters or leading thinkers of new technologies. Discomfort, on the other hand, refers to the individual's prediction of lack of mastery of a new technology causing a sense of being overwhelmed by it, while insecurity concerns the sense of distrust in new technologies and a level of skepticism about its ability to operate faultlessly. In other words, optimism and innovativeness are factors that promote the use of new technologies, while discomfort and anxiety serve as perceptions that hinder the use of them (Lin & Hsieh, 2011; Nugroho & Fajar, 2017; Parasuraman, 2000; Parasuraman & Colby, 2015).

In general, people demonstrating high TR handle technology well, while perceiving interest and stability, whereas they do not experience technical difficulties often. On the other hand, people with low TR tend to be skeptical and anxious about new technologies, attempting to avoid using them (Wang, So, & Sparks, 2017). Park, Ha, and Jeong (2020) analyzed the relationship between TR, personal characteristics, and perceived utilitarian and hedonic characteristics of in-store self-service technologies (SST) and concluded that utilitarian and hedonic perceptions both had a significant effect on SST acceptance for fashion shopping. In terms of the role of TR, innovativeness and optimism inherently improved consumer awareness, whereas discomfort and insecurity did not. As suggested by Parasuraman (2000), high values of optimism and

innovativeness contribute to an increase in overall TR level, but a high degree of discomfort and insecurity lead to its decrease (Chang & Chen, 2021). Therefore, this study characterizes TR as a secondary formation structure formed by four primary beliefs and examines its effect on perceived shopping value, focusing on its four constituting factors.

Perceived Shopping Value

Shopping value is one of the important concepts in the shopping environment (Picot-Coupey Krey, Huré, & Ackermann, 2021). Shopping value is obtained by consumers while shopping, comprised by the fun and enjoyment through this process or achieving the goal of purchasing a planned product (Kim & Park, 2002). A shopping experience is considered successful when the expected goal is achieved or when it provides pleasure and creates value. It consists of hedonic and utilitarian value (Babin, Darden, & Griffin, 1994). Traditionally, shopping is primarily driven by the desire to acquire specific products and services and has been regarded as a cognitively oriented activity and work (Forsythe & Bailey, 1996). Utilitarian shopping value means the ability to purchase products and services to meet the needs of the actual situation (Engel, Blackwell, & Miniard, 1995) and can be deemed as more practical and effective compared to other types of shopping perceptions (Batra & Ahtola, 1991; Sherry, 1990). In other words, utilitarian shopping value means that in a complex shopping environment, consumers may obtain value while acquiring goods and services, rather than simply treating shopping as a type of entertainment (Lee & Wu, 2017). In contrast, hedonic shopping value reflects the value found in the shopping activity itself (Babin & Attaway, 2000). According to Arnold and Reynolds (2003), hedonic shopping value includes adventure shopping, satisfaction shopping, value shopping, social shopping, role shopping, and idea shopping. Therefore, consumers perceiving this value promote socialization with friends and family through shopping, receive mental and sensory stimulation in the process of browsing and appreciating stores, sense an improved personal emotional well-being by relieving stress, and satisfy their curiosity about new trends and fashion (Arnold & Reynolds, 2003; Buttle & Coates, 1984; Tauber, 1972; Westbrook & Black,

1985). In other words, hedonic shopping value is regarded as a positive experience enjoyed by consumers while being emotionally satisfied with shopping activities, regardless of whether or not they purchase a product or service (Kim, 2006). The utilitarian shopping value might be defined as a functional factor, while hedonic shopping value as an emotional one.

An experience-oriented shopping environment may provide utilitarian value to consumers (Forsythe & Bailey, 1996; Kim et al., 2010). Interactions between products and consumers increase consumer participation, enabling them to obtain and evaluate product information and their functional properties, which help in consumer purchase decisions (Li & Moon, 2021). According to Ajzen and Fishbein (1975), the value perceived by consumers affects purchase intention. In addition, it can be seen that stores that provide experiences also provide hedonic value to consumers in terms of utilizing various sensory elements that arouse consumer interest and heighten excitement (Hoffman & Novak, 1996; Kim et al., 2010). Fashion AR stores introduce AR technology so that consumers can try on various outfits while looking at the 3D mirrors installed in the physical store itself, while they can also look at coordination with various outfits such as mix and match or layering. These attributes are expected to increase practical value as they allow consumers to virtually try on and evaluate fitting without directly undressing themselves, while they are also expected to increase hedonic value by providing an interactive experience.

Word-of-Mouth Intention

Word-of-Mouth (WOM) is a process by which consumers can share information leading them toward or away from specific products, brands, and services (Hawkins, Best, & Coney, 2004). The basic idea of WOM is that information about a product, service, store, etc. spreads from one consumer to another. WOM is a flow of information exchange, communication or dialogue between individuals, considered as an informal and non-commercial activity (Goyette, Ricard, Bergeron, & Marticotte, 2010). If products or services are recommended through WOM among family members, friends, and acquaintances, their characteristics are personal and impersonal (Brown & Reingen, 1987; Duhan,

Johnson, Wilcox, & Harrell, 1997). Myers and Reynolds (1967) found that the way consumers perceived a product liked by their friends predicted actual purchases more accurately, than the degree of how much they liked the product themselves. As a result of WOM helping consumers in their decision-making process, thereby playing an important role in purchasing decision factors in stores, the rapid spread of information through SNSs in modern times may affect consumers' purchasing decisions (Wiratama, Wijaya, Prihandono, Wijayanto, & Suhud, 2022).

In contemporary times, with the advent of new media such as card news, podcasts, Facebook, and Twitter, the role of WOM increased as well (Court, Elzinga, Mulder, & Vetvik, 2009). WOM became an important way to easily access potential consumers at low cost in the age of social networking services (Choi & Lee, 2022). In other words, purchase intention can become higher through a specific WOM, as well as changing negatively through negative word of mouth (Ha, 2020). As such, WOM plays a very important role in consumers' attitude toward purchasing a product or service (Brown & Reingen, 1987). If consumers have a positive attitude towards them, it eventually induces the behavior of actually purchasing the product or service (Thorson & Powell, 1991). In other words, consumers have already formed expectations for products and services before purchase through positive or negative WOM, which ultimately affects purchase intention (Oliver, 1980). Therefore, WOM intentions about fashion stores implemented with AR are expected to play an important role in raising awareness to these stores, imprinting the store's image. By considering the experience at the experiential store as important and sharing it on social media, this act is a voluntary publicity to others, ultimately appearing as a positive WOM such as recommendation intention (Choi & Kim, 2022). Only a few stores are equipped with AR technology yet, wherein WOM intentions can help spread these technologies to gauge the effectiveness of technology introduction. WOM plays an important role in the marketing process in providing positive information, which in turn will influence consumers' purchase decisions.

Methodology

Research Question and Research Model

The purpose of this study is to examine how TR, a characteristic of consumers, affects perceived shopping value and ultimately Word-of-Mouth intention in a fashion AR store. The research questions are as follows.

- RQ 1.** What is the technological effect on perceived shopping value in a fashion store where AR technology is applied?
- RQ 2.** What is the effect of perceived shopping values on Word-of-Mouth intentions in terms of AR fashion stores?

In this study, the use of AR technology in a fashion store was presented as a stimulus; therefore, the experience of using AR technology may affect Word-of-Mouth intention. The control variable (i.e., experience) serves as an external variable in the hereby proposed model, affecting the dependent variable (Kerlinger, Lee, & Bhanthumnavin, 2000), leading to a possibly identifiable causal relationship between the independent variable and the dependent variable, if this control variable is present in the model (Yu, 2022). Therefore, the present analysis sets experience of using AR in a fashion store as a control variable. The proposed research model is shown in the following Figure 1.

Stimuli and Measurements

A video showing shopping at a fashion store using AR technology was selected as a stimulus and edited to the length of about 1 minute and 50 seconds. In this video, consumers can try on various clothes while looking at the 3D mirror installed in the fashion store, while they can also look at coordination with various clothes such as mix and match and layering. In addition, the inventory of products can be traced in real time through a 3D mirror, while the user's avatar in the 3D mirror is transmitted to the online retailer with a personal QR code. This avatar can be called up and purchased at the online retailer later. The video presented an explanation of the situation through subtitles along with the

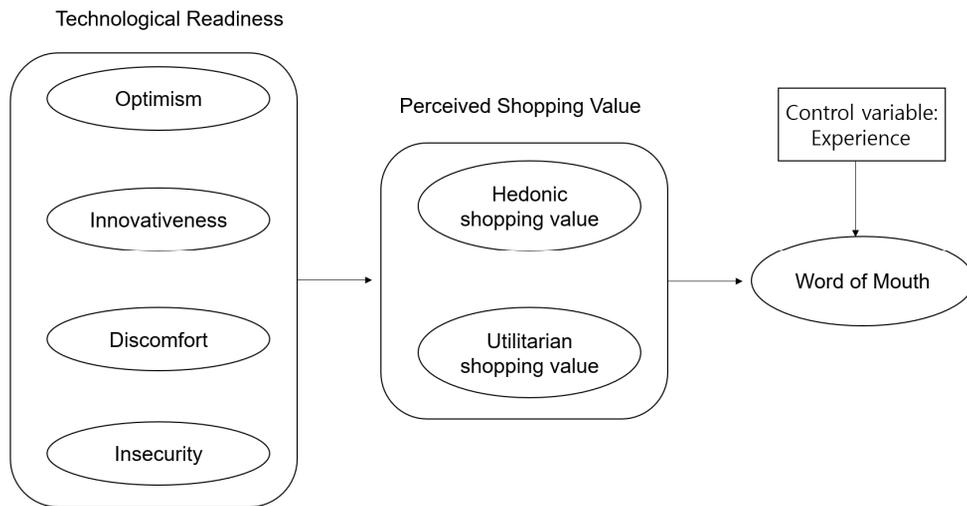


Figure 1. The proposed research model

virtual wearing of the costume. Respondents were able to respond to the survey after watching the video, wherein they could only fill out the survey after completely watching the video.

The questionnaire items included technological readiness, perceived shopping value, and Word-of-Mouth intention. To this end, the items used in previous studies with already confirmed validity and reliability were modified and employed in the present analysis. For TR, 16 items (TRI 2.0) developed by Parasuraman and Colby (2015) were used. For perceived shopping value, ten items used in Jones, Reynolds and Arnold (2006) were employed. Word-of-Mouth intention was measured with three questions by modifying the questions used in Wang, Wang, Xue, Wang, and Li (2018), and Maxham and Netemeyer (2002). All items were measured on a 7-point Likert scale, with added items related to demographic attributes of the respondents.

Data Collection and Sample Characteristics

The survey was conducted in November 2021 through an online survey specialist. A total of 438 people accessed the survey site with the intention of responding, among which data from a total of 322 participants were finally used for analysis, excluding those who did not watch the video

properly, allocated sampling by age group, and those who dropped out during the process. To solve the research question, descriptive statistics and reliability analysis were conducted using SPSS 26.0, while structural equation modeling was achieved using SmartPLS 3.0. The subjects of this study were all women, and the age distribution rather even: 104 (32.3%) participants in their 20s, 110 (34.2%) in their 30s, and 10 (33.5%) respondents in their 40s. 193 (59.9%) of them were unmarried, further 129 (40.1%) were married. 210 of them (65.2%) had the highest level of education with a university degree, further 48 students (14.9%) graduated from high school, 35 (10.9%) attended college, and 29 (9.0%) achieved graduate school or a higher level. 4 million won or more and less than 6 million won were the highest with 77 people (23.9%), 2 million won or more and less than 3 million won were 53 people (16.5%), and 6 million won or more and less than 8 million won were 42 people (13.0%). Office workers accounted for the majority of respondents' employment type with 111 (34.5%) respondents, followed by 55 full-time housewives (17.1%), while 33 participants chose "other" (10.2%), further 31 respondents (9.6%) stated that they are students, and 30 participants worked in service sales (9.3%). In a question asking about the experience of using augmented reality

technology in fashion stores, 34 people (10.6%) responded that they had experience.

Results

Evaluation of the Validity of the Measurement Model

Partial Least Squares (PLS) analysis was conducted using

SmartPLS 3.0 to analyze the proposed research model. First, after inspecting the validity and reliability of the measurement model, the structural model was evaluated (Hair, Hult, Ringle, & Sarstedt, 2021). This analysis was conducted with a total of 29 questions, and 3 questions with factor loadings lower than 0.5 were removed. The analysis results are shown in Table 1. The factor loadings of all items exceeded the recommended criteria of 0.6 (Chin, Peterson, & Brown, 2008). The composite reliability (CR) exceeded the

Table 1. Validity and reliability for constructs

Constructs	Items	Loadings	AVE	CR
Optimism	New technologies contribute to a better quality of life	.86	.70	.91
	Technology gives me more freedom of mobility	.87		
	Technology gives people more control over their daily lives	.78		
	Technology makes me more productive in my personal life	.85		
Innovativeness	Other people come to me for advice on new technologies	.78	.75	.92
	In general, I am among the first in my circle of friends to acquire new technology when it appears	.89		
	I can usually figure out new high-tech products and services without help from others	.89		
	I keep up with the latest technological developments in my areas of interest	.90		
Discomfort	When I get technical support from a provider of a high-tech product or service, I sometimes feel as if I am being taken advantage of by someone who knows more than I do	.79	.69	.87
	Technical support lines are not helpful because they don't explain things in terms I understand	.88		
	There is no such thing as a manual for a high-tech product or service that's written in plain language	.81		
Insecurity	People are too dependent on technology to do things for them	.87	.75	.90
	Too much technology distracts people to a point that is harmful	.90		
	Technology lowers the quality of relationships by reducing personal interaction	.81		
Perceived hedonic shopping value	Shopping is really fun.	.87	.76	.94
	I shop because I want to, not because I have to.	.85		
	Compared to other things I do, I really enjoy the time I spend shopping.	.92		
	I enjoy shopping for itself, not for the things I have to buy	.88		
Perceived utilitarian shopping value	While shopping I felt excited.	.86	.46	.78
	I shop to buy what I want.	.77		
	I may not be able to buy what I really need (Reversed)	.66		
	While shopping, I only look for the products I want.	.66		
Word of Mouth	I am disappointed if I have to go to another store without finishing the shopping I want. (Reversed)	.62	.91	.97
	I am willing to recommend this fashion VR store to others	.94		
	If I get a chance, I want to visit this fashion VR store with my acquaintances	.95		
	I want to spread the word about this fashion VR store	.96		

standard value of 0.7, while the AVE values exceeded 0.5 for all but one factor (Hair et al., 2021). The perceived utilitarian shopping value was 0.46, being close to 0.5, while all factor loadings exceeded 0.6, which led to the decision of using it for analysis.

Next, discriminant validity was evaluated. According to the criteria of Fornell and Larcker (1981), the square root value of AVE was lower than the correlation coefficient of the two factors, thus securing discriminant validity. This is shown in Table 2. Finally, as a result of the reliability analysis, internal consistency was secured beyond 0.6.

Evaluation of the Structural Model

The fit of the structural model of the PLS-SEM analysis was evaluated using R^2 and Q^2 values. The R^2 values of endogenous variables in this research model were derived as R^2 hedonic value = .211, R^2 utilitarian value = .254, and R^2 WOM intention = .131. An R^2 value of .26 or higher is evaluated as 'high', .13 to .26 as 'medium', and .02 to .13 as 'low' (Hair et al., 2021). The explanatory power of the endogenous variables is all shown as 'medium'. Q^2 of the hedonic value = .147, Q^2 practical value = .108, and Q^2 WOM intention = .111; since all of them secured a standard value of 0.00 or higher, it can be concluded that the

Table 2. Discriminant validity

Constructs	Cr. α	1	2	3	4	5	6	7
Discomfort	.77	.83						
Hedonic value	.92	.06	.87					
Innovativeness	.89	.14	.35	.87				
Insecurity	.84	.58	.04	.05	.87			
Optimism	.86	-.01	.42	.47	.02	.84		
Utilitarian value	.61	.30	.20	.31	.30	.35	.68	
Word of Mouth	.95	.08	.34	.30	.03	.55	.17	.95

Note: Values on the diagonal (bolded) are square root of the AVE while the off-diagonals represent correlations

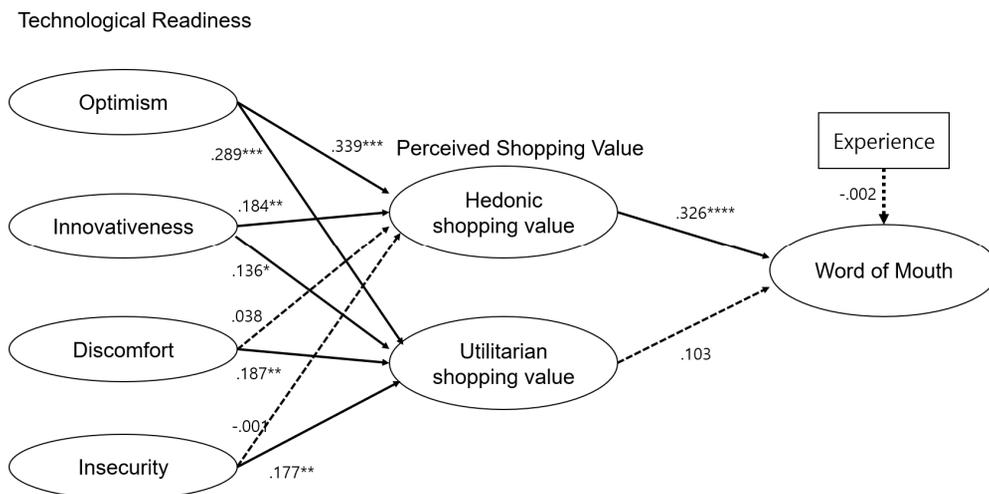


Figure 2. Results of path analysis

predictive fitness was satisfied. The variance inflation factor (VIF) values ranged from 1.124 to 4.207, confirming that their multicollinearity did not exist.

Path Analysis

To verify the significance of each path, bootstrapping was applied 5,000 times, and the experience of using the store to which augmented reality was applied as a control variable. The analysis results are presented in Figure 2.

The results showed that optimism in TR had a significant effect on both hedonic ($\beta=.338, p<.001$) and utilitarian shopping value ($\beta=.289, p<.001$). It was found that the effect on hedonic shopping value was slightly larger. Innovativeness also displayed a significant effect on both hedonic ($\beta=.184, p<.01$) and utilitarian shopping value ($\beta=.136, p<.05$). It was found that having a positive attitude toward technology had a significant effect on perceived shopping value, regardless of being pleasant or practical. However, discomfort only affected utilitarian values ($\beta=.187, p<.01$), and insecurity also appeared to have a positive effect only on practical values ($\beta=.177, p<.01$). It was determined that discomfort and insecurity, which are negative factors impacting technology, only affect practical value. Finally, among the perceived shopping values, only the hedonic one ($\beta=.326, p<.001$) was found to have a significant effect on WOM intention in fashion augmented reality stores. In other words, it was revealed that the hedonic shopping value perceived by consumers in a fashion store where augmented reality is applied has a significant effect on WOM intention.

Conclusion and Implications

This study examined whether consumers' technological readiness affects perceived shopping value in stores where AR technology is stored, ultimately enhancing Word-of-Mouth intention. Through these results, we would like to propose a strategy for revitalizing and spreading fashion stores with AR technology applied in the future.

First, in technology acceptance research using AR, a technology acceptance model (TAM) in which the perceived

usefulness and ease-of-use determines the intention to use, is mainly employed. However, this analysis is meaningful in that it focuses on the characteristics of consumers who accept technology rather than the characteristics of technology itself. Fashion stores where augmented reality is introduced are meaningful in that they have once again confirmed that consumers' readiness to accept the introduced technology may act as an important variable, as it is a store that enhances consumer experience, such as a sense of presence or immersion. It was confirmed once again that consumers' readiness to accept technology in fashion stores equipped with augmented reality can serve as an important variable affecting consumers' acceptance of AR technology. Moreover, it was confirmed that positive factors are more important in this regard than negative ones, which is consistent with the results of a study by Park et al. (2020). Consumers who pursue hedonic value receive pleasure from shopping itself (Ozen & Kodaz, 2012), and enjoy this even if they do not purchase a product. Therefore, the process of shopping at fashion AR store is reduced. It is deemed that consumers who perceive technology positively, experience a positive effect on hedonic value. In addition, these results are consistent with Li and Moon's (2021) study that consumer innovativeness has a greater impact on hedonic value than the utilitarian one, revealing once again the importance of positive factors for technology.

Second, among consumers' perceived shopping values, it was confirmed that hedonic value is more important than the utilitarian one. Both utilitarian and hedonic shopping values have a positive effect on purchase intention, which is consistent with the research results of Li and Moon (2021), who showed that hedonic value has a much greater influence than the utilitarian. In other words, it can be concluded that WOM intention increases when the hedonic shopping value is perceived as high. This shows that the view that shopping is regarded as leisure and entertainment, and that emotional aspects such as pleasure are more important than the traditional view that the purpose of shopping is product acquisition and tasks to be solved is being advocated (Babin et al., 1994; Forsythe & Bailey, 1996; Kim & Kim, 2016; Lao et al., 2021). Although AR is a practical technology that can help purchase fashion products in terms of costumers do

not need to try them on physically, it seems that it can help spread among consumers more easily, if the fun aspect is emphasized.

Practical implications of this study are as follows. In order to revitalize fashion AR stores that have not yet become generalized, it is necessary to increase WOM by using optimistic expectations for technology to reach highly innovative consumers. Innovativeness is a characteristic of early adopters, who have the tendency to first buy, try, evaluate, and inform others about a new product recently released. Therefore, it is necessary to use early adopters or opinion leaders to promote and publicize fashion AR stores. In addition, consumers who recognize value tend to act in an efficient way, whereas in this study, the importance of hedonic value rather than utilitarian one was revealed. This means that utilitarian shopping value is what can be acquired at the end of the shopping period (Hirschman & Holbrook, 1982), while hedonic aspects, including happiness, fantasy, arousal, sensuality, and pleasure, are different from utilitarian values (Fiore, Jin, & Kim, 2005), because they are obtained in the process of shopping. In other words, the fundamental reason why consumers who pursue hedonic value prefer shopping is not to obtain a physical object or process work, but to receive pleasure from the shopping process itself (Ozen & Kodaz, 2012). Therefore, consumers who pursue hedonic value enjoy the pleasure they can perceive while shopping, even if they do not purchase the product. Fashion AR stores seem to have highlighted the importance of hedonic value, as the consumer's experience in the process of purchasing a product is more important than the acquisition of the product. Since it has been revealed that consumers who perceive the hedonic value in the shopping process can increase their WOM intention, it is necessary to devise ways to increase the hedonic value.

The limitations of this study and suggestions for future research are as follows. First, only 10% of the subjects of this study have experience using AR technology, while the majority of respondents have not actually used AR technology in fashion stores. Therefore, participants who are not familiar with these technologies would prioritize pleasure rather than practicality. In future research, it is necessary to examine whether these technologies are helpful in

satisfaction, preference, and purchase of products targeting actual users, and suggest more practical strategies. Second, although the importance of hedonic shopping value has been revealed, there may exist an effect of utilitarian value, if purchase intention is added in addition to WOM intention. Ultimately, in order to increase the purchase behavior of fashion products, it is necessary to introduce and examine the purchase intention variable in detail. Third, insecurity or discomfort, which are negative aspects of TR, were found to affect only utilitarian value while ultimately not affecting WOM intention. Consumers who feel uncomfortable about technology can also become potential buyers; therefore, future research is necessary to find a way to lower the barriers to accepting AR technology. For example, it will be necessary to introduce a plan to reduce the difficulty of using the technology through detailed explanations for using this technology or supplementary explanations on how to operate it. Lastly, since the stimuli of this study was for female consumers to virtually try on clothes, this analysis lacked male participants. In future studies, it is expected that specific strategic directions will be proposed by analyzing differences by gender and product categories.

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