

The Effects of Female College Students' Participation in Dance Sports on Body Attractiveness Recognition and Desire for Exercise

¹Jongsang Yoo, ²Sunmun Park

¹Associate professor, Department of Sports Science, Nambu University, Korea

²Associate professor, Department of Sports Leisure, Honam University, Korea
uj0632@hanmail.net, psmun@honam.ac.kr

Abstract

The purpose of this study is to investigate the effect of female college students' participation in dance sports on their perception of body attractiveness and their desire for exercise. In order to achieve the purpose of this study, female college students residing in Gwangju Metropolitan City and Jeonnam in 2022 were selected as the population, and a total of 390 students were selected as study subjects using cluster random sampling. A total of 300 participants, 170 participants in dance sports and 130 non-participants, were selected as study subjects, excluding 90 copies of double entry and insincere data. As a survey tool, the questionnaire whose reliability and validity had already been verified in previous domestic and foreign studies was modified and supplemented to suit the purpose of this study. The collected data were computerized according to the purpose of analysis using SPSS Windows 20.0 Version, a statistical program. The results obtained through this procedure are as follows. First, there were partial differences in physical evaluation according to demographic characteristics. Second, there was a partial difference in exercise desire according to demographic characteristics. Third, physical evaluation was found to partially affect exercise desire.

Keywords: Dance Sports, Body Attractiveness, Desire for Exercise

1. INTRODUCTION

As many different classes of people take part in sports activity, their motives have been changed. Major motive is for their physical health, but there is growing tendency to practice for good shape. It is because people live in complicatedly organized relationships and awareness of their physical attractiveness influence on their lives in many ways. The importance of the awareness of physical attractiveness is related with self-concept/self-esteem. Self-esteem is the idea that is formed by self-perception and self-organization and self-esteem is generally one of the assessment elements. Self-awareness plays important role for an individual to live in modern society [1, 2]. Cooley, social psychologist, said that self-concept is what is reflected in the mirror. In many studies, it has been proved that those having high self-esteem have high achievement [3, 4]. To adolescents and adults, their self-concept of self-conceit is the influencing variables and they have interests in their appearances. Especially attractive body and good shape have much influence on the formation of identity [5]. Therefore, we can say that the self-esteem is the key to aware of the importance of our physical attractiveness and to keep and grow physical strength and to have attractive body. Today society emphasizes

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Corresponding Author: psmun@honam.ac.kr

Tel: +82-62-910-3607, Fax: +82-62-910-3705

Professor, Department of Sport Leisure, Honam University, Korea

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one's personality, and if someone has high body self-esteem, he has. And he becomes to be more confident to his work or personal relationship. In relation to this, according to a study, the more attractive she is, the more confidence she has. Also, to men, the more attractive he is, the more generous, sociable, and positive he is [6, 7]. But the negative cases are increasing; excessive diet or a plastic surgery etc. It is because that they have low self-esteem. The change of physical image, such as weight training or making muscles, is helped only through continuous physical activities. This is the one of the motives people have. It is because they recognize the physical practice as the activity that they should be, and they believe the physical practice can give good effect not only on keeping health or improvement but also on having attractive body they want. That is, they do exercise to keep health through physical activity in their leisure time, but also they do exercise to make body attractive in regard to their situation. Crandall said that needs for and the types of activity can be changed according to age, social environment and situation [8]. Likewise, people think of self-awareness to be important and body-esteem influences on it. So, at this point of radical increasing of the sports population for getting physical attractiveness, this research intends to study how one's self-esteem influence on his/her needs for physical activity. By this research we can help people aware of physical attractiveness in right ways. The purpose of this study is to investigate the effect of female college students' participation in dance sports on their perception of body attractiveness and their desire for exercise.

2. ANALYSIS METHOD AND SURVEY TOOL

2.1 Study Subjects

As for the study, female college students residing in Gwangju Metropolitan City and Jeonnam in 2022 were selected as the population, and a total of 390 people were selected as study subjects using cluster random sampling, but 90 copies of double entry and insincere data were excluded, and dance sports participants A total of 300 subjects, 170 and 130 non-participants, were selected as study subjects. The details of the study subjects are shown in <Table 1>.

Table 1. Study Subjects

Variable		N	%
Opposite sex friend	Have	124	41.3
	None	176	58.7
Grade	1 Grade	57	19.0
	2 Grade	75	25.0
	3 Grade	85	28.3
	4 Grade	83	27.7
Household income (won)	200 ↓	105	35.0
	200 ↑ -300 ↓	118	39.3
	300 ↑	77	25.7
Level of health	Not healthy	95	31.7
	Average	98	32.7
	Healthy	107	35.7

2.2 Research Tool

There is opposition to studies that investigate the effect of exercise on muscle attractiveness recognition and exercise desire of female college students' participation in dance sports, and the survey tool to achieve this

research purpose is the questionnaire method. In the domestic and foreign source survey, the actual questionnaire research paper, which confirmed the reliability and validity of the questionnaire, was enlarged, re-quoted, corrected, or supplemented for use. First, as demographic characteristics, household income, grade level, having friends of the opposite sex, and health were composed of one question each. In addition, body attractiveness recognition means the degree to which one recognizes how well one fits with society's standards for one's appearance. The sub-factors are appearance, which means one's evaluation of one's own body, attribution, which means one's perception of others' evaluation of one's own body, and weight, which is one's own evaluation of one's own body. It was composed [9, 10]. It is composed of a 5-point scale. Finally, the need for exercise refers to the human desire to exercise. The sub-factors include the need for homeostasis, which means maintaining and improving health and physical strength, the need for activity, which is the purpose of physical activity itself, the need for purification, which means finding mental stability by relieving stress, and the formation of friendly relationships with people. The 7 sub-factors are the need for affection, the need for ostentation to attract attention, the need for achievement to improve work efficiency and motor skills and to win in competition, and the need for autonomy, which means free action and exploration of new things free from restraints or help [11-13]. It is composed of a 5-point scale. 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
Demographic characteristics	Opposite sex friend	1
	Grade	1
	Household income	1
	Level of health	1
Recognition of body attractiveness	Appearance	10
	Attribution	5
	Weight	8
Desire for Exercise	Homeostasis	6
	Activity	6
	Catharsis	6
	Affiliation	6
	Show off	6
	Achievement	6
	Autonomy	6

3. VALIDITY AND RELIABILITY OF THIS STUDY

3.1 Exploratory Factor Analysis

The results of exploratory factor analysis, which is a validity test for body attractiveness recognition, are shown in <Table 3>. According to <Table 3>, the items showing a high factor load (0.653 or more) for factor 1 are items 1, 6, 7, 9, 11, 13, and 15, all of which are related to appearance factors. Items 17, 21, and 23 were removed because their factor loading values were low. Items showing a high factor load (0.592 or more) for factor 2 are five items (items 2, 5, 12, 14, and 20), all of which are related to attribution factors. Items showing a high factor load (0.592 or more) in factor 3 are six items (items 3, 4, 8, 10, 16, and 18), all of which are related to the weight factor, and items 19 and 22 have low factor load values. Removed.

And the cumulative ratio explaining the three sub-factors of appearance, attribution, and weight of body attractiveness recognition was 74.963%. These analysis results show that body attraction recognition was measured relatively reasonably.

Table 3. Exploratory factor analysis on Body Attractiveness Recognition

Variable		Factor 1	Factor 2	Factor 3
Appearance	Q01	0.849	0.021	0.191
	Q06	0.849	0.076	0.165
	Q07	0.808	0.200	0.149
	Q09	0.808	0.023	0.152
	Q11	0.801	0.144	0.187
	Q13	0.754	0.113	0.142
	Q15	0.653	0.140	0.172
Attribution	Q02	0.150	0.808	0.058
	Q05	0.224	0.737	0.184
	Q12	0.088	0.669	0.146
	Q14	0.235	0.642	0.047
	Q20	0.208	0.596	0.301
Weight	Q03	0.190	0.229	0.751
	Q04	0.097	0.274	0.739
	Q08	0.090	0.194	0.727
	Q10	0.116	0.069	0.707
	Q16	0.105	0.180	0.671
	Q18	0.109	0.079	0.592
	Eigen Value	2.994	2.983	1.520
Variance (%)	29.935	29.832	15.195	
Cumulative(%)	29.935	15.195	74.963	

The results of exploratory factor analysis, which is a validity test for exercise desire, are shown in <Table 4>. According to <Table 4>, the items showing high factor load (more than 0.754) for factor 1 are items 1, 8, 15, 22, 29, and 39, all of which are related to homeostasis factors. Items showing a high factor load (0.576 or more) in factor 2 are six items of items 2, 9, 16, 23, 30, and 37, all of which are related to activity factors. The items showing high factor loadings (0.671 or more) in factor 3 are 5 items (3, 10, 17, 24, 31), all of which are related to purification factors. Item 38 was removed because the factor loading value was low. The items showing high factor loading (0.645 or more) in factor 4 are 4 items (04, 11, 18, 25), all of which are related to love. Items 32 and 39 were removed because they had low factor loading values. The items showing a high factor load (0.578 or more) in factor 5 are 5 items (05, 12, 19, 26, 33), all of which are related to display. Item 40 was removed because the factor load value was low. The items showing high factor loading (0.660 or more) in factor 6 are 4 items (6, 13, 20, 27), all of which are related to achievement. Items 34 and 41 were removed because their factor loading values were low. The items showing high factor loadings (over 0.501) in factor 7 are 4 items, 7, 14, 21, and 28, all of which are related to autonomy. Items 35 and 42 were removed because their factor loading values were low.

And the cumulative ratio explaining the 7 sub-factors of homeostasis, activity, purification, friendship, display, achievement, and autonomy of the desire for exercise was 67.857%. These analysis results show that body attractiveness recognition was measured relatively reasonably.

Table 4. Exploratory factor analysis on Exercise Desire

Variable		Factor1	Factor2	Factor3	Factor4	Factor5	Factor6	Factor7
Homeostasis	Q01	0.849	0.221	0.191	0.028	0.181	0.250	0.089
	Q08	0.829	0.176	0.165	0.055	0.247	0.195	0.112
	Q15	0.808	0.200	0.149	0.122	0.230	0.309	0.080
	Q22	0.801	0.223	0.152	0.043	0.234	0.254	0.133
	Q29	0.799	0.244	0.187	0.046	0.286	0.121	0.197
	Q36	0.754	0.283	0.142	0.049	0.151	0.103	0.011
Activity	Q02	0.150	0.840	0.058	0.078	0.058	0.261	0.152
	Q09	0.224	0.837	0.184	0.031	0.122	0.444	0.155
	Q16	0.088	0.769	0.146	0.000	0.156	-0.074	0.204
	Q23	0.235	0.742	0.047	0.049	0.274	0.090	0.150
	Q30	0.208	0.696	0.301	0.079	0.195	0.022	0.165
	Q37	0.294	0.576	0.130	0.157	0.099	0.114	0.214
Catharsis	Q03	0.190	0.229	0.839	0.132	0.192	0.069	0.147
	Q10	0.097	0.274	0.820	0.144	0.172	0.004	0.142
	Q17	0.090	0.194	0.727	0.092	0.233	0.105	0.199
	Q24	0.116	0.069	0.707	0.088	0.227	0.180	0.189
	Q31	0.305	0.180	0.671	0.229	0.069	0.101	0.132
Affiliation	Q04	0.051	0.102	0.057	0.836	0.191	0.224	0.196
	Q11	0.133	-0.014	0.161	0.812	0.247	0.167	0.219
	Q18	0.076	-0.003	0.174	0.801	0.125	0.179	0.015
	Q25	-0.026	0.224	0.074	0.645	0.071	0.178	0.129
Show off	Q05	0.163	0.125	0.258	0.251	0.830	0.218	0.225
	Q12	0.278	0.217	0.208	0.206	0.827	0.218	0.163
	Q19	0.278	0.145	0.241	0.155	0.727	0.130	0.224
	Q26	0.204	0.191	0.168	0.225	0.585	0.203	0.108
	Q33	0.078	0.114	0.078	0.138	0.578	0.114	0.028
Achievement	Q06	0.255	0.192	0.069	0.268	0.223	0.786	0.177
	Q13	0.218	0.172	0.104	0.119	0.230	0.763	0.150
	Q20	0.292	0.233	0.025	0.114	0.222	0.685	0.217
	Q27	0.200	0.227	0.080	0.198	0.142	0.660	0.146
Autonomy	Q07	0.272	0.187	0.248	0.197	0.148	0.254	0.781
	Q14	0.176	0.236	0.151	0.246	0.193	0.266	0.733
	Q21	0.100	0.238	0.166	0.146	0.202	0.249	0.684
	Q28	0.058	0.176	0.108	0.114	0.102	0.079	0.501
Eigen Value	3.799	2.502	2.354	2.124	2.113	1.444	1.270	
Variance (%)	16.516	10.879	10.237	9.235	9.188	6.280	5.522	
Cumulative(%)	16.516	27.395	37.632	46.867	56.055	62.335	67.857	

3.2 Reliability Analysis of This Study

The results of the questionnaire reliability analysis in this study are shown in <Table 5>. As a result of this study reliability analysis, Recognition of body attractiveness Cronbach's α value was 0.76 - 0.70, and Need for exercise showed Cronbach's α value 0.85 - 0.74. 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.

Table 5. Reliability analysis

Factor	Sub-factor	Cronbach's α
Recognition of body attractiveness	Appearance	0.76
	Attribution	0.71
	Weight	0.70
Desire for Exercise	Homeostasis	0.85
	Activity	0.80
	Catharsis	0.76
	Affiliation	0.75
	Show off	0.74
	Achievement	0.75
	Autonomy	0.77

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, t-test, one-way 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 Differences in Perception of Body Attractiveness According to Demographic Characteristics of Female College Students Participating in Dance Sports

<Table 6> shows the results of t-test and one-way analysis of variance to find out the difference in perception of body attractiveness according to demographic characteristics. Looking at <Table 6> in detail, it was found that perception of body attractiveness partially differed according to whether there were friends of the opposite sex, grade level, household income, and health level, which were set as demographic characteristics variables. Appearance, attribution, and weight of body attractiveness perception showed a statistically significant difference at the 0.1% level according to the presence or absence of friends of the opposite sex. In other words, it was found that female college students who had friends of the opposite sex perceived her appearance, attribution, and weight higher than female college students who did not have friends of the opposite sex. According to the degree of health, there was a statistically significant difference in appearance at the 5% level and weight at the 0.1% level of body attractiveness recognition. In other words, it was found that female college students with low health levels perceived appearance and weight as body attractiveness recognition higher than female college students with normal health levels. There was no statistically significant difference in body attractiveness perception according to such grade and household income.

Looking at previous studies in this regard, physical attractiveness is defined by social consensus [14, 15]. In addition, it was explained as 'a concept that is recognized as giving pleasure to people as a characteristic of appearance that meets the idealized standard in a society' [16, 17]. Like this, attractive people get a lot of halo effect in many aspects of society.

Table 6. A t-test and One-way ANOVA on Differences in Perception of Body Attractiveness According to Demographic Characteristics

Variable		Appearance		Attribution		Weight	
		M	SD	M	SD	M	SD
Opposite sex friend	Have	3.13	0.49	3.16	0.65	3.02	0.52
	None	2.96	0.39	2.87	0.57	2.65	0.69
t		3.233***		4.098***		4.858***	
Grade	1 Grade	3.13	0.50	3.13	0.65	2.85	0.52
	2 Grade	2.98	0.45	2.95	0.65	2.83	0.53
	3 Grade	3.06	0.44	3.06	0.58	2.79	0.75
	4 Grade	3.09	0.45	3.05	0.65	3.01	0.62
F		1.380		0.914		1.851	
Household income (won)	200 ↓	3.03	0.43	3.06	0.46	2.92	0.61
	200 ↑ -300 ↓	3.05	0.45	2.93	0.63	2.83	0.62
	300 ↑	3.12	0.51	3.09	0.61	2.86	0.65
F		0.785		2.329		0.585	
Level of health	Not healthy	3.14	0.42	3.11	0.62	3.09	0.47
	Average	2.95	0.48	2.95	0.63	2.79	0.54
	Healthy	3.09	0.46	3.06	0.64	2.76	0.75
F		4.292*		1.500		8.371***	

***P < 0.001

These body attractiveness recognition factors and previous studies report that there are differences in body attractiveness recognition according to gender, age, marital status, friends of the opposite sex, and level of health [18, 19]. In particular, according to the degree of health, a very healthy group and a very weak group report a close relationship between the recognition of body attractiveness in a study by Lee Su-won and Park Soon-moon. It is presumed that the healthier the group, the more attractive the body is, and the weaker the group, the higher the evaluation and interest in the body is in order to have a healthy body. In addition, Chung(2005) study showed that the older the age, the lower the perception of physical attractiveness, which supports this study [20, 21]. This is considered to be a high awareness of one's body because it is a period of preparation for many opposite sex textbooks and social advancement. As for the level of health, it was shown that the very healthy miscellaneous group had the highest recognition, but the very weak group also showed the highest recognition.

5.2 Differences in Exercise Needs According to Demographic Characteristics of Female College Students Participating in Dance Sports

<Table 7> shows the results of t-test and one-way analysis of variance to find out the difference in exercise desire according to demographic characteristics. Looking at <Table 7> in detail, it was found that there was a partial difference in the need for exercise according to the presence of friends of the opposite sex, grade level, household income, and health status, which were set as demographic characteristics variables. Depending on the presence or absence of a friend of the opposite sex, there was a statistically significant difference at the 0.1% level in the homeostasis, activity, purification, friendship, display, achievement, and autonomy of the desire for exercise. In other words, it was found that female college students who had friends of the opposite sex perceived the constancy of exercise desire, activity, purification, friendship, display, achievement, and autonomy higher than female college students who did not have friends of the opposite sex.

Table 7. A t-test and One-way Analysis of Variance for Differences in Exercise Desire According to Demographic Characteristics

Variable		Homeostasis		Activity		Catharsis		Affiliation		show off		Achievement		Autonomy	
		M	SD	M	SD	M	SD	M	SD	M	SD	M	SD	M	SD
Opposite sex friend	Have	3.76	1.04	3.45	.56	3.87	1.13	3.13	0.66	3.19	0.67	3.44	0.58	3.34	0.54
	None	4.57	1.15	3.67	.59	4.57	1.27	3.54	0.73	3.56	0.69	3.65	0.60	3.59	0.66
t		6.231***		3.231***		4.990***		5.007***		4.592***		3.009**		3.616***	
Grade	1 Grade	3.64	1.15	3.36	0.58	3.75	1.07	3.02	0.72	3.20	0.64	3.36	0.65	3.27	0.56
	2 Grade	4.06	1.12	3.48	0.58	3.97	1.20	3.25	0.63	3.31	0.69	3.47	0.56	3.40	0.50
	3 Grade	4.28	1.18	3.68	0.61	4.48	1.35	3.49	0.75	3.52	0.77	3.66	0.63	3.51	0.69
	4 Grade	4.25	1.09	3.59	0.51	4.27	1.16	3.34	0.69	3.28	0.64	3.57	0.52	3.53	0.61
F		4.252**		3.950**		4.956**		5.417***		2.818*		3.284*		2.682*	
Household income (won)	200 ↓	4.13	0.98	3.51	0.56	4.20	1.22	3.34	0.69	3.35	0.67	3.59	0.54	3.52	0.57
	200 ↑ -300 ↓	4.15	1.29	3.62	0.59	4.28	1.26	3.36	0.73	3.37	0.71	3.49	0.64	3.42	0.64
	300 ↑	3.96	1.17	3.48	0.60	3.92	1.20	3.14	0.72	3.29	0.74	3.51	0.59	3.38	0.59
F		.680		1.633		2.038		2.432		0.322		0.917		1.239	
Level of health	Not healthy	4.13	1.07	3.53	0.52	4.14	1.01	3.27	0.65	3.32	0.66	3.55	0.50	3.39	0.47
	Average	3.72	1.04	3.32	0.57	3.62	1.12	3.06	0.72	3.10	0.64	3.28	0.60	3.23	0.63
	Healthy	4.41	1.23	3.75	0.58	4.67	1.31	3.54	0.70	3.57	0.71	3.74	0.58	3.68	0.60
F		9.673***		14.580***		20.728***		12.380***		12.355***		16.481***		15.767***	

p<0.01, *P<0.001

According to the grade of female college students, there is a statistically significant difference in display, achievement, and autonomy of exercise desire at the 5% level, homeostasis, activity, purification, and friendship at the 1% level, and friendship at the 0.1% level. appear. In other words, the higher the grade of female college students, the higher they perceived constancy, purification, friendship, and autonomy of the need for exercise. According to the degree of health, there was a statistically significant difference at the 0.1% level in the homeostasis of exercise desire, activity, purification, friendship, display, achievement, and autonomy. In other words, it was found that female college students with good health were more aware of the constancy of the need for exercise, activity, purification, friendship, display, achievement, and autonomy. However, there was no statistically significant difference in exercise needs according to household income. Looking at previous studies in this regard, studies by Song (2006) reported that there was a partial difference in exercise desire according to gender, health status, and age, which supports the results of this study [22, 23]. is giving in particular, regarding age, a concept similar to the female college student's grade in this study, it was reported that the younger the student, the higher the achievement and display of the exercise desire were reported, which was consistent with this study.

5.3 The Effect of Body Attractiveness Recognition on Exercise Desire in Female College Students Participating in Dance Sports Journal of the Korea Convergence Society Korea Science

<Table 8> shows the results of multiple regression analysis on the effect of dance sports participants' perception of body attractiveness on their exercise desire. According to <Table 8>, in the final regression ceremony, the perception of body attractiveness statistically affects the constancy of the desire for exercise, activity, purification, friendship, display, achievement, and autonomy at the 0.1% level. Looking at this in detail, first, it was found that only body weight had a statistically significant effect at the 0.1% level on the perception of body attractiveness on the homeostasis of exercise desire. Attribution (-0.107), Appearance (-0.080), in order. It was found to have an explanatory power of 6.5%.

Table 8. Multiple Regression Analysis on the Effects of Body Attractiveness Perception on Exercise Desire in Female College Students Participating in Dance Sports

Variables	Recognition of body attractiveness							
	Homeostasis		Activity		Catharsis		Affiliation	
	β	t	β	t	β	t	β	t
Constant		11.183		14.291		9.876		13.845
Appearance	-0.080	-1.177	-0.010	-0.150	-0.114	-1.691	-0.180	-2.667**
Attribution	0.107	1.676	0.212	3.294***	0.181	2.837**	0.145	2.069*
Weight	-0.233	-3.362***	-0.202	-2.881**	-0.197	-2.837**	-0.121	-1.940
R2	0.065		0.053		0.065		0.062	
F	6.528***		5.196***		6.518***		6.233***	
Variables	Show off		Achievement		Autonomy			
	β	t	β	t	β	t	β	t
Constant		14.221		14.048		15.423		
Appearance	-0.124	-1.968*	0.002	0.029	-0.057	-0.837		
Attribution	0.354	5.972***	0.217	3.386***	0.153	2.390*		
Weight	0.369	-5.722***	-0.234	-3.381***	-0.234	-3.359***		
R2	0.190		0.062		0.060			
F	22.017***		6.168***		6.007***			

***P<0.001

The recognition of body attractiveness was found to have a statistically significant effect at the 0.1% level and the weight at the 1% level, and the beta (β) value representing the relative contribution showed that the attribution (0.212), weight (-0.202), and appearance (-0.010) in order. It was found to have an explanatory power of 5.3%. Recognition of body attractiveness was found to have a statistically significant effect at the 1% level on the purification of exercise desire, and weight (-0.197) and weight (0.181) were found to have a statistically significant effect at the 1% level. appearance (-0.114) appeared to have an effect in order. It was found to have an explanatory power of 6.5%.

Appearance statistically has a significant effect at the 1% level and attribution at the 5% level, and the beta (β) value representing the relative contribution shows that the appearance (-0.180), attribution (0.145), and weight (-0.124) in order. It was found to have an explanatory power of 6.2%. The recognition of body attractiveness in displaying the desire for exercise was found to have a statistically significant effect on appearance at the 5% level and attribution and weight at the 0.1% level. 0.369), attribution (0.354), and appearance (-0.124) in order. It was found to have an explanatory power of 19%. Body attractiveness recognition was found to have a significant effect on the achievement of exercise desire at the 0.1% level, and weight (-0.234), attribution (0.217), and appearance showed beta (β) values representing relative contributions (0.002) appeared to have an effect in order. It was found to have an explanatory power of 6.2%. Body attractiveness recognition on the autonomy of exercise desire was found to have a significant effect on body weight at the 0.1% level and attribution at the 5% level. (0.217) and appearance (0.002) in order. It was found to have an explanatory power of 6.2%.

Looking at previous studies in this regard, Park(2005)'s study reported that the appearance and weight of body attractiveness perception are sub-factors and amulets of the desire for exercise, that is, the lower the perception of appearance and weight, the higher the desire for exercise, which is partially consistent with this study [24, 25]. The result of this study is that people who are not confident about their appearance and weight

have a higher need for exercise. Attributions have been shown to have a positive effect. In other words, the higher the recognition of attribution, the higher the need for exercise.

6. CONCLUSION

The purpose of this study is to identify the relationship between body attractiveness recognition and exercise desire of female college students participating in dance sports. The results obtained to identify the purpose of this study are as follows.

First, according to the demographic characteristics of female college students participating in dance sports, there was a partial difference in the perception of body attractiveness. In other words, it was found that female college students who had friends of the opposite sex perceived appearance, attribution, and weight as body attractiveness recognition higher than female college students who did not have friends of the opposite sex. In addition, it was found that female college students with lower health levels perceived appearance and weight higher in body attractiveness recognition than female college students with normal health levels.

Second, it was found that there was a partial difference in the exercise desire according to the demographic characteristics of female college students participating in dance sports. In other words, it was found that female college students who had friends of the opposite sex perceived the constancy of exercise desire, activity, purification, friendship, display, achievement, and autonomy higher than female college students who did not have friends of the opposite sex. In addition, it was found that the higher the grade of female college students, the higher they perceived the constancy, purification, friendship, and autonomy of the need for exercise. In addition, it was found that the higher the degree of health, the higher the degree of awareness of the constancy of the desire for exercise, activity, purification, friendship, display, achievement, and autonomy.

Third, it was found that the recognition of body attractiveness of female college students participating in dance sports partially affects the exercise desire. In other words, the lower the body weight perceived, the higher the recognition of the need for homeostasis of the need for exercise. appeared to be

In addition, it was found that the higher the perception of appearance and attribution of body attractiveness recognition, the higher the perception of friendship in the need for exercise. showed a high level of awareness of the need for display. And, the recognition of body attractiveness showed that the higher the attribution and the lower the weight, the higher the recognition of achievement of exercise desire and autonomy.

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REFERENCES

- [1] S.G. Kang and Y.S. Kim, "The Effects of Exercise Participation on Changes in Mental Health Variable for Obese Adolescent; Single Subject Design," *The Korean Journal of Physical Education*, Vol. 41, No. 4, pp. 147-156, 2002.
- [2] H.S. Kim, "The Effect of Physical Attractiveness on Interpersonal Perception and impression Judgment in Koreans," *Korean Journal of Social and Personality Psychology*, Vol. 7, No. 2, pp. 46-62, 1993.
- [3] H.N. Jung and S.M. Park, "The influence on participation in Dance Sports of female University Students and recognition of physical attraction and Importance of Physical attraction," *International Journal of Advanced Culture Technology*, Vol.8, No.4 153-160, 2020. <https://doi.org/10.17703/IJACT.2020.8.4.153>
- [4] C.H. Cooley, "*Human nature and the social order*", Routledge, pp 251. 1983.

- [5] S.W. Ma, "The effect of women's own physical attractiveness perception on self-esteem and self-efficacy: With a focus on the moderating effect of Chinese women's beauty and body attractiveness," Ph.D. Hanseong University Graduate School of Sports Science, Seoul, Korea., 2022.
- [6] Y.R. Shin, Y.S. Kim and I.S. Yeo, "The Relationship between Physical Self-perception, Exercise Flow, and Psychological Happiness of a Street Dance Participant," *The Korean Journal of Physical Education*, Vol. 59, No. 3, pp. 263-274, 2020. <https://10.23949/kjpe.2020.5.59.3.263>
- [7] S.S. Park, "The Effects of Sports for All Kendo Participants' Physical on Exercise Adherence and Life Quality," *The Journal of Korean Alliance of Martial Arts*, Vol. 21, No. 4, pp. 125-138, 2019.
- [8] K.H. Kim and H.S. Young, "The Influences of Exercise Needs on Exercise Adherence Questionnaire and Intention to Dropout of Leisure Sports Participants," *Korean Society of Sport Psychology*, Vol. 21, No. 2, pp. 33-45, 2010.
- [9] S.M. Park, "The Relationship between body-esteem scale for adolescents and expectative sports," Master, Graduate School of Kookmin University, Seoul, Korea., 2001.
- [10] E.K. Song, "The Effects of a 10-week Taekwon Diet Program on Body Composition, Blood Pressure, Blood Glucose and physical self-description of Obese Women," Ph.D. Kyung Hee University Graduate School Physical Education, Yongin, Korea., 2018.
- [11] J.H. Ko and H.J. Min, "The Effects of Women Life Long Dance Participants' Desire for Exercise on Adaptation to Life and Quality of Life," *The Korean Journal of Dance*, Vol. 73, No. 1, pp. 1-17, 2015.
- [12] L.J. Kang, "A study on the relationship between exercise desire, exercise commitment, and exercise addiction and intention to continue exercise among tennis clubs in China," Ph.D. Kunsan National University Graduate School Physical Education, Kunsan, Korea., 2022.
- [13] S.J. Maeng and C.K. Han, "The Impact of Body Image Distortion on Depression in Youths: Focusing on the Mediating Effects of Stress," *Health and Social Welfare Review*, Vol. 37, No. 4, pp. 238-268, June 2017. <https://10.15709/hswr.2017.37.4.238>
- [14] W.B. Kim and S.M. Park, "The Effects of Elderly's Motivation for Participating in Ball Game on Social Support and Subjective Happiness," *International Journal of Advanced Smart Convergence*, Vol. 10 No. 1, pp. 134-141, 2021. <https://doi.org/10.7236/IJASC.2021.10.1.134>.
- [15] S.S. Han, "The Relationship between Body Image, Self-efficacy and Dance Performance Ability in University Students Majoring in Dance," *The Korean Journal of Physical Education*, Vol. 57, No. 2, pp. 459-471, 2018.
- [16] E.J. Tak and H.A. Jung, "A Study on Sports Media Interest in Sports Values and Sports Activities," *International Journal of Advanced Culture Technology*, Vol. 9, No. 4, pp. 154-161, 2021. <https://doi.org/10.17703/IJACT.2021.9.4.154>.
- [17] S.H. Hong and I.S. Kim, "The Influence of Rhythm Exercise on Body Image and Psychological Factors of Middle-Aged females," *Journal of Korean Society for Rhythmic Exercises*, Vol. 10, No. 2, pp. 1-11, 2017.
- [18] J.S. Seo, "An Analysis of Differences in Body Images According to the Levels of Female Dancers and Predictability of Them," *The Korean Journal of Dance Studies*, Vol. 69, No. 2, pp. 1-11, 2018. <https://10.16877/kjds.69.2.201806.61>
- [19] E.Y. Kim and S.K. Shin, "The Effects of Body Image Perceptions on Interpersonal Relationships among Dance Major Students," *The Korean Journal of Dance*, Vol. 78, No. 6, pp. 91-112, 2020. <https://10.21317/ksd.78.6.6>
- [20] H.H. Chung, "Effect of the Physical Self-Concept on the Selection of Subjects: Physical Education, Art and Music," *Journal of Sport and Leisure Studies*, Vol. 24, No. 0, pp. 96-103, 2005.

- [21] K.Y. Song, "The Relationship between Participation Degree on Exercise Needs of Adult Swimmers," *Korea Sports Research*, Vol. 17, No. 6, pp. 471-478, 2006.
- [22] C.G. Oh, "Relationship among Needs of Exercise, Exercise Commitment, and Exercise Adherence of Swimming Participants," Ph.D. Dankook University Graduate School of Sports Science, Cheonan, Korea., 2022.
- [23] B.K. Park, "The Relationship between Participation and Needs of Sport Activity of Leisure Sports Participants," *Korea Sports Research*, Vol. 16, No. 3, pp. 317-325, 2005.
- [24] C.H. Bae and S.M. Park, "The relationship between Consumption Behavior Characteristics and Golf Consumption Behavior According to the influence of Important Hitters of Golf," *International Journal of Advanced Culture Technology*, Vol. 10, No. 3, pp. 253-262, 2022. <https://doi.org/10.17703/IJACT.2022.10.3.253>