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Analyzing the Intention of Sports Consumers' Purchase Behavior Through Online Sports Distributors

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Abstract

Purpose: The purpose of this study was to analyze Korean sports consumers' intention to stay using online sports products and services through online sports distribution platforms or return to using sports facilities and services in person. **Research design, data and methodology:** This study set up two models measuring consumers' recognition, attitude, and purchase intention toward online sports products and services based on involvement theory. An online survey was conducted and a total of 2,263 consumers participated in this study. Male participants were 1,256(55.5%) and female participants were 1,007(44.5%). Descriptive statistics were performed, and a path analysis was utilized to analyze the proposed model using SPSS 26 and SAS. **Results:** The results revealed two proposed models used in this study supported that consumers' online sports product and service recognition leads to a positive attitude toward online sports products and services. Moreover, consumers' positive online sports product and service attitudes were shown to lead to positive intentions to purchase online sports products and services. **Conclusions:** The findings revealed the recognition of consumers' online sports products and services led to positive attitudes and behavioral intentions. Implications were provided by suggesting the sports industry stick to developing online sports products and services until the endemic of COVID-19 is declared.

Keywords : Online Sports Distribution Platform, Offline, Covid-19, Purchase Intention, Sports Purchase Behavior

JEL Classification Code : J11, M30, Z21

1. Introduction

2022 marks two years since the WHO declared Covid-19 a global pandemic (WHO, 2020). After the declaration of Covid-19 as a global pandemic, various articles, reports, and journals alike have been reporting the impact of the pandemic on people's lives. For instance, prior studies have focused on the changes in consumers' behaviors shifting

online due to the social distance regulations that most countries adopted to prevent the spread of the virus (Al-Hattami, 2021; Sheth, 2020). More specifically, while some people could not go outside as freely as before the pandemic due to the lockdowns in their country, others were unwilling to go outside to protect themselves. These situations led (or forced) consumers to convert their purchase behavior to use online shopping more than ever before. Sheth (2020) shared,

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“With lockdown and social distancing, consumers' choice of the place to shop is restricted. This had resulted in location constraint and location shortage. We have mobility shift and mobility shortage.” (p. 281). However, while it is evident that consumers' purchase behavior has shifted from in-person to online shopping after the pandemic of COVID-19, many studies strived to analyze whether the changed consumer behavior will stay the same after the pandemic (e.g., Jensen et al., 2021).

Sports consumption (or participation), among other fields, is one of the most affected fields by the global pandemic. Especially the social distancing regulations and lockdowns issued worldwide affected how people consume sports activities. For instance, people could no longer visit professional sports teams' stadiums as *“sport facilities all over the world have been forced to close their gates to fans for the foreseeable future”* (Mastromartino et al., 2020, p. 1707). Additionally, studies investigated whether citizens intend to cease physical activities (Caputo & Reichert, 2020) or continue to pursue the type of exercise they used to participate in before the pandemic (Choi & Bum, 2020). Hence, it can be inferred from the previous studies that people's sports consumption behaviors, both spectator and participation behaviors, were affected due to the pandemic.

Although the COVID-19 pandemic is an international issue, its impact severity differs from country to country. Furthermore, consumer behavior is highly habitual and contextual (Sheth, 2020), which brings up the necessity to study the impact of COVID-19 based on the country's different habitual and contextual backgrounds. For instance, unlike other countries, Republic of Korea implemented a strong social distancing regulation that prohibited the opening of sports facilities and limited the number of people who could gather based on the degree of the regulation. The regulation was classified from 1st to 4th degrees, as the number became bigger, the lesser number of people were allowed to gather or facilities open. This led the sports industries in Korea to take a significant step from providing their services in-person to online, which resulted in significant growth in the online sports industry, including online sports distribution platforms such as YouTube and Yafit in Korea (Shin et al., 2021; Shin & Yang, 2022). However, after the continuous increment in the vaccination rate in Korea, the Korean government lifted the social distance regulation, and the sports facilities are starting to re-open.

With the social distancing regulations diminishing in Korea and sports facilities re-opening, this study aims to focus on the sports consumers at the stage where social distancing and the pandemic were most evident in 2020 and 2021. More specifically, this study focused on analyzing consumer behaviors in Korea after elevating the social distancing regulation, whether consumers will stay with

their changed habits of consuming online sports or return to consuming sports in person just as they did before the pandemic. Therefore, the purpose of this study is to analyze Korean sports consumers' intention to continue using online sports products and services through online sports distribution platforms or return to using sports facilities and services in person. In addition, this study strived to expand and add to the current sports industry literature by utilizing a specific theory (involvement theory) and big data to analyze the consumers' online sports purchase behavior intention.

2. Literature Review

2.1. Involvement Theory

Involvement in marketing was initially defined by Krugman's (1966) study, which mentioned involvement is the connections that individuals experience when they consciously bridge or reference the stimulus with the content of their life. More specifically, customer involvement is defined as *“a person's perceived relevance of (an) object based on inherent needs, values, and interests”* (Zaichkowsky, 1985, p. 342). Studies then have shown that the more highly consumers are involved in a certain product, the more likely they will process the related information in depth, elaborate on that information, and demonstrate the outcomes (Burnkrant & Sawyer, 1983; Krugman, 1966; Petty & Cacioppo, 1986).

After the establishment of the involvement concept, modern studies have been utilizing involvement in various contexts, such as advertisement (Lee et al., 2015), the service industry (Kinard & Capella, 2006), purchase decisions (Bojanic & Warnick, 2012), etc. The importance of customer involvement has been dealt with more deeply in the service industry due to the inseparable aspect of service production and consumption (Chen et al., 2015). For instance, a study showed that the more customers get involved in the service purchase decision process, the more likely they will be satisfied when purchasing a certain service (Russell-Bennett et al., 2007). Furthermore, a variety of services have been the subject of studies regarding customer involvement (e.g., Huang et al., 2010; Kim et al., 2007; Teng & Lu, 2016; Zhu et al., 2019). Table 1 shows the summaries of the main contents of the previous studies. Hence, involvement has been widely utilized to explain how consumers' involvement affects their behavioral intentions in related fields (Cui & Wu, 2016; Harrigan et al., 2018).

Table 1: Summaries of the Main Contents of the Previous Studies

Author	Main Findings
Huang et al. (2010)	Travel bloggers with high involvement were found to form more favorable impressions of the advertisements in travel blogs. Furthermore, the favorable impressions of the highly involved travel bloggers led to positive intention to purchase travel products in the advertisements.
Kim et al. (2007)	Online retailers' higher level of image interactivity technology (IIT) led to consumers' higher involvement in online shopping and ultimately to positive patronage intentions toward the online retailers' stores.
Teng and Lu (2016)	Consumers' organic food involvements mediate their health consciousness and ecological motives of organic food purchase intention. Additionally, consumers' uncertainty moderates the relationship between their organic food involvement and purchase intention.
Zhu et al. (2019)	The model based on the involvement theory was established and tested. Cross-border e-commerce (CBEC) platform users' cognition and involvement in the product they want to purchase lead to their trust in the product. Trust in the product developed from cognition and involvement leads to positive purchase intention.

2.2. Online Consumer Behavior

The shopping trend has been shifting online (Jensen et al., 2021), especially for younger shoppers, due to their familiarity and comfort with using websites and/or related technologies (Van Droogenbroeck & Hove, 2017). Furthermore, since the COVID-19 pandemic, consumers' demand for online and untact shopping increased tremendously, which caused an accelerated paradigm shift from offline shopping to online shopping (Moon et al., 2021). However, while there is a tendency for consumers who adopted using online grocery shopping to continue doing so even after the pandemic (Jensen et al., 2021), questions remain about whether the online shopping paradigm will stay as concrete as the days during the pandemic when the needs for comfort and safe shopping diminishes after the pandemic. For example, Erjavec and Manfreda's (2022) study implied how online usage might become more than a social phenomenon of the pandemic era but rather a common act on normal days.

Needless to say, online grocery shopping is one of the most escalated consumer behaviors due to the social distancing regulation following the COVID-19 pandemic

which restricted entering a crowded grocery store (Ellison et al., 2021; Melo, 2020). However, intentions to continue using online grocery shopping services differed based on the context. For instance, consumers likely to choose shopping online over offline shared similar characteristics with those who preferred online grocery shopping during the COVID-19 pandemic (e.g., young, full-time employees, college graduates, presence of children, etc.) (Jensen et al., 2021). Furthermore, while consumers answered they would go back to visiting offline grocery stores when the pandemic weakens (Grashuis et al., 2020), those who had experienced using online shopping were more likely to keep using online stores compared to those who never used online shopping services (Jensen et al., 2021).

Myriad studies were conducted to identify the significant factors in predicting consumers' intention to continue using the online service. Firstly, factors such as the perceived usefulness of online shopping were an important predictor of intention to continue using online shopping (Al-Hattami, 2021; Bölen & Özen, 2020; Mohamed et al., 2014). More specifically, studies have indicated consumers find the online shopping service useful when the website is equipped with high-quality services and useful functions (Bölen & Özen, 2020; Mohamed et al., 2014), which ultimately leads to consumers' intention to continue using the online shopping (Al-Hattami, 2021). Furthermore, satisfaction with the service was also mentioned as an important predictor of consumers' intention to continue usage of online shopping along with consumers' perceived usefulness of the website (Hsu et al., 2006; Yang, 2021). Finally, consumers' trust in online shopping services was also mentioned as an important factor influencing the intention to continue using the online shopping service (Chang & Chou, 2012; Chong, 2013; Zhao & Bacao, 2020).

Moreover, previous studies utilized the involvement concept and theory to explain consumers' purchase intention of certain products. For instance, McClure and Seock (2020) used consumers' involvement on the social media page of a certain product brand as the mediating variable between brand familiarity (recognition), attitude toward the social media, and intention to purchase certain products displayed in the social media in the future. While their study mentioned they used a reasoned action framework, besides utilizing involvement as a concept, their model portrays the conceptual model of involvement theory very well. In addition, Ma and colleagues (2020) study also analyzed consumers' online purchase intention using the stimuli-organism-response (S-O-R) model. Similar to McClure and Seock's (2020) model, Ma and colleagues also used involvement (cognitive and affective) as a mediating variable between online shopping experience and purchase intention. Although their study focused on analyzing the impact of a social tie on the model, they also explain the

involvement theory by showing how one's shopping experience (recognition of the service) leads to their affective involvement (attitude towards the service) and ultimately to purchase intention. Hence, it can be referred from previous studies that involvement theory has been used to explain the (online) consumers' purchase intention, mainly by analyzing the relationship among one's recognition, attitude, and purchase intention.

2.3. Sport Consumption Behavior during Pandemic

Caputo and Reichert (2020) conducted a literature review that included 41 articles regarding the effect of COVID-19 on people's physical activity. While the effect of social distancing regulation on people's physical activity engagement was found to be the main topic of the articles, difficulty in engaging in a telehealth exercise program (Middleton et al., 2020) was mentioned as one of the many fields that was analyzed in the academia during the pandemic. Moreover, the imposed social distancing regulation led to the closing of indoor fitness clubs and gyms (Islam et al., 2020) and brought up both the importance of utilizing home-based exercise and the lack of related infrastructure to practice physical activities in one's residence (Mutz & Gerke, 2020). In addition, a previous study analyzed the impact of utilizing digital platforms on physical activity engagement in Australia (Parker et al., 2021). Their study found that under the condition when people do not have access to fitness clubs or gyms due to social distancing regulations, people who actively utilized mobile health applications or other digital platforms to guide or help their physical activities were found to meet the level of recommended physical activities provided by WHO.

This trend is not unique to Australia but is shared in various countries. For instance, previous studies conducted in Germany (Ernsting et al., 2017) and the United States (Carroll et al., 2017) also shared similar results and found the impact of digital sports platform usage on people's physical activity. Furthermore, previous studies (e.g., Shin & Yang, 2022) also supports this trend by indicating there's a rapid growth in the servitization of sports in Korea, which is a movement to add service aspects to sports product manufacturing and/or sports facility industries. According to the report, since Korea experienced severe social distancing regulation imposed by the government, consumers turned their eyes to engaging in online sports products and services, such as Yafit (similar to Zwift), Samsung or Apple Health, etc.

In sum, recent studies indicated how consumers' purchase paradigm is shifting toward online shopping (e.g., Jensen et al., 2021). In order to respond to this shift of the paradigm, studies have analyzed the factors (perceived usefulness, satisfaction, and trust) that contribute to

consumers' intention to continue using the online shopping service (e.g., Al-Hattami, 2021). In response to this paradigm shift, as well as to adapt to the social distancing regulation, people have been engaging in digital sports platforms (e.g., Parker et al., 2021). Yet, as consumer behavior differs based on the context and people's habits (Sheth, 2020), this study targeted to analyze whether Korean citizens, who used to be heavily affected by the social distancing regulation imposed by the government, also take part in a paradigm shift: from offline sports participation to online sports platform participation. While previous studies utilized involvement as a single variable (e.g., Ma et al., 2020; McClure & Seock, 2020), this study strictly followed the involvement theory (Krugman, 1996; Zaichkowsky, 1985) to provide a foundational model of how involvement theory can be utilized to analyze online sports product consumers' purchase intention. As a result, the following research hypotheses were developed:

- H_{1a}:** Korean citizens' online sports product awareness will have a significant positive effect on their positive attitude toward online sports products.
- H_{1b}:** Korean citizens' online sports service awareness will have a significant positive effect on their positive attitude toward online sports services.
- H_{2a}:** Korean citizens' positive online sports product attitude will have a significant positive effect on their intention to purchase online sports products.
- H_{2b}:** Korean citizens' positive online sports service attitude will have a significant positive effect on their intention to purchase online service products.

3. Methodology

3.1. Participants and Procedures

After getting IRB approval, participants were recruited through purposive sampling by sending out an online survey in Korean to a certain Korean financial company's credit card users. The financial company's research team collected the data from December 2021 to January 2022. The online survey required approximately 10 minutes to complete. A total of 2,263 consumers participated in the study. Participants were somewhat evenly divided by having 1,256 male participants (55.5%) and 1,007 female participants (44.5%). Participants were mostly in their 30s through 50s (1,881; 83.1%). Table 2 shows the demographic characteristics of the participants.

Table 2: Demographic Characteristics

Characteristics		n	%
Gender	Male	1,256	55.5
	Female	1,007	44.5
Age	20s	129	5.7
	30s	533	23.55
	40s	873	38.58
	50s	475	20.99
	60s	216	9.54
	70s and over	37	1.63

3.2. Measures

The survey asked for participants' recognition of and attitude toward online sports products and services and their behavior to continue using the online sports product and services. More specifically, six items were utilized (three for online sports products and three for online sports services), each asking for consumers' recognition, attitude, and behavior intention. A 5-point Likert scale with 1 being "Does not know at all," "Very unfavorable," "Not at all intend to," and 5 being "Know very well," "Very favorable," "Very much intend to." Utilizing a single item has been widely recognized in academia with the benefits such as lessening the time required for survey completion, respondent fatigue, redundancy, etc. (Christophersen & Konradt, 2011; Nagy, 2002; Robins et al., 2001). The single-item measure was widely utilized in consumer behavior studies (Christophersen & Konradt, 2011; Bergkvist & Rossiter, 2009; Sarstedt & Wilczynski, 2009) and provided acceptable reliability when tested with studies that utilized multi-item consisted scales. Moreover, since items are developed following the specific involvement theory, in this case, the content validity of single-item measures utilized in this study is also supported.

3.3. Data Analysis

After conducting a descriptive analysis to measure each item's descriptive statistics (means, standard deviation, etc.), correlations among the items were analyzed to evaluate the potential relationship among the items utilized in this study. Next, two models (one for online sports products and one for online sports services) were set up utilizing the items according to the involvement theory (see Figures 1 and 2). Finally, this study utilized path analysis to analyze the causal relationship of the model. IBM SPSS 26 and S.A.S. software were utilized to analyze the descriptive statistics, correlation, and path analysis results.

4. Results

4.1. Descriptive Statistics and Correlations

Descriptive statistics and the correlations of the items utilized in this study are computed and provided in Table 3 (online sports products) and Table 4 (online sports services). According to the result, the normality of the items was met by having the skewness and kurtosis absolute value less than 10 (Kline, 2015). Moreover, the items utilized in each model (online sports products and services) correlate significantly.

4.2. Path Analysis

The path analysis technique was utilized to analyze the two proposed models. Most of the fit indices for each model showed that the proposed model has a good model fit (Online Sports Product Model: SRMR = .03; NFI = .99; CFI = .99; Online Sports Service Model: SRMR = .04; NFI = .98; CFI = .98), except RMSEA showing not a good model fit for both model (.10 and .14 respectively). The authors find the relatively small degree of freedom (Baseline Model Chi-Square DF = 3) due to the small number of variables (N = 3) used in this study contributed to the inflation of R.M.S.E.A. value, which is affected heavily based on the number of variables used in the study. Yet, since the model is concretely based on the theory and the rest of the fit indices show good model fit, the authors decided to use the proposed model without any modifications.

Table 3: Descriptive Statistics for Online Sport Products

	Items	M(SD)	Skewness	Kurtosis	1	2	3
1	Recognition (product)	2.86 (1.01)	-.04	-.72	-		
2	Attitude (product)	3.37 (.88)	-.77	.24	.32**	-	
3	Behavior (product)	3.11 (.96)	-.45	-.53	.30**	.70**	-

Note: * = $p < .05$, ** = $p < .01$

Table 4: Descriptive Statistics for Online Sport Services

	Items	M(SD)	Skewness	Kurtosis	1	2	3
1	Recognition (service)	2.78 (.95)	.11	-.62	-		
2	Attitude (service)	3.32 (.87)	-.78	.27	.41**	-	
3	Behavior (service)	3.01 (.92)	-.36	-.42	.38**	.72**	-

Note: * = $p < .05$, ** = $p < .01$

As a result, consumers' online sports product recognition had a significant positive effect on their positive attitude toward the online sports product ($\beta = .32$, $p < .00$). Next, consumers' positive attitude toward the online sports product had a significant positive effect on their perceived behavior intention to purchase online sports product in the

future ($\beta = .70, p < .00$). Moreover, consumers' online sports service recognition had a significant positive effect on their positive attitude toward the online sports service ($\beta = .41, p < .00$). Consumers' positive attitude toward the online sports service had a significant positive effect on their perceived behavior intention to purchase online sports service in the future ($\beta = .72, p < .00$). In addition, the indirect effects for both online sports products ($\beta = .22, p < .00$) and services recognition ($\beta = .29, p < .00$) had significant positive indirect effects on consumers' purchase intention. As a result, the two proposed models used in this study supported that consumers' online sports product and service recognition leads to a positive attitude toward online sports products and services (H1_a and H1_b supported). Moreover, consumers' positive online sports product and service attitudes were shown to lead to positive intention to purchase online sports products and services (H2_a and H2_b supported). Path coefficients for the two complete models are shown in Table 5 and Figures 1 and 2.

5. Discussion

Two years have passed since COVID-19 was declared a global pandemic (WHO, 2020). While a myriad of studies has been conducted to analyze the shift in consumer behavior from offline shopping to online shopping (e.g., Jensen et al., 2021), there is a need for more studies on whether this shift will prolong even after COVID-19 (Grashuis et al., 2020). In line with this need, sports is one of the major fields that have been affected by the pandemic, which promoted a new trend for people to participate in digital sports platforms (e.g., Parker et al., 2021). Using the involvement theory (Krugman, 1966), this study analyzed specifically Korean sports consumers' intentions to purchase online sports products and services through online sports distribution platforms to widen the previous digital sports context (Sheth et al., 2020).

According to our results, both online sports product and service recognition showed positive effects on consumers' positive attitudes toward online sports products ($\beta = .32, p < .00$) and services ($\beta = .41, p < .00$). This result is supported by previous studies that found consumers' positive recognition toward the services cultivate consumers' positive attitude regarding the service (Bölen & Özen, 2020; Mohamed et al., 2014). In addition to online services, our study added that when consumers know more about online sports products and services, they are more likely to develop positive attitudes toward them.

This result implies that due to the severe social distancing regulation imposed in Korea, consumers who knew about online sports products and services were found to have a positive attitude toward online sports products and services. However, considering the mean scores of online sports products and services recognitions, it can be found that consumers were more aware of the online sports services than the product. This result may be explained by the significant rise in consumers' use of online media, such as YouTube, to engage in physical activities is becoming more common, but using online sports products (such as Yafit, Samsung, or Apple health) is not as common as utilizing YouTube. Hence, our study suggests that online sports providers and distribution platforms should focus on raising awareness of their products and promoting a positive attitude towards them. Since limitations exist in purchasing online sports products, such as the cost to purchase related equipment (Middleton et al., 2020; Mutz & Gerke, 2020), more strategies to lessen the cost needed to purchase online sports products must come first to widen the recognition of online sports products.

Our result showed that both positive online sports product and service attitudes have a significant positive effect on consumers' intention to purchase online sports products ($\beta = .70, p < .00$) and services ($\beta = .72, p < .00$).

Table 5: Descriptive Statistics for Online Sport Products

	Recognition (Product)	Attitude (Product)
Standardized direct effects		
Attitude (Product)	.32**	-
Direct	-	.22**
Indirect		
Behavior (Product)	-	.70**
Direct		
	Recognition (Service)	Attitude (Service)
Standardized direct effects		
Attitude (Service)	.41**	-
Direct	-	.29**
Indirect		
Behavior (Service)	-	.72**
Direct		

Note: * = $p < .05$, ** = $p < .01$ for all analyses

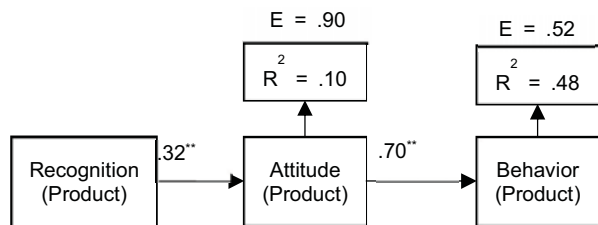


Figure 1: Online Sports Products Consumption Behavior

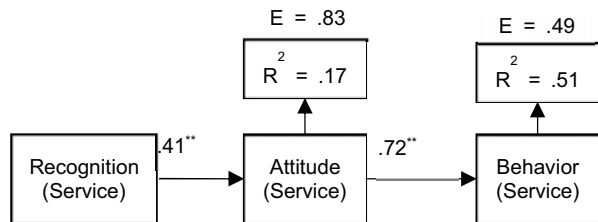


Figure 2: Online Sports Services Consumption Behavior

Previous studies results' also showed how consumers' positive attitude to online shopping affects their positive intention to use online shopping services (Chang & Chou, 2012; Chong, 2013; Hsu et al., 2006; Yang, 2021; Zhao & Bacao, 2020). More specifically, our result showed a better explanation of consumers' intention to purchase online sports products and services than their attitude regarding online sports products and services. This result implies that although our study's participants may not be well aware of online sports products and services, the positive attitude toward online sports products and services is an important predictor of participants' intention to purchase those products and services. This notion suggests that if online sports products and services providers can promote a positive attitude toward their items, consumers will be more likely to purchase them; hence, suggesting the importance of developing a positive attitude. However, previous studies mentioned the difficulties of taking the first step of using online sports products and services (Middleton et al., 2020; Mutz & Gerke, 2020), perhaps providing exhibition services or events where consumers can try out online sports products and services to raise awareness of the items can be suggested. The positive attitude developed by increment in awareness of the related items is expected to develop consumers' positive intention on their purchase behaviors.

The results suggest that, although sports facilities are being re-opened at the time of our study, consumers are very likely to continue using online sports products and services through online sports distribution platforms. However, the mean scores of both online sports products and services recognition being slightly over average indicate that consumers are somewhat aware of online sports products or services. Nevertheless, regardless of their average awareness, consumers showed the highest scores on both attitudes toward online sports products and services. Their positive attitudes led to more friendly intentions toward consuming online sports products and services. Hence, the sports industry may benefit in continuing to develop online sports products and services until the end of COVID-19 is declared and may focus on increasing the awareness of the available online products and services to enhance revenue, as recognition of either products or services had significant indirect effects on consumers' purchase intentions.

However, developing an online sports product or service that is easily accessible to consumers with various backgrounds (such as their age, social economic status, etc.) is a necessity when considering the difficulties of accessing online sports products and services due to consumers' age and infrastructure (Middleton et al., 2020; Mutz & Gerke, 2020). Since online sports products and services may require a high-speed internet connection and costly equipment, lessening this barrier is required to promote the accessibility of online sports products and services. By lessening the

barrier, consumers will be able to know and experience more about these items and cultivate a positive attitude, which will lead to their positive intention to purchase.

Although this study endeavored to widen the context of online sports product and service studies based on an involvement theory, some limitations and options can be considered in future studies. Firstly, this study utilized part of the involvement theory. Although our study utilized high involvement due to the cost of the online sports product and services, when cheaper products and services become available, utilizing low involvement theory (which explains one's recognition leads to purchase behavior intention and how certain behavior intention leads to attitude) can be considered in the future studies.

Next, this study utilized a single-item measure to analyze Korean consumers' intention to purchase online sports products and services. Although the single-item measure is recognized with benefits of usage in studies (such as causing less stress to the respondents), utilizing a multiple-item scale to compare with previous studies may improve the generalizability of the study. Hence, as many studies utilized involvement theory with multiple-item scales, future studies may use those scales and compare the results.

Moreover, as this study asked the participants' recognition, attitude, and intention to purchase online sports products and services in separate questions, the statistics technique (e.g., multi-group analysis) was unable to be used since a categorical variable was not used. Therefore, future studies may design the questionnaire differently and consider utilizing different statistical techniques to utilize involvement theory.

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