

The Relationship between Sports Media Immersion and Sports Continuation of University Students through Social Media

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Abstract

The purpose of this study is to examine the effects of university students' media sports immersion experience through social media on exercise immersion and exercise continuation. This research target was first selected as a population of university students who have contacted media sports aged 20 or older living in Gwangju Metropolitan City in 2019. The sampling procedure was divided into five parts: Dong-gu, Seo-gu, Nam-gu, Buk-gu, and Gwangsan-gu in Gwangju, and 300 men and women were sampled using cluster random sampling. After individually entering coded data into the computer, the statistical program (SPSS Windows.20.0 Version) was used. The results obtained through this research process are as follows. First, it was found that university students' immersion to media sports had a partial effect on their commitment to exercise. Second, it was found that university students' immersion in media sports had a partial effect on the continuation of the exercise. Third, it was found that college students' exercise commitment has a partial effect on exercise continuation.

Keywords: *Media Sports Immersion, Exercise immersion, Cognitive immersion, Action immersion, Exercise continuation*

1. Introduction

Human basic abilities are shown their's true abilities by harmonizing physical activity and mental development and maintaining a healthy body as a living organism. However, the development of scientific civilization and economic growth in the modern society have brought about an increase in leisure time as well as a convenient life for humans, but various modern diseases have begun to occur due to the reduction in physical activity [1]. This social trend has brought about the spread of a social atmosphere that sports and dance activities are essential to maintain an attractive body as well as one's own health in order to increase human desire and enjoy a happy life. Mass media can be said to be a device that allows the majority of the public to communicate information quickly and accurately and exchange opinions at the same time [2]. In addition, mass media, which are mainly used to obtain knowledge and information necessary for daily life, is influential by delivering popular culture and providing information such as values, trends, lifestyles, hobbies, products, and arts to an unspecified number of people simultaneously [3]. One of the most noticeable elements of popular culture is sports, which has achieved brilliant growth and development both quantitatively and qualitatively through the interest in healthy life of the people, economic and time-consuming leisure due to automation and science, and the securing of conditions for information and means of transportation. In modern times, mass media and sports maintain a symbiotic relationship. This is in order to temporarily escape the state of psychological health and emotional anxiety arising from daily life, and also they have more favored

messages that can overcome self-alienation and accept high-end culture.

Therefore, the public is enjoying the culture by choosing sports because of their playful factors such as interest, enjoyment, thrill, and emotional relaxation. In other words, the media realizes its own interests through sports, and the media is expanding and developing in relationships that are an important part of communication in sports. As sports have become a big part of the media industry, the term media sports has also appeared. This can be said to be an interdependent symbiotic relationship and phenomenon between sports and the media. Due to mass media, interest in sports is increasing and modern sports are rapidly being delivered to the public through various media, and socio-economic environment changes bring an increase in leisure time for university students, so media sports are closely related to the participation of university students in sports. Therefore, the purpose of the research is to find out how media sports immersion experiences affect the sports immersion, athletic sentiment, and athletic continuation of university students.

2. Analysis method and survey tool

2.1 Study Subjects

This research target was first selected as a population of university students who have contacted media sports aged 20 or older living in Gwangju Metropolitan City in 2019. The sampling procedure was divided into five parts: Dong-gu, Seo-gu, Nam-gu, Buk-gu, and Gwangsan-gu in Gwangju, and 300 men and women were sampled using cluster random sampling. Specific demographic characteristics are as shown in Table 1.

Table 1. study subjects

	Variable	Number of cases	percentage(%)
Gender	Male	150	50
	Female	150	50
Period of participation in media sports	More than 1year - less than 2year	70	23
	More than 2year - less than 4year	100	33
	More than 4year	130	44
Household income	200 million won ↓	100	33
	2 million won ↑ -3 million won ↓	120	43
	3 million won ↑	80	27

2.2 Survey Tools

In this study, the survey method to find out the relationship between media sports immersion and exercise immersion and exercise continuation of college students is the questionnaire. Therefore, the questionnaire, which has already been verified for reliability and validity of the questionnaire in domestic and foreign prior research, was re-selected, modified, and supplemented for the purpose of this study. The specific survey tools are as follows. The questionnaire used by S.M Park and A.H. Lee [4] was used to measure the media sports immersion experience and consisted of a total of nine questions. Sub-factors consist of interest and challenge. In addition, a questionnaire used by S.W. Ahn [5] was used to measure exercise immersion and consisted of a total of 12 questions. Sub-factors consist of cognitive and behavioral immersion. Finally, a questionnaire used by J.W. Jang [6] was used to measure the duration of exercise, consisting of a total of 13 questions. Sub-factors are composed of tendency, possibility, and intensification. Specific survey indicators are as shown in Table 2.

Table 2. Questionnaire composition indicator

Constituent indicators	Sub-factor	Number of questions
Demographic characteristics	Gender	1
	Household income	1
	Media sports participation period	1
Media Sports Immersion	Interest	4
	Challenge	5
Exercise immersion	Cognitive immersion	8
	Action immersion	4
Exercise continuation	Tendency	5
	Possibility	4
	Reinforcement	4

3. Validity and reliability of this study

3.1 Exploratory factor analysis

The results of the exploratory factor analysis, a validity check for media sports immersion, are as shown in Table 3.

Table 3. An Analytical Study on the Investigative Factors of Media Sports Concentration

Question	Interest	Challenge
Q09	.847	.069
Q06	.778	.147
Q01	.768	.137
Q02	.760	.102
Q08	.148	.725
Q04	.068	.664
Q05	.016	.601
Q03	.112	.584
Q07	.045	.505
Characteristic value	3.473	1.259
Dispersion %	49.611	17.981
Accumulation %	49.611	67.592

Table 3 shows that the high factor load (.760) on factor 1 is four items in question 9, 6, 1, 2 and 2, which are related to interest. The items showing a high factor load (.505) in Factor 2 are five items in question 8, 4, 5, 3, and 7, all related to the challenge. And the cumulative ratio, which explains the two factors of media

sports immersion and challenge, was 67.592%. These analysis results show that the media sports immersion factors were measured relatively reasonably. The results of the exploratory factor analysis, a validity check for motor immersion, are as shown in Table 4.

Table 4. Exploratory Factor Analysis of Motion Inducement

Question	Cognitive immersion	Immersion into action
Q06	.738	.294
Q08	.707	.138
Q07	.661	.043
Q03	.625	.187
Q01	.586	.056
Q02	.554	.150
Q04	.545	.084
Q05	.413	.067
Q11	.002	.701
Q12	.198	.642
Q09	.315	.586
Q10	.084	.554
Characteristic value	3.228	3.121
Dispersion %	30.902	30.012
Accumulation %	30.902	60.914

Table 4 shows the high factor load (.413) on factor 1 in eight categories, including questions 6, 8, 7, 3, 1, 2, 4, and 5, related to cognitive immersion. The items that show a high factor load (.554) in factor 2 are all four of the questions 12, 12, 9, and 10, all related to the immersion into action. And the cumulative ratio, which explains the two factors of cognitive and behavioral immersion, was 60.914%. These analysis results show that the kinetic immersion factors were measured relatively reasonably.

The results of the exploratory factor analysis, which is a validity check of the kinetic flux, are as shown in Table 5. Table 5 shows that the high factor load (.410) on factor 1 is five items in question 5, 3, 7, 1 and 6, which are related to trend. The items showing a high factor load (.554) in factor 2 are all four of the questions 8, 9, 10, and 13, all related to stiffness. Factors 3 The items showing a high factor load (.598) are all four items of question 12, 11, 2, and 4, all related to the possibility. And the cumulative ratio, which explains the three factors of kinetic propensity, hardening and possibility, was at 69.399%. The results of these analyses show that the kinetic continuous factors were measured relatively reasonably.

The results of the reliability analysis of this study questionnaire are shown in Table 6. Table 6 shows that the value of Chronbach's α for media sports immersion was .76 - .90, and the value of Chronbach's α for exercise immersion was .85 - .81. In addition, the Chronbach's value of kinetic flux was found to be .76 - .80. In this study, the reliability coefficient of Cronbach's α value for all factors appeared at a high level, which is judged to be a reliable question.

Table 5. Continuation of exercise

Question	Tendency	Fortification star	likelihood
Q05	.738	.294	.002
Q03	.707	.138	.198
Q07	.661	.043	.315
Q01	.625	.187	.084
Q06	.410	.056	.067
Q08	.199	.701	.256
Q09	.133	.642	.294
Q10	.065	.586	.301
Q13	.343	.554	.204
Q12	.218	.103	.695
Q11	.148	.169	.692
Q02	.068	.176	.665
Q04	.016	.283	.598
Characteristic value	3.936	3.678	2.796
Dispersion %	26.240	24.519	18.641
Accumulation %	26.240	50.758	69.399

Table 6. Reliability analysis

Factor	Sub-factor	Cronbach's α
Media Sports Immersion	Interest	.90
	Challenge	.76
Motor immersion	Cognitive immersion	.85
	Immersion into action	.81
Continuation of exercise	Tendency	.76
	likelihood	.81
	Fortification star	.80

4. Investigation procedure and data processing

The research procedure of this study was retrieved by distributing questionnaire by researchers and assistants who visited the target location. First, explain the response tips and precautions for the questionnaire, then ask them to respond with self-administration methods, and then recall the questionnaire.

Data processing excluded double entry and inorganic data from analysis, coded only valid samples according to coding instructions, and individually entered coded data into the computer, and then used the statistical program SPSS Windows 20.0 Version to analyze frequency, exploration factor analysis, and reliability, multiple Regression.

5. Results

5.1 The Effect of Media Sports Concentration on Exercise Immersion

The results of multiple Regression analysis to find out the effect of media sports immersion on exercise immersion are as shown in Table 7.

Table 7. The Effect of Media Sports Concentration on Exercise Immersion

Variables	Exercise immersion			
	Cognitive immersion		Immersion into action	
	β	t	β	t
Constant Interest		5.458		13.543
Interest	.245	6.378***	.265	6.868***
Challenge	.140	3.646***	.190	2.560*
R ²	.164		.153	
F	48.462***		44.704***	

***p<.001, *p<.05

Table 7 shows that media sports immersion in the final regression affects cognitive and behavioral immersion at 0.1% statistically. Looking at this in detail, first, it was found that the interest and challenge of media sports immersion had an effect at the level of 0.1% statistically on the cognitive immersion of exercise immersion. When looking at the beta (β) value, which indicates the relative contribution of sports immersion to cognitive immersion in media sports immersion, it was found that cognitive immersion (.245) and behavioral immersion (.140) were in order. Therefore, it was found that the explanatory power of cognitive commitment to media sports commitment shows 16.4% of the total variable.

Meanwhile, the interest of media sports immersion in the activity immersion of exercise immersion has been shown to affect statistically at 0.1% level and the challenge of media sports immersion in the activity immersion of exercise immersion has been shown to affect at statistically 5% level. When looking at the beta(β) value, which represents the relative contribution of exercise commitment to behavioral commitment, media sports commitment was found to have an effect in the order of cognitive commitment (.265) and behavior commitment (.190). Therefore, it was found that the explanatory power of behavioral commitment to media sports commitment was 15.3% of the total variable.

5.2 The Effect of Media Sports Immersion on the Continuation of Exercise

The results of multiple regression analysis to find out the effect of media sports immersion on the exercise routine are as shown in Table 8.

Looking at Table 8, it was found that media sports commitment in the final regression equation had a statistically influence on the tendency, possibility, and reinforcement of exercise continuity at 0.1% level. Looking at this in detail, first, it was found that the interest and challenge of media sports immersion had a statistical effect on the tendency of continuing exercise at the level of 0.1%. When looking at the beta (β) value, which represents the relative contribution of media sports immersion to the tendency of exercise continuity, it was found that interest (.184) and challenge (.164) were in order. Therefore, it was found that the explanatory power of the tendency toward media sports immersion was 22.2% of the total variable.

In addition, it was found that the interest and challenge of media sports immersion had an effect on the possibility of continuing exercise statistically at 0.1% level. When looking at the beta (β) value, which represents the relative contribution of media sports immersion to the possibility of continuing exercise, it was

found that interest (.209) and challenge (.121) were in order. Therefore, it was found that the explanatory power of reinforcement for media sports immersion was 27.7% of the total variable.

Lastly, it was found that the interest and challenge of media sports immersion on the reinforcement of exercise persistence statistically had an effect at 0.1% level. When looking at the beta (β) value, which represents the relative contribution of media sports immersion to the reinforcement of exercise continuity, it was found that interest (.294) and challenge (.234) were in order. Therefore, it was found that the explanatory power of reinforcement for media sports immersion was 27.7% of the total variable.

Table 8. The Effect of Media Sports Immersion on the Continuation of Exercise

Variables	Continuation of exercise					
	Tendency		likelihood		Reinforcement	
	β	t	β	t	β	t
Constant Interest		11.657		11.772		9.945
Interest	.184	4.987***	.209	5.399***	.294	8.256***
Challenge	.164	4.893***	.121	3.448***	.234	7.239***
R ²		.222		.161		.277
F		69.886***		46.835***		92.275***

***p<.001

5.3 The Effect of Exercise Immersion on Exercise Continuity of Exercise

Table 9 shows the results of multiple regression analysis to find out the effect of exercise immersion on exercise continuation.

Table 9 shows that motor immersion in the final regression equation affects the tendency, likelihood, and intensification of motion at a statistically 0.1% level. Looking at this in detail, first, it was found that cognitive immersion and behavioral immersion of exercise immersion had an effect on the tendency of exercise continuation at a level of 0.1% statistically. When looking at the beta (β) value, which indicates the relative contribution of exercise immersion to the tendency of exercise continuity, it was found that cognitive immersion (.344) and behavioral immersion (.182) were in order. Therefore, it was found that the explanatory power of the tendency toward exercise immersion was 18.1% of the total variable. In addition, it was found that cognitive immersion and behavioral immersion of exercise immersion had a statistical effect on the possibility of continuing exercise at 0.1% level. When looking at the beta (β) value, which indicates the relative contribution of exercise immersion to the possibility of continuing exercise, it was found that cognitive immersion (.331) and behavioral immersion (.163) were in order. Therefore, it was found that the explanatory power of the possibility of immersion in motion was 16.1% of the total variance.

Finally, it was found that cognitive immersion of exercise immersion had an effect on reinforcement of exercise continuity at a statistically 0.1% level, and behavioral immersion had an effect at a statistically 5% level. When looking at the beta (β) value, which indicates the relative contribution of exercise immersion to the reinforcement of exercise continuity, it was found that cognitive immersion (.149) and behavioral immersion (.116) were in order. Therefore, it was found that the explanatory power of reinforcement for exercise immersion was 3.3% of the total variance.

Table 9. The Effect of Exercise Immersion on Exercise Continuity of Exercise

Variables	Continuation of exercise					
	Tendency		likelihood		Reinforcement	
	β	t	β	t	β	t
Constant Interest		27.859		23.651		30.467
Interest	.344	11.618***	.331	11.054***	.149	4.661***
Challenge	.182	6.160***	.163	5.449***	.116	2.398*
R ²	.181		.161		.033	
F	109.003***		94.521***		17.221***	

***p<.001

6. Conclusion

The purpose of this study is to examine the effects of university students' media sports immersion experience through social media on exercise immersion and exercise continuation. Based on the results of this study, the following is the discussion of the conclusions.

First, it was found that university students' immersion to media sports had a partial effect on their commitment to exercise. In other words, the higher the experience of the interest and challenge of media sports immersion, the higher the perceived immersion and action immersion of exercise immersion were found. These results report that there is a significant positive correlation between the two factors in Y.G. Lee and K.B. Suh [7] study on the level of involvement in sports media and exercise immersion. This research supports the results of this study by reporting the results in the same context as the results of this study. In other words, the experience of immersion in all sports situations that you see, hear, and feel through social media media directly affect your immersion in sports activities, which can be viewed as being expressed in physical activities. In summary, social media's sports media is playing a role as alternative method to feel immersive experience and Immersion is a result formed during the process, and it can be said that immersion is formed in indirect media acceptance as well as direct participation in sports.

Second, it was found that university students' immersion in media sports had a partial effect on the continuation of the exercise. In other words, the higher you experience the interest and challenge of immersion in media sports, it was found that the tendency, possibility, and reinforcement of exercise persistence were highly recognized. A study by K.P. Lee, YG. Lee and Y.J. Yoon [8] reveals that media sports not only provide users with information and entertainment about sports, but also play a role in maintaining relationships with sports and activities. In summary, in the modern society, the media is universal so that anyone can easily access it. University students respond sensitively to media and accept media sports in a variety of ways. The media explains the rules, strategies, and tactics of the sport in a way that helps them understand and it is thought that the actual play of the players is played on a slow screen and repetitively played back to bring about a change in the values and emotions of the sports to the university students, thereby directly participating in the sport.

Third, it was found that college students' exercise commitment has a partial effect on exercise continuation. In other words, it was found that the higher the cognitive immersion and behavioral immersion of exercise immersion, the higher the tendency, possibility, and reinforcement of exercise persistence. Looking at the preceding research, X. Chen and K.S. Park [9] reports that there is a very high relationship in the effect of immersion to participation persistence through research on the relationship between participation motivation, sports immersion, and behavior after participation of adventure sports participants and D.K. Kim and J.E. Lee [10] supports the results of this study by reporting the results that exercise immersion has a significant effect on exercise persistence in the relationship between mentoring experience, exercise immersion, physical self-concept, and exercise continuity of aerobics participants. To sum up the above results, it can be cognitive

immersion and behavioral immersion, which are sub-factors of exercise immersion through sports activities, are ultimately variables that improve performance by stimulating the tendency, possibility and reinforcement of athletic sustainability.

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