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# The effect of social network sports community consciousness on sports attitude

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#### Abstract

The purpose of this study is to determine the impact of social network sports community consciousness on loyalty and sports attitude. In order to achieve this research purpose, the population of the study was selected as adult men and women over the age of 20 who are active in the social network sports community in 2022. The sampling method used cluster random sampling to select a total of 300 people, 150 men and 150 women, as research subjects. The survey tool used was the questionnaire method, and the questionnaire whose reliability and validity had been verified in previous studies at home and abroad was used by requoting, modifying, or supplementing it to suit the purpose of this study. It was also structured on a 5-point scale. Frequency analysis, factor analysis, reliability analysis, simple regression analysis, and multiple regression analysis were performed on the collected data using the statistical program SPSS Windows 20.0 Version. The results obtained through this process are as follows. First, social network sports community consciousness was found to have a partial effect on loyalty. Second, social network sports community consciousness was found to have a partial effect on sports attitudes. Third, social network sports community loyalty was found to have a partial effect on sports attitudes. Considering these results, various activities such as decision-making process, relationship formation, and opinion expression of modern people are carried out by the O-line community. In addition, while in the past it was a format that led from offline activities to online activities, currently, there are more and more formats that lead from online activities to offline activities. Therefore, modern people's SNS sports community activities provide many experiences, which creates a sense of community and sports attitudes are formed based on this. This can be said to lead to loyal activities.

Keywords: Social Networking Service, Sports Community Consciousness, Loyalty, Sports Attitude

# 1. INTRODUCTION

The economic structure of human society has undergone many changes as it transitioned from an

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agricultural society to an industrial society to an information society. There has been a drastic change in the use of mass media, following the traditional four major mass media (newspapers, magazines, TV, and radio) to the Internet, an online media. In addition, we are creating a new media era of dreams by providing infinite information content using the vast Internet network [1, 2]. In this way, today's Internet media has brought about many changes in the lives of modern people along with the development of technology. In other words, we can refer to the spread of the use of virtual cyberspace free from the constraints of time and space through computers and communication networks.

Cyberspace is a virtual space that is not socially inhabited and is nothing more than a simulator that can be escaped at any time by turning it off. However, as a space where actors with various interests participate, new cultural forms and community cooperation emerge and new social problems are solved. It is a space where conflict can occur [3, 4]. In addition, it is a social group created when many people conduct open discussions with human emotions to form a network of human relationships, and can be said to be a space where people with common interests exchange opinions and information. The online community that developed along with the changed consciousness of modern people has become an important factor in all fields of modern society. In particular, companies began providing community services under the names of clubs, clubs, cafes, etc. on portal sites, Internet home shopping, and corporate sites to attract and retain customers. From a company's perspective, this can be seen as an investment to efficiently manage target customers who are highly loyal to the company in order to create and expand new markets.

This change is also in the field of sports, as mobile Internet allows people to watch sports broadcasts anytime, anywhere, escaping the constraints of time and space, and many portal sites and platforms at home and abroad are providing sports streaming broadcasts. In modern society, sports content is being converted into smart content with the emergence of a smart media environment and the creation of various business models [5]. This is having an impact on the expansion and revitalization of social network sports communities.

In an online community, a collective identity, like our consciousness, grows as members continue to engage in activities, and a sense of belonging and identification naturally arises. Therefore, since members are free to join and withdraw online, instilling a sense of commonality and establishing identity among members are very important factors in maintaining the online community. In the field of sports, the formation of various online sports communities as a form of Internet community has led to the formation of a sports community where people who prefer sports share information, exercise, and build friendships. This fact, unlike existing sports communities, allows information to be obtained at any time with a single connection, free communication between members forms more intimate relationships, identity is formed through continued interaction, and the online community This is shown through loyal actions. Such highly loyal members are likely to participate in practical offline activities [6, 7]. In this way, loyalty, which greatly contributes to offline activities in online communities, was originally mainly discussed in the marketing field as a variable that measures consumers' attachment to a specific brand, store, or company. However, on the Internet, the repeat access rate and membership rate are the ultimate measurement criteria for the success of an online community, which are important factors in the development of an online community [8]. This loyalty to the sports community also influences sports attitudes. Sports attitude is a mindset toward an object formed through sports experience, and can be said to be a general tendency that determines an individual's thoughts and actions [9]. Additionally, because sports attitudes are influenced by various personal and social factors, personal experiences play a very important role in forming sports attitudes. Accordingly, online sports communities have been formed in various forms and are active in each sports field, contributing greatly to the formation of sports attitudes by encouraging modern people to participate in various sports [10].

As a result, through sports community activities, which can be called indirect sports participation, a sense

of community is created in the process, and loyalty appears based on this. This can be said to have an influence on the formation of sports attitudes. In other words, if we can create conditions for long-term interaction in the online sports community, they will be able to gradually and positively increase their value perception of sports attitudes. Therefore, we are at a point where science and technology called the Internet are influencing all fields of society, and this study needs to analyze the impact of social network sports community consciousness on loyalty and sports attitude.

# 2. ANALYSIS METHOD AND SURVEY TOOL

# 2.1. Study Subjects

This study sampled adult men and women over the age of 20 who are active in social network sports communities in 2022. The sampling method used cluster random sampling to select a total of 300 samples, including 165 males and 135 females. The specific demographic characteristics of the research subjects are as shown in <Table 1>.

	Variable	N	%
Condon	Female	135	45
Gender	Male	165	55
Age	20's	130	43.3
	30's	110	36.7
	over 40	90	30.0
	200 or less	80	26.7
Income level	More than 200 - less than 300	100	33.3
	More than 300	120	40.0

**Table 1. Study Subjects** 

#### 2.2. Research Tool

This study used the questionnaire method as a research tool to determine the impact of social network sports community awareness on sports attitude, and the questionnaire whose reliability and validity were verified in previous domestic and foreign studies was re-quoted for the purpose of this study. Or it was used with modification and supplementation. It was also structured on a 5-point scale, composition indicators are as shown in <Table 2>.

Factor	Sub-factor	Number of questions	
Community consciousness	Sense of belonging, Satisfying needs, Influence, Emotional connection	13	
Loyalty	-	5	
Sports attitude	Social attitude, Personal attitude	11	

**Table 2. Questionnaire Composition Indicator** 

The specific contents of the questionnaire are: First, the sense of community consists of the sense of

community in social network sports, which refers to the members' feelings of belonging, feelings of importance to each other, and shared belief that members' needs will be satisfied through solidarity [11]. In addition, loyalty refers to the continuous favorable disposition, attitude, and repetitive behavior of members toward a social network community, and was composed of a single factor [12]. Lastly, sports attitude refers to the social, psychological, and personal beliefs and values perceived toward sports, and is composed of social and personal attitudes, [13].

# 3. VALIDITY AND RELIABILITY OF THIS STUDY

# 3.1. Exploratory Factor Analysis

The results of exploratory factor analysis on motivation to participate are shown in <Table 3>. Looking at <Table 3>, the four questions, 1, 2, 3, and 4, showing high factor loadings (over 0.648) on factor 1 are all related to sense of belonging. The four questions showing high loadings (over 0.631) on Factor 2 are 14, 12, 13, and 15, all of which are related to influence. Factor 3 has three questions, 9, 8, and 10, that show high factor loadings (over 0.660), all of which are related to emotional bonds. Item 11 was removed because the factor loading value was low. Factor 4 has three questions, 7, 5, and 6, showing high loadings (over 0.574), all of which are related to the integration and satisfaction of needs. And the cumulative ratio explaining the four factors of community consciousness: sense of belonging, influence, emotional bond, and integration and satisfaction of needs was found to be 70.310%.

The results of exploratory factor analysis on sports attitude are shown in <Table 4>. Looking at <Table 4>, the four questions showing high factor loadings (over 0.680) on Factor 1 are four questions: 12, 7, 9, and 6, all of which are related to social attitudes. Items 5 and 11 were removed due to low factor loading values. The four questions showing high loadings (over 0.630) on factor 2 are 4, 2, 3, and 1, all of which are related to personal attitude. Item 5 was removed because the factor loading value was low. And the cumulative ratio explaining the two factors of personal and social attitude toward sports was found to be 66.211%.

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Variable		Factor 1	Factor 2	Factor 3	Factor 4
0(1 1:	Q01	0.779	0.197	0.169	0.108
	Q02	0.743	0.119	0.268	0.189
Sense of belonging	Q03	0.663	0.174	0.399	0.179
	Q04	0.648	0.219	0.336	0.249
	Q14	0.083	0.806	0.142	0.241
	Q12	0.360	0.731	0.242	0.057
Influence	Q13	0.214	0.718	0.279	0.062
	Q15	0.074	0.631	0.144	0.491
Emotional connection	Q09	0.306	0.201	0.834	0.137
	Q08	0.257	0.233	0.832	0.099
	Q10	0.398	0.312	0.660	0.172
satisfying needs	Q07	0.124	0.127	0.104	0.863
	Q05	0.322	0.140	0.379	0.577
	Q06	0.385	0.396	0.004	0.574
Eigen Value	e	2.790	2.614	2.527	1.913

Table 3. Exploratory factor analysis of community consciousness

Variance (%)	19.929	18.669	18.050	13.661
Accumulation (%)	19.929	38.598	56.648	70.310

Table 4. Exploratory factor analysis of sports attitude

Variable		Factor 1	Factor 2	
	Q12	0.830	0.200	
Social attitude	Q07	0.788	0.169	
Social attitude	Q09	0.751	0.211	
	Q06	0.680	0.197	
	Q04	0.092	0.856	
Personal attitude	Q02	0.185	0.836	
Personal attitude	Q03	0.298	0.814	
	Q01	0.431	0.630	
Eigen Value		2.653	2.643	
Variance (%)		33.168	33.042	
Accumulation (%)		33.168	66.211	

### 3.2. Reliability analysis results

The results of the questionnaire reliability analysis in this study are shown in <Table 5>. Looking at <Table 5>, the Cronbach's  $\alpha$  value for social community awareness was found to be .81 to 0.90, and the Cronbach's  $\alpha$  value for loyalty was found to be 0.89. In addition, Cronbach's  $\alpha$  value for sports attitude was found to be 0.87 to 0.88. In this study, the Cronbach's  $\alpha$  value, which is the reliability coefficient for all factors, was found to be at a high level, making it a reliable item.

Table 5. Reliability analysis

Factor	Sub-factor	Cronbach's $\alpha$	
	Sense of belonging,	0.86	
Double in ation, mostly ration	Satisfying needs	0.81	
Participation motivation	Emotional connection	0.90	
	Influence	0.86	
Loyalty	-	0.89	
On auto attituda	Social attitude	0.88	
Sports attitude	Personal attitude	0.87	

# 4. STATISTICAL ANALYSIS

The survey procedure of this study was collected in such a way that the researcher and assistant directly visited the sampled subjects and distributed and collected questionnaires. First, after explaining the method of answering the questionnaire and precautions, the questionnaire was collected after answering in the self-written form. Answered questions were collected for data analysis, and valid samples were coded according to the coding guidelines, excluding double or non-entry data. After inputting the coded data individually into the

computer, frequency analysis, exploratory factor analysis, reliability analysis, simple regression analysis and multiple regression analysis were performed using the SPSS Windows 20.0 statistical program. The statistical significance level was set at p<0.05.

#### 5. RESULTS

### 5.1. Social Network Sports Community Sense Impact on Loyalty

The results of multiple regression analysis to determine the impact of social network sports community consciousness on loyalty are shown in <Table 6>. Looking at <Table 6>, the final regression equation shows that social network sports community consciousness loyalty is statistically affected at the 0.1% level. Looking at this specifically, it was found that the influence of social networks and sports community consciousness on loyalty, emotional bonds, and professional development of motivation to participate in horseback riding in the integration and satisfaction of needs had a significant effect at the 0.1% level. Looking at the beta (β) value, which indicates relative contribution, the influence of SNS sports community consciousness on loyalty is in the order of influence (0.307), integration and satisfaction of needs (0.252), emotional bond (0.216), and sense of belonging (0.092), showing an explanatory power of 56.6%. Looking at previous studies based on the results of this study, Online community consciousness can be seen as a feeling of relationship that individuals have with the community and a feeling that they are satisfying their needs in dependence on each other. In other words, it can be seen as meaning the emotional and psychological phenomena that occur in the relationships between community members and other members, as well as the relationships themselves. This correlation between online community consciousness and community loyalty supports the results of this study as various previous studies have shown a correlation between online community consciousness and loyalty [14]. In addition, it is reported that community loyalty has the most significant impact when needs are met and a sense of belonging is felt [12]. As a result, we believe that community loyalty is a positive emotional attitude among members created through online community activities, which increases community loyalty for online conversations between members of the site they belong to.

Table 6. Multiple regression analysis of the impact of social network sports community awareness on loyalty

Variable		Lo	oyalty	
Variable	В	SD B	β	t
constant	0.423	0.167		2.534
Sense of belonging	0.088	0.060	0.092	1.480
Influence	0.332	0.056	0.307	5.899***
Emotional connection	0.216	0.055	0.246	3.953***
Satisfying needs	0.264	0.056	0.252	4.753***
$R^2$	0.566			
F		96.	234***	

\*\*\*p<0.001

# 5.2. The impact of social network sports community awareness on sports attitude

The results of a multiple regression analysis to determine the impact of social network sports community awareness on sports attitudes are shown in <Table 7>. Looking at <Table 7>, the final regression equation

shows that social network sports community awareness statistically affects personal and social attitudes toward sports at the 0.1% level. First, it was found that the social network sports community consciousness, influence and emotional bond had a significant impact at the 0.1% level on the personal attitude of sports attitude, and the social network sports community consciousness had a significant effect on the social attitude of sports attitude, and the sense of belonging and emotional bond were 5%. At the % level, influence was found to have a significant impact at the 1% level. Looking at previous studies based on the results of this study, The characteristic of an online community is that members who got to know each other through bulletin boards or electronic conversations meet face-to-face through various opportunities, which are called 'offline meetings.' In particular, sports communities can be seen to hold offline meetings more frequently than other types of communities for socialization and direct sports activities. If you think about it in this regard, close relationships are formed through constant interaction on the Internet before offline meetings, and this has an influence on the formation of values such as sports attitudes [15]. Meanwhile, other previous studies explain that offline activities through the formation of community awareness in online sports communities induce more active sports activities and subsequently online community activities, which results in an overall increase in participation in the sports community. [16]. Considering these results together, the sports activities of the sports community not only provide an opportunity to confirm the bonds formed through the Internet, but also have a feedback effect that activates interaction on the Internet and also influence the formation of sports attitudes.

Table 7. Multiple regression analysis of the impact of social network sports community awareness on sports attitude

Variable	Personal attitude		Social attitude	
variable	β	t	β	t
Constant		6.695		4.030
Sense of belonging	0.019	0.239	0.201	2.503*
Influence	0.251	3.780***	0.183	3.737**
Emotional connection	0.351	4.415***	0.171	2.145*
Satisfying needs	-0.003	-0.044	0.075	1.100
R <sup>2</sup>	0.292		0.2	285
F	30.4	30.463*** 29.397***		397***

\*p<0.05, \*\*\*p<0.001

#### 5.3. Social Network Sports Community Loyalty Impact on Sports Attitudes

The results of a simple regression analysis to determine the impact of social network sports community consciousness on sports attitudes are shown in <Table 8>. Looking at <Table 8>, the final regression equation shows that social network sports community loyalty statistically affects personal and social attitudes toward sports at the 0.1% level. Looking at this specifically, social network sports community loyalty was found to have a significant effect on personal and social attitudes toward sports at the 0.1% level. Looking at the beta (β) value indicating relative contribution, personal attitude was found to be social network sports community loyalty (0.447), showing an explanatory power of 20%. In addition, social attitude was found to be social network sports community loyalty (0.413), showing an explanatory power of 17.1%. Looking at previous studies based on the results of this study, in online sports communities or online fan club communities, individual spontaneity can be seen as an important factor. In other words, it can be said that sustainability of

the online community and loyalty to the community's interests contribute to the community's survival and development. Accordingly, in the marketing field, loyalty to a site is defined at the level of an individual's attitude or behavior toward a specific brand [17]. In other words, loyalty induces behavior at the level of individual product purchase. Accordingly, the correlation between online community loyalty and sports attitude established in this study is indirectly supported.

Meanwhile, looking at various previous studies, the activation of sports activities is related to the interaction between members of an online community according to the membership period, and as the membership period of members increases, the interaction of club members and offline sports activities both increase [18, 19]. As a result, unlike other communities, the online sports community is not for the purpose of economic consumption, but rather a non-profit and voluntary gathering for the satisfaction of individuals' own needs. Therefore, if loyalty to the sports community is high, sports activities to achieve the ultimate goal of one's sports community participation increase, and it is believed that sports attitudes are formed from these experiences.

Table 8. Simple regression analysis of the impact of social network sports community loyalty on sports attitudes

Variable	Personal attitude		Social attitude	
variable	β	t	β	t
Constant		9.943		7.842
Loyalty	0.447	8.620***	0.413	7.837***
$R^2$	0.200		0.	171
F	74.297***		61.4	126***

\*\*\*p<0.001

#### 6. CONCLUSION

The purpose of this study is to determine the impact of social network sports community participants' sense of community on loyalty and sports attitude. To achieve this research objective, 300 adults aged 20 or older who were active in social network sports communities were selected as research subjects. The collected data were statistically processed for the purpose of analysis. The results obtained through this process are as follows.

First, social network sports community consciousness was found to have a partial effect on loyalty. In other words, the higher the perception of the influence, emotional bond, and need integration and satisfaction of the social network sports community consciousness, the higher the perception of loyalty.

Second, social network sports community consciousness was found to have a partial effect on sports attitudes. In other words, the higher the perception of the influence and emotional ties of the social network sports community consciousness, the higher the perception of personal attitude toward sports. In addition, the higher the perception of the influence, emotional bond, and need integration and satisfaction of the social network sports community consciousness, the higher the perception of social attitude toward sports.

Third, social network sports community loyalty was found to have a partial effect on sports attitudes. In other words, the higher the perception of social network sports community loyalty, the higher the perception of personal attitude towards sports. In addition, the higher the perceived loyalty to the SNS sports community, the higher the perceived social attitude toward sports.

Considering these results, various activities such as decision-making process, relationship formation, and

opinion expression of modern people are carried out by the O-line community. In addition, while in the past it was a format that led from offline activities to online activities, currently, there are more and more formats that lead from online activities to offline activities. Therefore, modern people's SNS sports community activities provide many experiences, which creates a sense of community and sports attitudes are formed based on this. This can be said to lead to loyal activities.

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# **REFERENCES**

- [1] A.H. Lee and S.M. Park, "Relation between Online Sports Community Awareness and Sports Activity," *Journal of International Information Institute*, Vol. 18, No. 10, pp.1343-4500, Oct 2015.
- [2] S.M. Park, "A study on the relation model of sports activities through internet media," Ph.D. Graduate School of Kookmin University, Seoul, Korea., 2006.
- [3] D.G. Jo, "A Study of Cyberculture and the Diffusion of Internet Memes," *PHILOSOPHY:THOUGHT:CULTURE*, *Vol. 21*, No. 0, pp.215-234, 2016.
- [4] S. M, Park and A. H Lee, "An Influence of the Using Pattern of Sports Media on Loyalty & Sports Attitude," *Journal of International Information Institute*, Vol. 19, No. 9A, pp. 1344-8994, Sep 2016.
- [5] J.S. Ryu and Y.S. Won, "The Relationship Among University Students' Use Motivation, Satisfaction and Media Functional Evaluation of Internet-media Sports," *The Korean Journal of Physical Education*, Vol. 50, No. 2, pp.85-96, 2011.
- [6] I.C. Whang, "A study on formation process of loyalty toward an on-line fan club," Master. Graduate School of Yonsei University, Seoul, Korea., 2003.
- [7] N.I. Kim and S.M. Park, "The Relationship between Media Sports Involvement Experiences and Sports Values and Sports Participation," *International Journal of Applied Engineering Research*, Vol. 12, No. 20, pp. 9768-9773. January 2017.
- [8] J.S. Park and S.M. Park, "The Effects of Internet Media Ability on Interactivity and Sports Site Loyalty," *Journal of Engineering of Applied Sciences, Vol. 12*, No. 10, pp. 2556-2559. 2017.
- [9] A.H. Lee and S.M. Park, "The Effects of Social Network Sharing on the Acceptance Attitude and channel Loyalty of Professional Baseball Media Sports Viewers," *International Journal of Applied Engineering Research*, Vol. 12, No. 20, pp.9763-9767, January 2017.
- [10] S.K. Kim, "The study of on-line interaction in sport club and participation in leisure sports," Master. Graduate School of Kookmin University, Seoul, Korea., 2001.
- [11] J.Y. Moon, and J.H. Choi, "Relationships Among Participation Motives in Virtual Community, Sense of Community, Loyalty and Purchase Intention." *Information Systems Review, vol. 5*, no. 2, pp. 71-90, 2003.
- [12] S.H. Bae, "The impact of the user's participatory incentives on the sense of virtual community and loyalty," Ph.D. Graduate School of Yonsei University, Seoul, Korea., 2001.
- [13] J.Y. Moon and J.H. Choi, "Relationships Among Participation Motives in Virtual Community, Sense of Community, Loyalty and Purchase Intention." *Information Systems Review, vol. 5*, no. 2, pp.71-90, 2003.
- [14] J.H. Lee, S.H. Jeong, S.H. Jeong and J.H. Lee. "The Effect of Social Network Service(SNS) User's Information Satisfaction on the Corporate Image of Professional Baseball Team, Brand Equity and Consumer Loyalty." *Korean Journal of Sport Science*, vol. 24, no. 3, pp. 560-575, 2013.

- [15] S.H, Jeong and J.Y. Chung, "Structural Relationship between User-to-User Interactivity and Consumer Behavior in Online Sports Products Community." *The Korean Journal of Physical Education, vol. 61*, no. 6, pp. 441-458, 2022. DOI: https://doi.org/10.23949/kjpe.2022.11.61.6.32
- [16] M.H. Hong, "The Study of social relationship and interaction of sport club members on the PC communication," Master. Graduate School of Yonsei University, Seoul, Korea., 1999.
- [17] I.C. Hwang, "A study on formation process of loyalty toward an on-line fan club," Master. Graduate School of Yonsei University, Seoul, Korea., 2003.
- [18] Y.E. Kim, B.S. Kim and B.R. Moon, "Comparative analysis of Online community on Sport bulletin." *The Korean Journal of Physical Education*, vol. 54, no. 1, pp. 97-109, 2015.
- [19] J.S Lee, "Research Examining the Social Interaction Patterns in Online Community." Journal of Communication Science, vol. 7, no. 4, pp. 79-111, 2007.