Examining relationship among self-esteem with obesity, physical fitness level and participation to sport

Meric ERASLAN[1], Emrah ATAY[1], Yılmaz YUKSEL[2]

[1] Mehmet Akif Ersoy University, School of Physical Education and Sport, Burdur, Turkey.
[2] Sakarya University, Department of Physical Education and Sport Teaching, Sakarya, Turkey.
Address correspondence to Meriç Eraslan, mericeraslan@hotmail.com.

Abstract

This study' purpose was to examine relationship among self-esteem with obesity, physical fitness level and participation situation to sport. 115 male and 124 female participated to study. Participants' mean age is 12.98±1.04 year, mean height 157.38±9.21 cm, mean BMI value 19.37±3.63 kg/m². Only %28 of participants participates to sport. Besides, their %73.6 participates to sporting activities out of lesson. Coopersmith Self-Esteem Inventory was used as data collection material at study. Inventory is comprised of 25 items and minimum score to be taken from inventory is 0, maximum score is 25. Vertical jump, handgrip strength, flexibility and plates tapping measurements were taken from participants and these were standardized for determination of physical fitness level. Mann-Whitney U, Kruskal Wallis-H and Spearman Correlation analyzes were applied as statistical analyze method. No statistically significant difference was found between self-esteem levels as participants' gender, doing licensed sport, participation to sporting activities out of lesson and obesity situations (p>0.05). Besides, it was established that there was no significant relationship between self-esteem and physical fitness level (p>0.05). Self-esteem is a case to be effect a lot of factor. Therefore, factors to be effect self-esteem are standardized at researches to be conduct regarding self-esteem. Thus, relationship among self-esteem with doing sport situation, physical fitness level and obesity situation is may be established correctly.

Keywords: Self-Esteem, physical fitness level, obesity.

INTRODUCTION

Self-notion is one of factors creating base of personality. It expresses "who is person", "what can do person" and "how can accommodate environment" (1). As to self-esteem is a case expressing "what do person see oneself", "whether person finds value oneself or not" or "which level value" (2, 3) and this case is continued during life (4). Children having low self-esteem tend to determine destination under their capacities (5). Physical activity and sport workouts may contribute that children determine high level destination by improving self-esteem. Besides, high self-esteem invigorates belief that person is found value by everybody else, low self-esteem make reverse effect (3).

It contributes development of self-esteem that children have high success at their physical abilities and skills (6). There are studies indicating self-esteem of individuals participating skill and physical activity workouts is high (7). It is claimed that doing sport effect self-esteem positively, high self-esteem effect sporting success positively (8).

There is difference in self-esteem between genders. Male' self-esteem is higher than female (9). Besides, participation to social activities and high socio-economic structure affect self-esteem positively (10).

Self-esteem is important regarding individual' gain confidence, increase of life satisfaction, be more success while one reaches to destination, one communicate with others well, increase of be success possibility and reach to destinations for future. As known, self-notion isn't a congenital feature; it is comprised in social and physical environment over time (11).

MATERIAL & METHOD

Research Group

Participant' 41.8% (115 individuals) is male, 51.9% (124 individuals) is female and participants' mean age is 12.98±1.04 year, mean height is 157.38±9.21 cm and mean BMI value is 19.37±3.63 kg/m². Participants' 28% participates to competitions at school or sport clubs and 73.6% participate to sporting activities out of lesson.

Determination of Physical Fitness Level

In physical fitness evaluation; vertical jump, handgrip strength, flexibility and plates tapping tests existing in Eurofit test battery were performed in accordance with procedure (12). Vertical jump, handgrip strength and flexibility test scores, which achievement score is directly proportional with obtained score, were summed after test scores were standardized in SPSS 15.0 for Windows Package program. These scores were removed from plates tapping test score which achievement score is inversely proportional with obtained score. Standard fitness score was obtained in this way.

Data Collection Material

Coopersmith Self-Esteem Inventory was used as data collection material. Inventory is comprised two forms as 25-items short form and 50-items long form (13). Short form was used in this research. There are expected answers (Yes, No) at inventory. These are in manner "items are Yes 1 ,4, 5, 8, 9, 14,19, 20, items are no 2, 3, 6, 7, 10, 11, 12, 13,15, 16, 17, 18, 21, 22, 23, 24, 25. In short form, lower score to be taken is 0, maximum score is 25.

Statistical Analyze

SPSS 15.0 for Windows Package program was used in obtained data. Mann-Whitney U, Kruskal Wallis-H and Spearman Correlation analyzes were selected as statistical analyze method, besides benefited from descriptive statistics. Mann-Whitney U analyze was used for comparison of self-esteem as gender, licensed doing sport situation and participation situation to sporting activities out of lesson. Kruskal Wallis-H analyze was used for comparison of self-esteem as obesity situation. Spearman Correlation analyzes was used to determine relationship between physical fitness level and self-esteem. As to descriptive statistics were used to determine self-esteem means and frequency distribution.

RESULTS

No statistically significant difference was found among self-esteem level as participants' genders, doing licensed sport situation, participation situation to activities out of lesson (p>0,05).

There was no significant relationship between participants' physical fitness level and self-esteem level (p>0.05).

Table 1. Means belonging to motoric features and self-esteem scores of participants.

Variables	N	Mean	SD
Vertical jump (cm)	239	33.30	10.53
Handgrip Strength (kg)	239	21.75	6.01
Flexibility (cm)	239	1.50	7.66
Plates tapping (sec)	239	15.21	2.82
Self-Esteem (score)	239	16.51	3.54

Table 3. Investigation of relationship between physical fitness level and self-esteem level.

	Correlation	Self-esteem
Physical fitness	r	.009
	p	.891

DISCUSSION

In committed study, it was worked that comparison of self-esteem features as participants' genders, doing sport situation and obesity, besides relationship between physical fitness level and self-esteem level. No significant difference was found among self-esteem score as gender, doing sport situation and obesity. It is important result of this study that physical fitness level doesn't affect on self-esteem at significant level.

Table 2. Comparison of participants' self-esteem score.

Variables	Sub-Variables	N	Mean	SD	Z/X^2	p
Gender	Male	115	16.06	3.728	-1.510^z	,131
	Female	124	16.94	3.312		
Doing licensed sport situation	Participated	68	16.53	3.884	-.335^z	,738
	Non-Participated	171	16.51	3.403		
Participation situation to activities out of lesson	Participated	176	16.63	3.503	-.874^z	,382
	Non-Participated	63	16.21	3.646		
Obesity situation	Thin	110	16.89	3.344		
	Normal Weight	112	16.00	3.778	4.166^{x2}	,125
	Overweight-Obese	17	17.47	2.695		

^{z} Mann Whitney U test; ^{x2} Kruskal Wallis H test

It was established that there was no statistically significant difference between self-esteem levels as gender in this study. Generally in literature, it was concluded that there is no significant difference between self-esteem level as genders (9, 14, 15, 16). Today, it is known that female and male live together at a lot of field, especially career and school. This situation declines polarization regarding roles between genders. These situation may be cause that self-esteem don't illustrate difference (17).

In this study, no statistically significant difference was found between self-esteem level as doing licensed sport situation and participation situation to activities out of lesson. Similarly this study' findings, Uçan and Çağlayan (2012) (16) with Pınar (2002) (15) established that there was no statistically significant difference. As to Certel and Bahadır (2012) concluded that there was no relationship between self-esteem and time doing sport (sport age)(14). In their study, Tiggeman and Williamson (2000) found that participation to sport effect self-esteem positively at male, effect negatively at female (18). Opposite these findings, research findings illustrating that there were statistically significant difference between self-esteem level of doing sport and not do sport (9, 19).

It was established that self-esteem features wasn't differentiated as obesity situation in committed this study. As to Pınar (2002) found that obese participants had lower self-esteem (15). In a study committed by Pesa et al (2000), it was established that overweight participants had lower self-esteem (20). People are sense alterations occurring themselves (21). Therefore, we may say that alterations occurring physical appearance is reason of "that obese individuals have lower self-esteem".

There are contrasts or similarities between committed this study and literature knowledge. Reason of this is that self-esteem is affected by a lot of factor. Thus, it may be said that it is required that only factors which will be examined should be different from each other by creating groups having similar structures. Inclusion criteria for creation of similar structure groups should be added to research examining the relationship among self-esteem with participation to sport, physical fitness and obesity. It contribute to establish the relationship among self-esteem with participation to sport, physical fitness and obesity correctly that studies in this topic should be applied in similar

groups in terms of both socio-demographic and socio-economic.

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