

## **Effect of SNS sports advertisement Engagement on advertising attitude, product trust, and purchase intention of sports participants with disabilities**

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### **Abstract**

*The purpose of this study is to investigate the effect of consumers' engagement through SNS sports advertisements on purchase intention through advertising attitudes and product trust for the disabled. In other words, it was intended to investigate how the disabled people's intention to purchase products is formed by acting on various sports product advertisements that are seen during SNS activities. Accordingly, a survey was conducted on 300 people with disabilities participating in sports for the disabled. As a result, it was found that functional engagement had a positive effect on both advertising attitude and product trust, and advertising attitude and product trust had a positive effect on purchase intention. However, emotion engineering and communal engineering were found to have a negative effect on advertising attitudes and not on product trust.*

**Keywords:** *Sports for the disabled, SNS Sports Advertisement, Engagement, Advertising Attitude, product trust , Purchase Intention.*

### **1. Introduction**

Modern society has brought about various environmental changes along with improving the quality of life with the development of science and technology. In particular, changes in the distribution and media environment are affecting media communication to the extent that immediate and interactive feedback is possible between media users and users, or between media users and media systems.

Smartphones, which are becoming popular, and social media, which rapidly increases the number of users, played a major role in these changes. It has been more than a decade since such SNS has become a main tool for modern people's communication, and in particular, channels such as Instagram and YouTube have been created, forming a new culture of communication.

According to a survey by global research firm Statista, the number of SNS users worldwide exceeded 2.09 billion in 2019, and more than 3.02 billion people are expected to use it after 2021 [1], and the size of domestic SNS users is expected to expand as global trends [2].

These SNSs have a variety of contents, and it is predicted that the number of users will increase explosively as they become available anytime, anywhere due to the popularization of smartphones. These SNS plays an

important role as a communication channel for modern people as a tool for images and videos, and user growth and change have become the basis for the development of SNS advertisements, which can be seen as moving to commerce.

According to Bloomberg News, as of 2019, Instagram's advertising revenue was more than \$20 billion and YouTube's advertising sales were more than \$15 billion, predicting that advertising marketability through SNS would increase even more [3].

As the marketability of advertisements through SNS increases, engagement is recognized as an important variable in content evaluation executed through the media in this regard, and its importance is being emphasized. This can be seen as an important attribute and a factor that can maximize advertising effectiveness in the advertising and marketing areas because advertising can be avoided by increasing the amount of information on SNS [4].

This engagement appears in digital media and is used in various meanings, but it can be said how much users exposed to media information or content understand and concentrate these information through emotional experiences such as involvement, interference, preference, and association [5].

Calder & Tamhene defined engagement as increasing the active ability of consumers to focus and explore attention by allowing them to personally grasp in-depth implications for the brand by interacting with the brand of the product through advertising [6, 7].

This concept is a qualitative concept of how deeply and closely users identify, focus, and understand the information, and many studies are being conducted in this study to understand advertising effects in depth, and in general, engagement-high content has a positive attitude, increasing memory effects [8].

Consumers generally buy information from their memories after a certain period of time or a certain period of time rather than purchasing the product immediately after seeing the advertisement. Therefore, in order to stimulate consumers' purchase intentions through advertisements, it is very important to form consumers' attitudes toward advertisements and build trust in products. Ducoffe proved the process of forming a consumer's attitude exposed to advertisements, and stated that consumers' perception and attitude toward brands or products are formed by advertisements [9]. This cannot be an exception to SNS advertisements. In other words, even in SNS advertisements, users will form an attitude toward products through advertisements, which can be predicted to affect consumers' purchase intentions by increasing advertising attitudes and product trust through advertisements.

On the other hand, most of the preceding studies related to SNS are mainly studies targeting young people. However, due to the popularization of smartphones, SNS is used for various purposes by age groups in various fields, so there is a need to conduct research through various research subjects to generalize theory construction that can provide theoretical grounds.

Therefore, this study is expected to be used as a basis for presenting directions for SNS sports advertising strategies in various fields by establishing attitudes toward advertisements perceived by users and trust in products according to differences in engagement of SNS sports advertisements.

## **2. Research hypothesis**

The research hypothesis established in this study was based on the results and theoretical grounds shown in previous studies. The details are as follows.

**2.1. Relationship between engagement and advertising attitude.**

Looking at the research results related to digital signage by Kim and Park(2017), it was found that engagement had a direct positive effect on advertising attitude [10]. In addition, a study related to shopping mall advertisements by Jeon and Park(2017) also found that engagement had a positive effect on attitudes. Therefore, the following hypothesis was established [11].

Hypothesis 1. Engagement will have a significant influence on advertising attitudes.

**2.2. Relationship between engagement and product trust.**

Looking at the research results of Jeon, Hong, Cho and Lee (2020), it was found that engagement affects reliability [12]. In addition, a study of shopping mall customers by Jeon and Park (2017) said that media engagement had a positive effect on reliability. Therefore, the following hypothesis was established [11].

Hypothesis 2. Engagement will have a positive effect on product trust.

**2.3. Relationship between advertising attitude and purchase intention**

Jin and Yoo (2017) stated that consumers' attitudes have a significant influence on purchase intention[13]. In addition, Jin (2011) stated that in a study related to virtual advertising, brand attitude has a positive effect on purchase intention. Therefore, the following hypothesis was established [14].

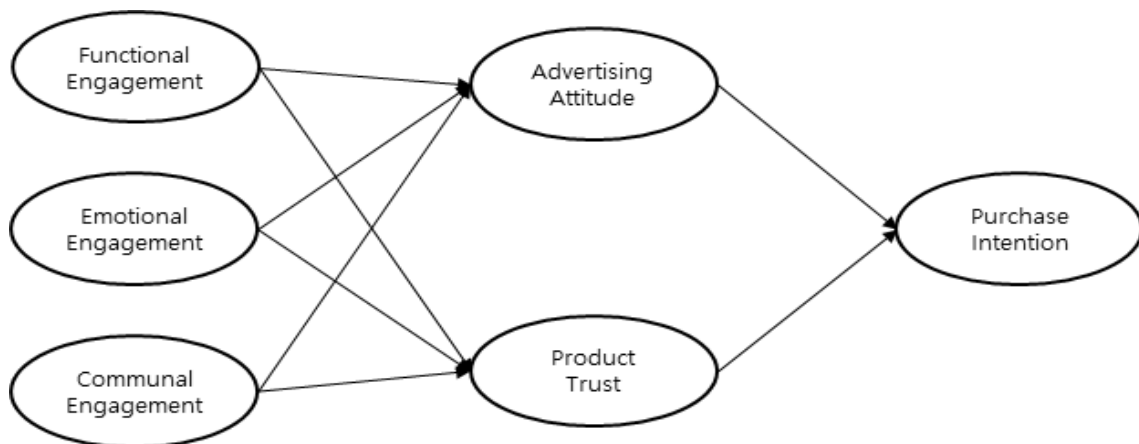
Hypothesis 3. Advertising attitude will have a significant influence on purchase intention.

**2.4. Relationship between product trust and purchase intention**

In a study of video platform users of Jang and Ha (2021), it was found that trust had a positive effect on purchase intention [15]. In addition, a study of customers of Internet shopping malls by Kim, Lee and Kim (2004) also found that trust had a positive effect on purchase intention. Therefore, the following hypothesis was established [16].

Hypothesis 4. Product trust will have a positive effect on purchase intention.

The research model based on the hypothesis established in this study above is shown in Figure 1 below.



**Figure 1. Study model**

### 3. Research Method

#### 3.1. Research Subjects

The subjects of this study were adult disabled people who experienced SNS among participants in the sports field with disabilities. As for the sampling method, a sample was extracted using the convenience sampling method among the non-probability sampling methods. In order to collect data, sports participants with disabilities were asked for consent after explaining the purpose and purpose of this study, and among them, SNS users were asked to distribute questionnaires to subjects by self-administration. Through this process, a total of 310 questionnaires were collected, of which 10 copies of data judged to be poor or unreliable were excluded, and 300 copies of the questionnaires were used as the final valid sample. Accordingly, the general characteristics of these study subjects are shown in Table 1.

**Table 1. General characteristics of subject**

Classification		Frequency	Percentage(%)
Sex	Male	206	68.7
	Female	94	31.3
Age	20s	34	11.3
	30s	91	30.3
	40s	124	42.4
	50s or Over	48	16.0
degree of disability	1-2	73	24.3
	3-4	162	54.0
	5-6	65	21.7
Total		300	100

#### 3.2. Research Tools

The survey tool used in this study is a questionnaire. In the composition of the questionnaire, the questionnaire items used in previous studies were modified and used according to the purpose of this study. The specific contents of the survey are as follows. First, the questionnaire on engagement was used by modifying the questions used in the study of Lim, Huang, Kim, Biocca [17]. In addition, the questionnaire on advertising attitude, product trust, and purchase intention was modified and used in the study of Yang Min-hyuk [18].

#### 3.3. Validity and Reliability Analysis

Confirmatory factor analysis was conducted to verify convergent validity and discriminant validity for all research units, resulting in the results shown in Table 2. The suitability was verified through TLI (standard .9 or higher) and CFI (standard .9 or higher) suggested by Netemeyer, Bearden & Sharma (1997) [18], and  $\chi^2/df$  values (standard 3 or less) and RMR (standard .05 to .08 or less) suggested by Kim Gye-soo (2010) [19]. As a result, TLI=.942, CFI=.953,  $\chi^2/df=2.759$ , RMSEA=.076.

In addition, in order to confirm the centralized validity, the standard accuracy suggested by Kim Gye-soo (2010), the average variance extraction (AVE) value, and the conceptual reliability were compared. As a result, it was found that all factors were above the criteria of AVE (more than 5), c

concept reliability (more than 7), and standard accuracy (more than 5), satisfying all of the criteria, satisfying the concentrated validity. [ 19 ]

In addition, as a result of verifying the reliability, it was confirmed that the reliability coefficient values of all constituent concepts were .7 or higher as shown in by 2, indicating that they were relatively reliable.

**Table 2. Confirmatory factory analysis & reliability**

Factors	S.E.	M.E.	C. R	AVE	Cronbach's α
Functional engagement 1	.723	.793			
Functional engagement 2	.798	.483			
Functional engagement 3	.794	.575	.824	.540	.878
Functional engagement 4	.787	.481			
Emotional engagement 2	.850	.336			
Emotional engagement 3	.802	.472	.840	.637	.811
Emotional engagement 4	.852	.385			
Communal engagement 1	.846	.434			
Communal engagement 2	.864	.331			
Communal engagement 3	.833	.529	.878	.644	.915
Communal engagement 4	.883	.330			
Advertising attitude 1	.880	.257			
Advertising attitude 2	.933	.166	.912	.777	.948
Advertising attitude 4	.879	.272			
Product trust 1	.881	.250			
Product trust 2	.959	.076			
Product trust 3	.929	.130	.950	.826	.942
Product trust 4	.836	.229			
Purchase intention 2	.888	.219			
Purchase intention 3	.920	.163	.924	.801	.925
Purchase intention 4	.887	.219			

X<sup>2</sup>=468.997(df=170, p=.000), X<sup>2</sup>/df=2.759, TLI=.942, CFI=.953, RMSEA=.076

Correlation was analyzed to verify the discriminant validity between each factor. Looking at the results, as shown in Table 3, the relationship direction between each factor appeared as the hypothesis set in the study. Discriminant validity was verified through comparison between the square value of the correlation coefficient and the AVE value, a method of verifying discriminant validity suggested by Fornell and Larcker (1981) [20]. Fornell and Larcker (1981) stated that discriminant validity is satisfied between the two constituent concepts if the AVE value is larger than the square value of the correlation coefficient of each constituent concept of the two constituent concepts. Therefore, it can be seen that the scales used in this study have discriminant validity through the AVE values presented in Table 2 and the square values of the correlation coefficient presented in Table 3.

**Table 3. Correlation analysis**

Factors	1	2	3	4	5	6
Functional engagement	1					
Emotional engagement	.499***	1				
Communal engagement	.601***	.582***	1			
Advertising attitude	.498***	.291***	.478***	1		
Product trust	.436***	.349***	.436***	.606***	1	
Purchase intention	.408***	.332***	.534***	.564***	.735***	1

\*\*\*p&lt;.001

### 3.4. Data Processing Methods

Data processing was performed using SPSS 23 and AMOS 18 to achieve the purpose of this study.

Frequency analysis was conducted to explain the general characteristics of the survey subjects and the composition of the survey questions, and exploratory factor analysis and Cronbach's test were conducted to ensure reliability for the feasibility of the survey tools.

In addition, structural equation model analysis was performed to verify the concentrated feasibility and discriminative feasibility of the measured items shown in the exploratory factor analysis results, correlation analysis, and hypothesis verification.

## 4. Results

Table 4 shows the results of structural equation model analysis to verify the research model set in this study. It was found that the fit of the model was relatively appropriate. And all hypotheses established in this study were adopted. The details are shown in Table 4.

**Table 4. Hypothesis verification result**

	Hypothesis		Estimate	S.E.	t
H1-1	Functional engagement	⇨ Advertising attitude	4.011	1.088	3.688***
H1-2	Emotional engagement	⇨ Advertising attitude	-.929	.396	-2.345*
H1-3	Communal engagement	⇨ Advertising attitude	-2.179	.864	-2.521*
H2-1	Functional engagement	⇨ Product trust	6.893	3.080	2.238*
H2-2	Emotional engagement	⇨ Product trust	-1.136	.727	-1.562
H2-3	Communal engagement	⇨ Product trust	-4.577	2.398	-1.908
H3	Advertising attitude	⇨ Purchase intention	.239	.058	4.116***
H4	Product trust	⇨ Purchase intention	.612	.062	9.911***

$\chi^2=481.606(df=174, p=.000)$ ,  $\chi^2/df=2.768$ ,  $TLI=.942$ ,  $CFI=.952$ ,  $RMSEA=.076$

## 5. Conclusion

From the results of this study, it can be seen that SNS engagement of consumers of sports products with disabilities plays an important role in building advertising attitudes and product trust. In particular, Functional engagement was found to have a positive effect on both advertising and product attitudes, indicating that it was a very important factor. People with disabilities are also engaged in various SNS activities, and among these SNS activities, they encounter various advertisements. Through these advertisements, even the intention to purchase products can be formed. Therefore, if you accurately understand the functional engagement among the SNS engagement of the disabled and execute appropriate advertisements, you will be able to further enhance the advertising effect.

In the case of Emotion and Communal engagement, since it can negatively affect advertising attitudes, the Emotion and Communal engagement of the disabled should also be identified as important, allowing the disabled to carry out appropriate advertisements for using SNS

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