

Relationship between Immersion and Fun Perception of Leisure Sports Participants Leisure Attitude

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Abstract

The purpose of this study is to identify the effects of leisure sports participants' leisure attitudes on immersion and fun perception. As of 2021, the subject of this study was set as a population of adult males and females aged 20 and over who participate in leisure sports in Gwangju and the South, and then the cluster random sampling method was used. A total of 300 people, 150 boys and 150 women, were collected. A questionnaire was used as a survey tool, and a questionnaire whose validity and reliability were recognized in previous studies was modified and secured according to this study. In addition, all questionnaires were constructed on a 5-point scale. The statistical analysis used for data analysis was frequency analysis, exploratory factor analysis, reliability analysis, and multiple regression analysis using SPSS Windows 21.0 Version. The conclusions obtained in this study through data analysis by such methods and procedures are as follows. First, it was found that leisure sports participants' leisure attitudes partially affect immersion. Second, leisure sports participants' leisure attitudes were found to have a partial effect on their perception of fun. Third, it was found that the immersion of leisure sports participants partially affects the perception of fun.

Keywords: Leisure Sports, Immersion, Fun Perception, Leisure Attitude

1. INTRODUCTION

Looking at the historical concept of leisure for humankind, it is a classic concept that pursues "truth and self-understanding" through intellectual and cultural artistic activities for one's own development in ancient times. The increase in leisure time due to the shortening of working time was changed by the birds of the times as the "concept of free time" [1]. his means that 'leisure' exerts a lot of influence on mankind and is closely related to human life. This means that leisure in the concept of "free time" means the differentiation of work and leisure for modern people. They recognize that the investment value is high for individuals to eliminate frustration []. It can be said that leisure sports activities play a role in satisfying the desires of modern people. This is because, through participation in leisure sports, you can experience emotion, joy, happiness, and fun in addition to health, and give meaning and reward to life in a dull daily life and energize your life. Recent research on leisure sports has turned its attention to understanding positive emotions such as fun experienced

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through leisure sports, and the experience of such emotions can be said to be a key factor in the motivation to participate in leisure sports. In other words, providing various fun things to participants in order to maximize the positive experience of participating in leisure sports can be called self-motivation [2]. Emotional states related to pleasure, fun, joy, etc. are important categories in giving meaning to the leisure sports experience. It can be said that it is a very important factor in exploring the essential meaning of the motivation to continue participation [3]. Motivation for continuous participation in leisure sports through fun is linked to an active immersion experience in leisure sports activities, and immersion experience is a kind of mental state that can appear in daily life, and this state is the optimal. It can occur in interaction [4]. In order to enjoy the quality of life due to the improvement of the level of consciousness of modern people and the change of desire, Social conditions must be created, and the most important thing for individuals is their health, and continuous participation in leisure sports and healthy consumption are the most basic starting points for improving the quality of life [5]. Considering these points, it can be seen that there is a mutually meaningful relationship between fun perception, exercise immersion, and quality of life factors that sustain continuous participation in leisure sports, and it can be said that it is an essential part of life for modern people. In other words, leisure sports participants continuously participate with their own will and abilities, and feel bliss when immersed in leisure sports by breaking free from daily life. In previous studies targeting participants in extreme sports, immersion through fun and pleasure gives them an opportunity for self-reflection, and it is reported that self-realization is achieved through self-consciousness obtained from being immersed and intoxicated [6, 7]. Therefore, this study aims to present theoretical basic data on the fun factor, which can be said to be an important factor for continuous participation in leisure sports participation, which has been overlooked in sports sociology and psychology, etc. The purpose of this study is to elucidate the effect on perception.

2. ANALYSIS METHOD AND SURVEY TOOL

2.1 Study Subjects

As of 2021, the subject of this study was set as a population of adult males and females aged 20 and over who participate in leisure sports in Gwangju and the South, and then the cluster random sampling method was used. A total of 300 people, 150 boys and 150 women, were collected. The details of the study subjects are shown in <Table 1>.

Table 1. Study Subjects

Variable		N	%
Gender	Female	118	39.3
	Male	182	60.7
Age	20's	97	32.3
	30's	116	38.7
	over 40	87	29
Income level	200 or less	122	40.7
	More than 200-less than 300	117	39.0
	More than 300	61	20.3

2.2 Research Tool

A questionnaire was used as a survey tool, and a questionnaire whose validity and reliability were recognized in previous studies was modified and secured according to this study. Leisure attitude is an intrinsic state in

which an individual reacts to the experience gained through leisure activities from the past and the disliked good feelings he has about leisure and his knowledge and beliefs about leisure [8, 9]. The sub-factors consisted of cognitive, affective, and behavioral attitudes on a 5-point scale. Immersion is a state of mental and physical excitement felt when acting as a state of complete immersion in leisure sports activities [10]. A single factor was constructed on a 5-point scale. Perception of fun refers to a positive emotional response to feelings of pleasure, liking, and fun during leisure sports activities [11]. The sub-factors were composed of a 5-point scale for competence and achievement. The detailed composition of the questions on the test paper is shown in <Table 2>.

Table 2. Questionnaire Composition Indicator

Factor	Sub-factor	Number of questions
Leisure attitude	Cognitive	7
	Affective	4
	Behavioral	4
Immersion	-	5
Fun perception	Perception of competence	3
	Win and compete	5
	Exercises and benefits	5
	Stylish	4

3. VALIDITY AND RELIABILITY OF THIS STUDY

3.1 Exploratory Factor Analysis

The results of the exploratory factor analysis, which is a validity test for leisure attitudes, are shown in <Table 3>.

Table 3. Exploratory factor analysis on Leisure Attitude

Variable		Factor 1	Factor 2	Factor 3
Cognitive	Q01	0.741	0.058	-0.043
	Q08	0.721	0.159	-0.010
	Q06	0.690	0.249	0.060
	Q07	0.681	0.077	0.014
	Q05	0.669	0.026	0.351
	Q03	0.569	0.366	-0.023
	Q02	0.498	0.289	0.163
	Affective	Q09	0.211	0.873
Q16		0.186	0.832	-0.001
Q12		0.198	0.757	0.239
Q13		0.059	0.731	0.356
Behavioral	Q22	0.121	0.150	0.801
	Q23	-0.030	0.258	0.783
	Q24	0.111	0.210	0.705
	Q26	0.021	0.114	0.584
Eigen Value		3.271	2.910	1.688
Variance (%)		25.159	22.383	12.988
Cumulative(%)		25.159	47.542	60.530

According to <Table 3>, the items showing a high factor load (0.498 or more) for factor 1 are items 1, 8, 6, 7, 5, 3, and 2, all of which are related to cognitive factors. The items showing a high factor load (0.731 or more) for factor 2 are 4 items of items 9, 16, 12, and 13, all of which are related to affective factors. Items 10, 11, and 14 were removed because their factor loading values were low. The items showing a high factor load (more than 0.584) in factor 3 are four items of items 22, 23, 24, and 26, all of which are related to behavioral factors. Items 17, 18, 19, and 26 were removed because their factor loading values were low.

And the cumulative ratio explaining the three sub-factors of cognitive support, affective, and behavioral leisure attitudes was 60.530%. These analysis results show that leisure attitude factors were measured relatively reasonably.

The results of the exploratory factor analysis, which is a validity test for the perception of fun, are shown in <Table 4>.

Table 4. Exploratory factor analysis on Fun Perception

Variable		Factor 1	Factor 2	Factor 3	Factor 4
Practice and benefits	Q07	0.880	-0.015	0.102	0.106
	Q08	0.857	0.021	0.108	0.164
	Q10	0.806	-0.081	0.143	0.187
	Q11	0.743	0.294	0.095	0.151
	Q09	0.628	-0.126	0.272	0.259
Win and compete	Q13	0.155	0.832	0.158	0.048
	Q12	0.078	0.797	0.160	0.035
	Q15	-0.187	0.716	0.352	0.192
	Q16	-0.075	0.686	0.288	0.211
	Q14	-0.010	0.682	0.310	0.342
Stylish	Q19	0.178	0.290	0.826	0.100
	Q20	0.301	0.289	0.795	0.089
	Q21	0.089	0.226	0.770	0.215
	Q18	0.165	0.264	0.754	0.026
Perception of competence	Q01	0.246	0.099	0.008	0.854
	Q02	0.223	0.240	0.194	0.835
	Q03	0.307	0.229	0.186	0.743
Eigen Value		3.538	3.294	3.026	2.408
Variance (%)		20.813	19.374	17.800	14.167
Cumulative(%)		20.813	40.188	57.988	72.156

According to <Table 4>, the items showing a high factor load (0.628 or more) for factor 1 are five items (items 7, 8, 10, 11, and 9), all of which are related to practice and benefit factors. Items showing a high factor load (0.682 or more) in factor 2 are five items, items 13, 12, 15, 16, and 14, all of which are related to factors related to victory and competition. The items showing a high factor load (0.754 or more) in factor 3 are 4 items of items 19, 20, 21, and 18, all of which are related to the fashion factor, and item 17 was removed because the factor load value was low. The items showing high factor loadings (0.743 or more) in factor 4 were three items (items 1, 2, and 3), all of which were related to perception of competence, and items 5 and 6 were removed because they had low factor loadings.

And the cumulative ratio explaining the four sub-factors of perception of fun: practice and benefit, victory and competition, coolness, and competence perception was 72.156%. This analysis result shows that the fun perception factor was measured relatively reasonably.

3.2 Reliability Analysis of This Study

The results of the questionnaire reliability analysis in this study are shown in <Table 5>.

Table 5. Reliability analysis

Factor	Sub-factor	Cronbach's α
Leisure Attitude	Cognitive	0.88
	Affective	0.85
	Behavioral	0.76
Immersion	-	0.74
Fun perception	Perception of competence	0.87
	Win and compete	0.90
	Practice and benefits	0.85
	Stylish	0.85

Looking at <Table 5>, Cronbach's α value of leisure attitude was 0.76 - 0.88, and Cronbach's α value of flow was .74. Also, Cronbach's α value of fun perception was 0.85 - 0.90. In this study, the Cronbach's α value, which is the reliability coefficient for all factors, appeared at a high level, which is judged to be a reliable item.

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, 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 Effect of Leisure Attitude of Leisure Sports Participants on Immersion

<Table 6> shows the results of multiple regression analysis to find out the effect of leisure sports participants' leisure attitude on flow.

Looking at <Table 6>, in the final regression equation, it was found that the leisure attitude had a statistical effect on flow at the 0.1% level. Looking at this in detail, it was found that only the behavioral factor of leisure attitude had a statistically significant effect on immersion at the 0.1% level. In addition, when looking at the beta (β) value, which represents the relative contribution, it was found to have an effect in the order of behavioral (0.663), affective (0.099), and cognitive (0.052). Therefore, it was found that the explanatory power of the leisure attitude toward flow showed 46.1% of the explanatory power of the total variance. Looking at previous studies based on the results of this study, Flow is defined as a kind of state that occurs easily while participants are participating in their favorite activity and occurs when they optimally interact with a given environment [12]. In other words, leisure attitude factors closely related to mental, behavioral, and beliefs that play a leading role in human activities have a high influence on immersion, which is a change in human's

internal psychological state. In addition, in a study targeting college students, it was reported that there was a meaningful relationship between commitment and leisure attitude, and this study was supported [13].

As a result, the leisure attitude establishes a meaningful relationship with immersion.

Table 6. Multiple regression analysis on the effect of Leisure Attitude on Immersion

Variable	Immersion			
	B	SE B	β	t
Constant	2.110	0.509		4.146
Cognitive	-0.144	0.151	-0.052	-0.952
Affective	0.223	0.118	0.099	1.882
Behavioral	1.886	0.138	0.663	13.660***
R ²	0.461			
F	78.539***			

***P<0.001

5.2 Effect of Leisure Sports Participants' Leisure Attitudes on Their Perception of Fun

<Table 7> shows the results of multiple regression analysis to find out the effect of leisure sports participants' leisure attitude on their perception of fun.

Table 7. Multiple Regression Analysis on the effects of Leisure Attitude on Perception of Fun

Variable	Perception of competence		Win and compete		Practice and benefits		Stylish	
	β	t	β	t	β	t	β	t
Constant		0.839		5.558		0.471		4.099
Cognitive	0.077	1.423	0.044	0.812	0.079	1.937	0.030	0.701
Affective	0.051	0.985	0.087	1.664	0.103	2.593**	-0.017	0.402
Behavioral	0.695	14.436***	0.668	13.817***	0.830	22.751***	0.809	21.203***
R ²	0.468		0.465		0.695		0.666	
F	81.031***		79.891***		209.538***		183.469***	

p<0.01, *P<0.001

Looking at <Table 7>, in the final regression equation, it was found that leisure attitude had a statistical effect on the sub-factors of perception of fun, victory and competition, practice and benefit, coolness, and competence perception at a level of 0.1%. Looking at this in detail, first of all, only the behavioral factor among the sub-factors of leisure attitude was found to have a statistical effect at the 0.1% level of the perception of competence, victory and competition, and the coolness factor of the perception of fun, and the practice and As for the benefit factor, it was found that the defining factor of leisure attitude statistically had an effect at the 1% level and the behavioral factor at the 0.1% level. Looking at the beta (β) value, which represents the relative contribution of leisure attitude to the perception of competence, it was found to have an effect in the order of behavioral (0.695), cognitive (0.077), and affective (0.051), with an explanatory power of 46.8%. is showing

In addition, when looking at the beta (β) value, which represents the relative contribution of leisure attitudes to victory and competition, it was found to have an effect in the order of behavioral (0.668), affective (0.087), and cognitive (0.044), with 46.5% shows the explanatory power of In addition, when looking at the beta (β) value, which represents the relative contribution of leisure attitudes to practice and benefits, it was found to have an effect in the order of behavioral (0.830), affective (0.103), and cognitive (0.079), with 69.5% shows the explanatory power of Lastly, looking at the beta (β) value, which represents the relative contribution of leisure attitudes to fashion, it was found to have an effect in the order of behavioral (0.809), cognitive (0.030), and cognitive (0.017), which is 46.5 % explanatory power. Looking at previous studies based on the results of this study, if the defining element of leisure attitude is to represent the emotional aspect, students with developed emotional aspects can easily feel satisfaction and experience happiness even with a small improvement in their skills. It is explained that there will be, and it is concluded that the pleasure of competition can be accepted positively [14, 15]. This suggests that the affective attitude is closely related to the competence factor of fun, which supports the results of this study. In addition, since cognitive factors, which mean knowledge and beliefs about leisure activities, mediate movement and affect achievement factors, are rational and self-judgmental rather than emotional and emotional, cognitive factors affect the achievement of fun. It is believed to have a large influence on.

5.3 Effect of Immersion in Leisure Sports on Perception of Fun

<Table 8> shows the results of multiple regression analysis to examine the effect of leisure sports participants' immersion on their perception of fun.

Table 8. Multiple regression analysis on the effect of Immersion on the Perception of Fun

Variable	Perception of competence		Win and compete		Practice and benefits		Stylish	
	β	t	β	t	β	t	β	t
Constant		7.573		7.643		6.057		4.280
Immersion	0.263	4.697***	0.731	18.433***	0.632	14.093***	0.517	10.400***
R ²	0.069		0.534		0.400		0.268	
F	22.061***		33.757***		98.601***		78.161***	

***P < 0.001

Looking at <Table 8>, in the final regression equation, it was found that immersion had a statistical effect on the sub-factors of Perception of Fun, Victory and Competition, Practice and Benefit, Coolness, and Competence at the 0.1% level. Looking at this in detail, first of all, it was found that the perception of fun perception had a statistical effect on flow at the level of 0.1% and showed an explanatory power of 6.9%. Victory and competition were found to have a statistically significant effect on commitment at the 0.1% level, with an explanatory power of 53.4%. Practice and benefits have been shown to statistically affect flow at the 0.1% level, showing 40% explanatory power. Stylishness was found to have a statistically significant effect on immersion at the 0.1% level, showing 26.8% explanatory power. Looking at previous studies based on the results of this study, defined that pleasure or enjoyment in sports and exercise research is an optimal psychological state that leads to the performance of actions related to intrinsic purpose and positive perception [16]. In addition, fun and enjoyment are not defined as positive emotions, but rather as optimal psychological

states, but other scholars define pleasure or fun as positive emotions about pleasure or fun in sports and exercise situations. Therefore, it supports the establishment of a research model for the relationship between immersion and fun established in this study [17, 18]. Also, pleasure or fun must be the best psychological experience with the likely outcome of pursuing an action for one's own ends. Therefore, it is argued that enjoyment or fun can only occur under these conditions. In other words, positive emotions arise from pleasurable experiences.

6. CONCLUSION

The purpose of this study is to identify the effects of leisure sports participants leisure attitudes on immersion and fun perception. The results obtained to identify the purpose of this study are as follows.

First, it was found that leisure sports participants' leisure attitudes partially affect immersion. In other words, it was found that the higher the behavioral attitude of the leisure sports participants, the higher the immersion.

Second, leisure sports participants' leisure attitudes were found to have a partial effect on their perception of fun. in other words,

The higher the behavioral attitude of leisure attitude, the higher the perception of competence, victory and competition, and the fun perception of coolness. The higher the positive and behavioral attitude of leisure attitude, the higher the fun perception of practice and benefit appear.

Third, it was found that the immersion of leisure sports participants partially affects the perception of fun. In other words, the higher the immersion, the higher the perception of competence, victory and competition, practice and benefit, and fun perception of coolness.

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