# The Relationship Between Sports Media Involvement Levels and Usefulness of Information Searching and Consumer Behavior 

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#### Abstract

The purpose of the present study is to clarify the effect sports media involvement levels on consumer behavior and the usefulness of information searching. The research subjects include 300 university students in the Gwangju Region in 2014, consisting of 150 males and 150 females. Data analysis conducted factor analysis, one-way anova analysis and multiple regression analysis by using the SPSS statistics program. First, sports media involvement levels appear to partially affect the usefulness of information searching. Second, sports media involvement levels appear to partially affect consumer behavior. Third, the usefulness of information searching appears to partially affect consumer behavior. For this study, the statistics analysis software package SPSS 18.0 was used.


Key words: Sports media, involvement levels, consumer behavior, information convenience, information reliability

## INTRODUCTION

Modern people living in the information age of the 21 st century live in the mass of knowledge and information. We use mass media as a means to communicate such a lot of information to the public in a short time.

Mass media types include TV, newspapers, magazines, the internet and mobile. It has a lot of influence on the direction and behavior of thinking to modern people. It also allows us to control our lives and communicate our culture.

In contemporary society, media consists of a single process where a minority of people are swiftly connected to a majority of people for simultaneous communication. In other words, media does not specify social values, thinking, trends, hobbies, lifestyles, art or products but quickly provides them to the public (Sung, 2014).

The influence of these mass media is contributing to the development of popular culture. Among them, sports is the most notable element in recent years. It has made remarkable progress both quantitatively and qualitatively through interest in the public health and economic, time saving, information and transportation conditions. Based on the recent advancement in information technology, the sports field is able to obtain information on athletes,
teams or organizations and swiftly and accurately check athletes active overseas or game situations (Park and Lee, 2016).

In other words, media sports can meet sports consumption needs through sports information support service and sports information acceptance. Among them, the radical development of the internet media has had a great impact.

Corporations use such a phenomenon as a promotional means for marketing through billboards in games, advertisements on uniforms and equipment, media advertisements and internet advertisements on portal sites. At the current period, sports media allows sports to be popularized as a participatory sport as well as a spectator sport but it also means unfolding of the sports marketing market as part of its commercialization. Consequently, sports consumers undergo a process of information searching to accept information by using media like the internet and such information searching is a major predictor and a factor affecting consumer behavior.

## MATERIALS AND METHODS

Analysis method and survey tool: The research subjects include 300 university students in the Gwangju Region in
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Table 1: Factor analysis of usefulness of information searching

| Questions | Information convenience | Information reliability |
| :--- | :---: | :---: |
| Q08 | 0.854 | 0.038 |
| Q02 | 0.838 | 0.088 |
| Q03 | 0.830 | 0.124 |
| Q01 | 0.791 | 0.195 |
| Q04 | 0.788 | 0.166 |
| Q05 | 0.744 | 0.123 |
| Q07 | 0.752 | 0.212 |
| Q13 | 0.110 | 0.820 |
| Q11 | 0.067 | 0.817 |
| Q14 | 0.079 | 0.802 |
| Q12 | 0.133 | 0.778 |
| Q10 | 0.213 | 0.754 |
| Characteristic value | 3.397 | 3.247 |
| Dispersion (\%) | 33.971 | 32.467 |
| Accumulation (\%) | 33.971 | 66.439 |

2014, consisting of 150 males and 150 females. Data analysis conducted factor analysis, one-way ANOVA analysis and multiple regression analysis by using the SPSS statistics program.

In order to measure sports media involvement levels, the survey used in the research by Kim and Chung (2008) was modified and supplemented, consisting low, medium and high involvement. In order to measure the usefulness of information searching, a survey was composed with information searching convenience and information reliability, based on the survey used in the research by Kim and Kye (2005). Also, to measure sports consumer behavior, a survey was composed with a single factor based on the survey used by Lee and Kim (2012).

Survey validity and reliability analysis: In the exploratory factor analysis, the rotation method was used. The perpendicular rotation method uses the varimax method among the perpendicular rotation methods to rotate the factors, so that there is no correlation between the factors.

Factor analysis of usefulness of information searching is shown: Factor analysis of usefulness of information searching is shown in Table 1. Specifically, information convenience, in usefulness of information searching had factor loading of 0.752-0.854 and question 06 was eliminated due to insufficient factor loading. Information reliability had factor loading of 0.754-0.820 and question 09 was eliminated due to insufficient factor loading. The cumulative percentage that explains the two factors information convenience and information reliability was 66.439\%.

Reliability analysis: The reliability analysis of this study is shown in Table 2. Specifically, the Cronbach's alpha value of information convenience in usefulness of information searching was 0.82 and that of information reliability 0.80 . Also, the Cronbach's alpha value of consumer behavior was 0.87 .

Table 2 : Reliability analysis

| Factors | Sub-factor | Cronbach's alpha |
| :--- | :--- | :---: |
| Usefulness of information | Information convenience | 0.82 |
| Searching | Information reliability | 0.80 |
| Consumer behavior | - | 0.87 |

## RESULTS AND DISCUSSION

The effect of sports media involvement levels on the usefulness of information searching: One-way ANOVA of effects of sports media involvement levels on usefulness of information searching is shown in Table 3. According to the sports media involvement level, there were significant differences in information convenience at the $0.1 \%$ level. Specifically, information convenience was perceived to be highest in high involvement ( $M=4.53$ ), medium involvement ( $M=4.33$ ) and low involvement ( $\mathrm{M}=3.71$ ) in the order. In other words, higher levels of sports media involvement resulted in higher levels of information convenience.

The result of Scheffe's post-hoc test showed that information convenience was perceived to be higher in high and medium involvement than in low involvement in sports media involvement levels.

According to the sports media involvement level, there were significant differences in information reliability at the $0.1 \%$ level. Specifically, information reliability was perceived to be highest in high involvement ( $M=3.57$ ), medium involvement ( $M=3.31$ ) and low involvement ( $M=2.64$ ) in the order. In other words, higher levels of sports media involvement resulted in higher levels of information reliability.

The result of Scheffe's post-hoc test showed that information reliability was perceived to be higher in high and medium involvement than in low involvement in sports media involvement levels.

The effect of sports media involvement levels on consumer behavior: One-way ANOVA of effects of sports media involvement levels on consumer behavior is shown in Table 4. According to the sports media involvement level, there were significant differences in consumer behavior at the $0.1 \%$ level. Specifically, consumer behavior was perceived to be highest in high involvement ( $M=3.19$ ), medium involvement $(M=3.12)$ and low involvement $(\mathrm{M}=2.95)$ in the order. In other words, higher levels of sports media involvement resulted in higher levels of consumer behavior.

The result of Scheffe's post-hoc test showed that consumer behavior was perceived to be higher in high and medium involvement than in low involvement in sports media involvement levels.
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Table 3: Effects of sports media involvement levels on usefulness of information searching
Usefulness of information searching

| Information convenience |  | Information reliability |  |
| :---: | :---: | :---: | :---: |
| M | SD | M | SD |
| 3.71 | 0.57 | 2.64 | 0.53 |
| 4.33 | 0.70 | 3.31 | 0.75 |
| 4.53 | 0.65 | 3.57 | 0.70 |

*** $\mathrm{p}<0.001 ; \mathrm{F}=51.320^{\text {*** }} ; 55.802^{* * *} ;$ Post-hoc $\mathrm{b}, \mathrm{c}>\mathrm{a} ; \mathrm{b}, \mathrm{c}>\mathrm{a}$

Table 4: Effects of sports media involvement levels on consumer behavior
Consumer behavior

|  | ---------------------------------- |  |
| :--- | :---: | :---: |
| Variables | M | SD |
| Low involvement (a) | 2.95 | 0.55 |
| Medium involvement (b) | 3.12 | 0.75 |
| High involvement (c) | 3.19 | 0.67 |

*** $\mathrm{p}<0.001 ; \mathrm{F}=22.763^{* * *}$; Post-hoc: $\mathrm{b}, \mathrm{c}>\mathrm{a}$

Table 5: Correlation analysis

|  | Usefulness of <br>  <br>  <br> VariablesInformation <br> convenience | Information searching <br> reliability | Consumer <br> behavior |
| :--- | :--- | :--- | :--- |
| Usefulness of information searching |  |  |  |
| Information convenience | 1 |  |  |
| Information reliability | $0.645^{* * *}$ | 1 |  |
| Consumer behavior | $0.623^{* * *}$ | $0.581^{* * *}$ | 1 |
| M | 3.420 | 3.400 | 3.36 |
| SD | 0.850 | 0.870 | 0.79 |
| *** $\mathrm{p}<0.001$ |  |  |  |

The effect of the usefulness of information searching on consumer behavior: Usefulness of information searching and consumer the correlation analysis of the behavior is shown in Table 5 . The correlation coefficient between information convenience and information reliability $(r=0.645)$ was $0.1 \%$. In addition, correlation coefficient with consumption behavior ( $\mathrm{r}=0.581 \sim 0.623$ ) showed a significant correlation at $0.1 \%$ level.

The mean value of information convenience, a sub-factor of usefulness of information searching was 3.42 and the average value of information reliability was 3.40. The mean of the consumer behavior was 3.36 . Rregression analysis of effects of usefulness of information searching on consumer behavior is shown in Table 6.

Specifically, usefulness of information searching had a significant effect on consumer behavior at the $0.1 \%$ level. Information convenience and information reliability in usefulness of information searching had significant effects at the $0.1 \%$ level. Regarding the beta values which represent relative contribution, information convenience ( $\beta=0.284$ ) and information reliability $(\beta=0.253)$ had the largest effects in the order. The explanatory power of usefulness of information searching on consumer behavior was $29.8 \%$.

Table 6: Effects of usefulness of information searching on consumer behavior Consumer behavior

| Variables | B | SE (B) | $\beta$ | t -values |
| :---: | :---: | :---: | :---: | :---: |
| Constant | 1.116 | 0.176 |  | 6.360 |
| Information convenience | 0.279 | 0.054 | 0.284 | $5.133^{* * *}$ |
| Information reliability | 0.258 | 0.059 | 0.253 | 4.390**** |

## CONCLUSION

First, sports media involvement levels appear to partially affect the usefulness of information searching. Information searching elements like the amount and quality of information, the ability of recall information, risk perception and confidence for decision-making, affect information searching. In other words, decision making in consumer behavior is affected by involvement levels like the time required to search information and the number of information searching activities.

Also, consumers in specific situations such as sports consumption, first search for related stored information and try to obtain information from outside if such information is lacking (Lee and Park, 2015). This suggests that there is a close relationship between the level of involvement of sports media and information seeking. Second, sports media involvement levels appear to partially affect consumer behavior.

Every individual consumes in various ways to the extent that modern society is called a consumer society. Such consumption is encouraged by the media and produced and supplied through sports consumption or media so, the role of media may be regarded as playing an important part in the consumer behavior of individuals (Lee, 2015).

In order to respond to the needs and desires of diversified sports consumers, the level of involvement in sports media and consumption behavior are closely related. Third, the usefulness of information searching appears to partially affect consumer behavior.

Now a days, consumers practice reasonable purchasing by using various types of information when purchasing a product. Therefore, information reliability and usefulness closely affect consumer behavior.

An examination of the research results show that in an information society like modern times, internet media has a greater appeal than other media for consumer behavior due to its time strategy and convenience and because it is capable of enabling communication between consumers.

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