

# Journal of Education and Recreation Patterns (JERP)

www.jerpatterns.com

# Self-Esteem and Body Image of Gifted University Students

Havva DEMİREL<sup>1</sup>, Bekir Furkan TÜZER<sup>2</sup>, Mehmet ALTIN<sup>3</sup>

# To cite this article:

Demirel, H, Tüzer, B.F., Altın, M. (2024). Self-Esteem and body image of gifted university students. *Journal of Education and Recreation Patterns (JERP)*, 5 (2), 208-219. DOI: https://doi.org/10.53016/jerp.v5i2.221

Journal of Education and Recreation Patterns (JERP) is an international scientific, high quality open access, peer viewed scholarly journal provides a comprehensive range of unique online-only journal submission services to academics, researchers, advanced doctoral students and other professionals in their field. This journal publishes original research papers, theory-based empirical papers, review papers, case studies, conference reports, book reviews, essay and relevant reports twice a year (June and December) in online versions.

<sup>&</sup>lt;sup>1</sup> Selçuk University, <u>havvademirel@selcuk.edu.tr</u>, b <u>https://orcid.org/0000-0003-2805-4281</u>

<sup>&</sup>lt;sup>2</sup> Selçuk University, <u>bekir.tuzer@selcuk.edu.tr</u>, <u>https://orcid.org/0000-0002-1665-7205</u>

<sup>&</sup>lt;sup>3</sup> Selçuk University, mealtin@selcuk.edu.tr, https://orcid.org/0000-0002-6439-7997

Volume 5, Issue 2, Year 2024

# **Self-Esteem and Body Image of Gifted University Students**

Havva Demirel<sup>1</sup>, Bekir Furkan Tüzer<sup>2</sup>, Mehmet Altın<sup>3</sup>

#### ARTICLE INFORMATION

Original Research Paper

Received 13.02. 2024 Accepted 24.11. 2024

#### https://jerpatterns.com

December, 2024 **Volume:** 5, No: 2 **Pages:** 208-219

#### **ABSTRACT**

**Aim:** This study aimed to examine the self-esteem and body image of gifted university students. The population consisted of students admitted through a special talent exam, with a sample of 421 students (247 female, 174 male).

ISSN: 2757-9344

Mateiral and Method: Scale applications were carried out with scale forms created manually and via Google. The self-esteem scale developed by Rosenberg (1965) and validity and reliability study conducted by Çuhadaroğlu (1986) was used to measure self-esteem levels, and the body image scale developed by Secord and Jourard and adapted into Turkish by Hovardaoğlu (1993) was used to determine body perceptions.

**Results:** While no statistical change was observed in self-esteem and body image scores related to age, daily sports practice and time allocated to art, statistical differences were found depending on gender and faculty of study. In addition, it was noteworthy that the body perception values of the students of the Faculty of Sports Sciences and the Faculty of Fine Arts were higher than the Conservatory students.

Conclusion: As a result, the fact that male participants have higher self-esteem than female participants can be associated with social norms, women's place in society and status differences. In general terms, a person feels as valuable as the value he/she sees, so this environmental attitude or perspective can be seen as a factor affecting women's self-esteem in Anatolian societies, and it can be said that the value that men see both physically and as a social dynamic imposed on them at work, at home and in social life makes their self-esteem higher than women. The reason why the body perception values expected at a high level in the students of the Faculty of Sports Sciences were significantly lower than the students of the other two faculties can be seen as that their body perception values may be perceived differently by the people around them.

Keywords: Body Perception, Self-Esteem, Sports, Talented University Students

This work is licensed under a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License.

#### INTRODUCTION

The study, in which self-esteem and body perception were addressed together, was conducted on gifted university students. The indirect but close relationship between body image (body perception) and self-esteem, especially the common features that can be observed from the outside such as physical appearance, traceable success and special talent, brought together the students of the Faculty of Sports Sciences, Faculty of Fine Arts and Conservatory in our study.

"Self-esteem," a concept dating back to the 1890s, has been particularly addressed in some areas of clinical psychology. However, the fact that the faculty students within the scope of our sample have some special talents related to their fields and that they perform sports, music or art is seen as their common point. For this reason, self-esteem and body images were handled separately from other faculty students. Therefore, no research on this subject has been found. In addition, it is a prejudice that we often encounter that the social popularity of the faculty students we have chosen is high, and there are also prejudices that those with low selfesteem may have unsuccessful social relationships or vice versa. Social psychology research argues that interpersonal relationships are related to self-esteem (Doğan et al., 2009). Rosenberg (1965) explains that self-esteem is the sum of the value individuals place on themselves and their own opinions and feelings. According to Coopersmith (1967), self-esteem determines individuals' beliefs about their abilities, achievements and values. In the literature, there are studies showing that there is a strong link between mental well-being and self-esteem (Tian et al., 2018). There is also a distinction between high self-esteem (positive) and low selfesteem (negative). While high self-esteem is associated with all kinds of success, low selfesteem is associated with depression and anxiety (Woods & Scott, 2016; Zhou et al., 2020). Chung (2017) and Alessandri (2019) think that self-esteem has a very complex structure in four different dimensions. These four dimensions, namely body ego, emotional evaluation, cognitive and social dimensions, play an active role in maximizing potential and success on the one hand and minimizing personal weaknesses and deficiencies on the other (Butler & Gasson, 2005). Self-esteem has a much more comprehensive meaning than a simple word meaning and in the literature, the term is also referred to as self-worth, self-belief, self-concept, selfawareness and self-image (Sagat et al. 2021).

It has been the subject of many studies that any kind of regular and adequate physical activity is good for both physical and mental health (WHO, 2018). Especially in sports activities, if the final result is victory, the athlete's sense of ownership of success is also quite strong and it is assumed that this feeling is accompanied by feelings such as self-concept, selfbelief and self-awareness. However, we would like to verify whether the interaction that occurs in the field of sport is also manifested in the performance of other artistic talents. The affinity of artists in any field of fine arts with self-esteem in the presentation process is often recognized by experts in both art and other fields (Franklin, 1992). In different studies on self-esteem, Shavelson et al. (1976) and Vispoel (1995) evaluated art and self-esteem together and saw that a distinction that can be characterized as "artistic self-esteem" would be correct. According to the researchers, respect is positively correlated with self-esteem in the global or familiar sense (Vispoel, 1995). As a result, Vispoel developed the Artistic Self-Perception Inventory (ASPI), which examines how people perceive themselves in different artistic fields to confirm the thesis he advocated, and his thesis has been accepted by many researchers (Marsh & Roche, 1996; Sanders & Browne, 1998; Vispoel, 2003; Zimmerman, 2005; Draugelis et al., 2014). In their research, they stated that the better people perceive themselves in an artistic field, the higher their general self-esteem will be. Their explanation supports Vispoel's (1995) assumptions.

Body image can be explained as individuals' feelings, thoughts, perceptions and attitudes about their physical appearance and the way they present themselves. Physical appearance has a very important place in modern societies. Individuals who are appreciated for their

appearance are considered more positive, more attractive, more intelligent and more honorable than others (Brennan et al., 2010; Saylan & Soyyiğit, 2022). The distinction between accepted and ideal body image among young generations is strongly influenced by family, environment and cultural factors. The impositions of mass media and popular culture likewise encourage the standardization of beauty and attractiveness criteria. (Holmqvist et al., 2013). Therefore, especially in recent years, body image dissatisfaction has emerged as a major psychological problem due to the media's emphasis on beauty and thinness. At the same time, mental disorders such as low self-esteem, depression, social anxiety, eating disorders, sexual disorders and other illnesses are also common (Nye & Cash 2006).

When the research on body image in athletes and non-athletes is examined, Varnes et al. (2013) argue that participation in sports distracts people from body image anxiety, but this distancing is not very intense in women and high-level athletes. We witness steroid use quite frequently in sports, especially among bodybuilders. This is a typical behavior related to the perception of body image. However, since anabolic steroids can cause negative effects, this can also make bodybuilders who use steroids vulnerable to body image perception while pushing them to unhealthy diets (Mish, 2008). Similar results were obtained by Kong and Harris (2015). However, female athletes engaged in sports that require thinness (such as dancers and gymnasts) were found to have higher levels of body dissatisfaction than other athletes. In addition, elite athletes reported higher levels of body dissatisfaction than recreational and noncompetitive individuals. According to the results of this research, body image disorders are more common in sports where aesthetics, thinness and elegance are emphasized. Similarly, Ferrand et al. (2007) reported that synchronized swimmers had a higher level of dissatisfaction than the general population. Therefore, individuals who are dissatisfied with their physical appearance may be ashamed of their bodies, which leads to low self-esteem (Ritan et al., 2018). A study conducted in Indonesia showed that students with low body image also have low selfacceptance (Maryam, 2019).

Negative body image, which leads to self-confidence, depression and difficulties in interpersonal relationships, destroys the perception of a fit physique, especially in athletes. Students who are interested in sports are often expected to be healthy, fit and have an ideal body shape, and therefore they are forced to look fit and have an ideal body shape all the time. In fact, what matters is how athletes feel rather than how they look physically in order to be successful. Only with this feeling can athletes be successful in their social and sports lives. In studies on the relationship between body image and physical activity, researchers state that those who engage in aesthetic sports are more concerned with their weight and have a higher body image perception than those who do not engage in sports (Petrie, 1996; Hellín et al., 2006). In studies conducted in the field of art, especially in dancers, the importance of the body has been reported as a factor affecting the success in performing the figures. Therefore, it has been stated that dance students are paired with low weight and fat percentage and have great concerns about nutrition, so they experience eating disorders and are health risk groups. According to Buckroyd (2000), dance, which creates so much psychological and physical tension on student dancers, is seen as more worrying, especially in professional groups and in highly competitive branches such as ballet, and emphasized that it is important to analyze the relationship between dance and body image (Buckroyd, 2000). Assuming that dance combines emotional, psychological and physical aspects, a student who is able to develop a harmonious image of himself/herself will strengthen his/her self-esteem and self-concept by becoming aware of the determinants of academic and achievement motivation (Weiner, 1985) that influence performance (Lozano, 2000). On the contrary, dancers who are dissatisfied with their figures may develop low self-esteem and inadequacy. According to Megías (2009), low selfconfidence and inadequacy in people can lead to poor performance and loss of motivation to learn (González & Tourón 1992). Factors such as sleep, general health, body image and selfesteem are interconnected in everyday life and affect well-being and human relationships (Beiter et al., 2015). Therefore, since it is not possible to consider athletes and artists away from human beings, the concepts of self-esteem and body image are of great importance for both groups.

# **METHOD**

#### Research Model

The aim of this study, which used the comparison method, one of the quantitative research methods, is to examine the self-esteem and body image perceptions of gifted university students according to various factors such as gender, age, time allocated to daily sports and arts, and faculty of study. The population comprises students from universities that admit students through a special talent exam, while the sample group consists of 421 students studying at Selçuk University Faculty of Fine Arts, Faculty of Sports Sciences and Conservatory.

# **Data Collection Tools**

Demographic questions regarding the participants' gender, age, time allocated to daily sports and arts, and faculty of study were prepared by the researchers and directed to the participants. The data were obtained electronically and face-to-face by random sampling method. The obtained data were organized according to kurtosis skewness values and outlier data were not used.

**Rosenberg Self-Esteem Scale (RBSS):** In the study, "Rosenberg Self-Esteem Scale" developed by Rosenberg (1965) and validity and reliability studies conducted by Çuhadaroğlu (1986) was used to measure self-esteem. The Cronbach's Alpha value of the scale was 0.91 for positive items and 0.87 for negative items. In the Turkish validity and reliability study of the RBSS, 0-1 points were scored as high self-esteem, 2-4 points as moderate self-esteem, and 5-6 points as low self-esteem. The RBSS consists of twelve sub-dimensions and the first ten items measure self-esteem. Items 1, 2, 4, 6, 7 are positive and items 3, 5, 8, 9, 10 are negative.

**Body Image Scale:** Data on body image were obtained with the Body Perception Scale. This scale, whose original name is Bady Cathexis Scale (BCS), was developed by Secord and Jourard in 1953. It was adapted into Turkish by Hovardaoğlu (1993). In order to evaluate the reliability of the scale, the internal consistency coefficient was calculated, and Cronbach's Alpha coefficient was determined as  $\alpha$ =.91. It is a scale that determines a person's satisfaction with 40 different body parts or functions. The form of the scale used in our country is a five-point Likert-type measurement tool consisting of 40 items. The most positive statement receives 1 point and the most negative statement receives 5 points. Accordingly, the lowest total score is 40 and the highest total score is 200. An increase in the total score indicates a decrease in satisfaction with body parts or functions, while a decrease in the total score indicates an increase in satisfaction (Kundakçı, 2005).

# **Data Analysis**

"SPSS" Statistical Package For Social Science version 22. Statistical program was used in the statistical analysis of the data obtained from the study. In the analysis of the normality test, parametric tests were applied since the kurtosis skewness values were in the range of  $\pm 2$  (George & Mallery 2010). Significance was accepted as p<0.05. The Independent T test was used to compare the differences between two independent groups and the One-Way Anova test was used to compare more than two independent groups.

This research was approved by the Ethics Committee of Selçuk University Faculty of Sports Sciences with the ethics committee report number 144 and the date 09.11.2022.

#### **FINDINGS**

In this part of the study, the results of the analysis of self-esteem and body image levels of the participants regarding gender, age, time allocated to daily sports and arts, and faculties of study are given.

**Table 1**Self-Esteem and Body Image Results by Gender Factor

Gender	n	M	Sd	t	p	
Female	247	14,81	2,33	2.47	,014*	
Male	174	15,44	2,71	-2,47		
Female	247	101,08	12,35	1.02	055	
Male	174	98,68	12,91	1,93	,055	
	Female Male Female	Female 247 Male 174 Female 247	Female         247         14,81           Male         174         15,44           Female         247         101,08	Female         247         14,81         2,33           Male         174         15,44         2,71           Female         247         101,08         12,35	Female         247         14,81         2,33           Male         174         15,44         2,71           Female         247         101,08         12,35           1 93	

p<0.05

Table 1 shows that men's self-esteem scores were statistically higher than women's (p<0.05), while there was no statistical change in body perception values depending on gender.

**Table 2** *Results of Self-Esteem and Body Image of Participants According to Age Factor* 

	Age	n	M	Sd	F	p
Self-Esteem	18-20	295	15,04	2,45		
	21-23	99	15,14	2,79	,055	,946
	24-26	27	15,07	2,13	_	
Body Image Perception	18-20	295	99,78	12,54		
	21-23	99	101,40	13,23	,807	,447
	24-26	27	98,63	11,22	_	

As can be understood from Table 2, no statistical change was observed in self-esteem and body perception values depending on age groups.

**Table 3**Results of Self-Esteem and Body Image Related to Time Allocated to Sports and Arts Daily

	Daily Time cated to Sports and Arts	n	M	Sd	F	p
Self-Esteem	0-1 hour	186	15,27	2,52		,408
	2-3 hour	121	14,86	2,42	067	
	4-5 hour	50	15,16	2,82	- ,967	
	6 and above	64	14,80	2,39	_	
Body Image Perception	0-1 hour	186	99,63	12,92		250
	2-3 hour	121	99,05	11,78	1 240	
	4-5 hour	50	100,94	12,95	- 1,349	,258
	6 and above	64	102,70	12,93	<del>_</del>	

As can be seen in Table 3, no statistical change was observed in self-esteem and body perception values depending on the time allocated to sports on a daily basis.

**Table 4**Results of Self-Esteem and Body Image According to the Department of Study of the Participants

	<b>Faculty of Education</b>	n	M	Sd	F	р
Self- Esteem	Faculty of Sport Sciences	139	15,29	$2,77^{a}$		
	Faculty of Fine Arts	130	15,32	2,52 a	3,223	,041*
	Conservatory	152	14,66	2,19 <sup>b</sup>		
Body	Faculty of Sport Sciences	139	101,80	13,29 a		
Image	Faculty of Fine Arts	130	97,99	12,33 <sup>b</sup>	3,121	,045 *
Perception	Conservatory	152	100,31	12,06	_	

Statistical difference between groups p<0.05. a,b= source of difference

As can be understood from Table 4, it was determined that the self-esteem value of the conservatory students was statistically lower than the value of the students of the faculties of sport sciences and fine arts (p<0.05), and the value of the students of the faculty of sport sciences was statistically higher than the value of the students of the faculty of fine arts in body perception values (p<0.05).

#### DISCUSSION

Self-esteem and body image were compared in the study conducted with the students of Selcuk University Faculty of Sports Sciences, Faculty of Fine Arts and Conservatory who have special talents and who started their undergraduate education in the relevant universities and faculties by making their preferences to plan their future in this field. As a result of statistical analysis, self-esteem values of males were higher than females in terms of gender. Looking at the differences between faculties, it is seen that the self-esteem of the students of the Faculty of Sports Sciences and the Faculty of Fine Arts has higher values than the Conservatory students, while the body image perceptions of the students of the Faculty of Sports Sciences are higher than the other two faculties. As in the comparisons between ages, it was seen that there was no difference in self-esteem and body image perceptions in terms of the time allocated to sports and arts.

The fact that the self-esteem of male participants was higher than that of female participants is not surprising in the Turkish social structure. In Turkish culture, children are raised with distinct gender roles. Environmental pressures often lead to lower self-esteem in girls due to societal expectations and norms. As a matter of fact, the impositions in our culture that women should be more controlled cause them to behave more dependent and far from common sense (Kuzgun, 1993). In a thesis study on decision-making and self-esteem of university students, the self-esteem values of male students were higher than female students, and the difference between gender variable and self-esteem values was found to be significant (Taşgit, 2012). In studies on the relationship between self-esteem and gender, it is generally seen that boys have higher self-esteem than girls (Knox et al., 1998). Another study examining self-esteem and self-confidence in men (Klein et al., 2017) states that there is a relationship between being physically active and self-esteem, psychological self-confidence and decisionmaking (Luciano & Orth 2017). A man's perception of his physical body image is an important complement to his self-esteem, and exercise is not only good for physiological health but also for psychological health. Lubans et al. (2016) proved that there are strong links between the self-esteem of physically remarkable and talented people and their ability to be social, communicate and develop personally. It is argued that men who systematically engage in sports or physical activities are emotionally calmer, better able to cope with their internal problems and more successful in their emotional self-control (Zamani Sani et al., 2016).

Wrzesinska et al. (2018) emphasize that physical activity contributes to the creation of self-confidence, positive decision-making and a socially successful life in men. Men's physical

performance is associated with their athletic abilities and this perception contributes to the development of the self-esteem concept of physical attractiveness and self-confidence (Poobalan et al., 2012). Studies investigating the relationship between participation in sports activities and physical self-efficacy have observed that the self-esteem of men who exercise regularly is significantly higher than men who exercise intermittently (Evans et al., 2017; Holt et al., 2020). The research was supported by Kim and James (2019), who stated that the selfesteem perceptions of men who experience social exclusion for various reasons can be gained through sports activities. There was no significant difference between men and women in body image perceptions. However, many studies have been conducted to compare body image across cultures. This relationship is especially important in body image comparisons between countries and continents (Gupta et al., 2001; Jung & Lee 2006). According to the National Weather Service (NWS, 2013), the climate of the southern and northern regions varies. In the south, temperatures are reported to be about 14 degrees warmer and more humid. Therefore, women living in the Southeast try to lower the perceived temperature by dressing thinner, lighter and lighter. Wearing clothes that make the body more visible may be an explanation for women investing more in their appearance than women in the Northwest (Paulk et al., 2014). As a matter of fact, it is thought that the fact that body image results did not differ in male and female individuals in our study may be due to the fact that our sample was selected among students living in the same climatic conditions. In our study, there was no significant difference in self-esteem and body image values depending on the age variable. It is thought that the results are due to the fact that the average age of the individuals in the sample group is close to each other. In terms of the time allocated to sports and arts, no significant difference was found in self-esteem and body image values.

The self-esteem of the students who participated in the study was higher in Conservatory students, and the body image values were higher in the students of the Faculty of Sports Sciences. In our general observations, it is seen that those who do sports expect to have a physical appearance specific to the sports branch they are interested in or to be aware of the physical reflection of their interest in sports. The reason why the body perception values expected at a high level in the students of the Faculty of Sports Sciences were significantly lower than the students of the other two faculties can be seen as that their body perception values may be perceived differently by those around them.

# Conclusion

As a result, in the literature review related to the research, it is seen that the perceptions and negative impositions created through social media and advertisements about body image create negative and wrong perceptions on young people and even people of all ages, lead to wrong eating habits, and threaten people's health with additives taken from outside in unnatural ways. It was also supported that self-esteem has a very complex structure and affects personal development in every sense. It is recommended that talented young people should invest in their fields and receive psychological support with affirmations away from existing beliefs and impositions that are not true in their self-esteem and body image perceptions in order to progress successfully on their path.

# **Limitations and Recommendations**

The sample group of this study consists of individuals who have been admitted to university through the special aptitude exam. As a result, reaching gifted individuals and applying the scales constitute a limitation for this research.

# **Acknowledgment or Notes:**

We would like to thank the valuable students who fully supported us during the research phase.

#### REFERENCES

- Alessandri, G. (2019). Self-esteem in adolescents. In S. Hupp & J. Jewell (Eds.), *The encyclopedia of child and adolescent development*. Wiley. <a href="https://doi.org/10.1002/9781119171492.wecad460">https://doi.org/10.1002/9781119171492.wecad460</a>
- Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., & Clarahan, M. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of Affective Disorders*, 173, 90–96. https://doi.org/10.1016/j.jad.2014.10.054
- Brennan, M. A., Lalonde, C. E., & Bain, J. L. (2010). Body image perceptions: Do gender differences exist? *Psi Chi Journal of Undergraduate Research*, *15*(Fall), 1089–4136. <a href="https://doi.org/10.24839/1089-4136.JN15.3.130">https://doi.org/10.24839/1089-4136.JN15.3.130</a>
- Buckroyd, P. (2000). The student dancer: Emotional aspects of the teaching and learning of dance. Dance Books.
- Butler, R. J., & Gasson, S. L. (2005). Self-esteem/self-concept scales for children and adolescents: A review. *Child and Adolescent Mental Health*, 10(4), 190–201. https://doi.org/10.1111/j.1475-3588.2005.00368.x
- Chung, J. L. (2017). *Korean women, self-esteem, and practical theology: Transformative care*. Palgrave Pivot. <a href="https://doi.org/10.1007/978-3-319-69508-2\_4">https://doi.org/10.1007/978-3-319-69508-2\_4</a>
- Coopersmith, S. (1967). The antecedents of self-esteem. W. H. Freeman.
- Çuhadaroğlu, F. (1986). *Adolescents and self-esteem* (Specialist thesis). Hacettepe University Faculty of Medicine, Ankara, Turkey.
- Doğan, T., Totan, T., & Sapmaz, F. (2009). Self-esteem and social intelligence among university students. *Sakarya University Faculty of Education Journal*, 17, 236–248.
- Draugelis, S., Martin, J., & Garn, A. (2014). Psychosocial predictors of well-being in collegiate dancers. *The Sport Psychologist*, 28(1), 1–9. <a href="https://doi.org/10.1123/tsp.2012-0093">https://doi.org/10.1123/tsp.2012-0093</a>
- Evans, M. B., Allan, V., Erickson, K., Martin, L. J., Budziszewski, R., & Côté, J. (2017). Are all sport activities equal? A systematic review of how youth psychosocial experiences vary across differing sport activities. *British Journal of Sports Medicine*, *51*(3), 169–176. <a href="https://doi.org/10.1136/bjsports-2016-096725">https://doi.org/10.1136/bjsports-2016-096725</a>
- Ferrand, C., Magnan, C., Rouveix, M., & Filaire, E. (2007). Disordered eating, perfectionism and body-esteem of elite synchronized swimmers. *European Journal of Sport Science*, 7(4), 223–230. <a href="https://doi.org/10.1080/17461390701722168">https://doi.org/10.1080/17461390701722168</a>
- Franklin, M. (1992). Art therapy and self-esteem. *Art Therapy*, 9(2), 78–84. https://doi.org/10.1080/07421656.1992.10758941
- George, D., & Mallery, M. (2010). SPSS for Windows step by step: A simple guide and reference. Pearson.
- González, M. C. Y., & Tourón, J. (1992). Self-concept and academic performance: Implications for motivation and self-regulated learning. EUNSA.
- Gupta, M. A., Chaturvedi, S. K., Chandarana, P. C., & Johnson, A. M. (2001). Weight-related body image concerns among 18–24-year-old women in Canada and India: An empirical comparative study. *Journal of Psychosomatic Research*, 50, 193–198. <a href="https://doi.org/10.1016/S0022-3999(00)00221-X">https://doi.org/10.1016/S0022-3999(00)00221-X</a>
- Hellín, P. H., Moreno, J. A., & Rodríguez, P. L. (2006). Relationship of perceived motor competence with physical-sport practice. *Revista de Psicología del Deporte*, 15(2), 219–231.
- Holmqvist, K., Frisén, A., & Anderson-Fye, E. (2013). Body image and child well-being. In *Handbook of child well-being: Theories, methods, and policies in global perspective*. Springer. <a href="https://doi.org/10.1007/978-90-481-9063-8">https://doi.org/10.1007/978-90-481-9063-8</a>
- Holt, N. L., Deal, C. J., & Pankow, K. (2020). Positive youth development through sport. In Tenenbaum, G. & Eklund, R. C. (Eds.), *Handbook of sport psychology* (4th ed.). John Wiley & Sons. <a href="https://doi.org/10.1002/9781119568124.ch20">https://doi.org/10.1002/9781119568124.ch20</a>

- Hovardaoğlu, S. (1993). Body perception scale. 3P Journal (Special Issue on Tests), 1(1), 26–29.
- Jung, J., & Lee, S. H. (2006). Cross-cultural comparisons of appearance self-schema, body image, self-esteem, and dieting behavior between Korean and U.S. women. Family and Consumer Sciences Research Journal, 34, 350–365. <a href="https://doi.org/10.1177/1077727X06286419">https://doi.org/10.1177/1077727X06286419</a>
- Kim, J., & James, J. D. (2019). Sport and happiness: Understanding the relations among sport consumption activities, long- and short-term subjective well-being, and psychological need fulfillment. *Journal of Sport Management*, 33(2), 119–132. https://doi.org/10.1123/jsm.2018-0071
- Klein, M., Fröhlich, M., & Emrich, E. (2017). Self-concept in adolescents—Relationship between sport participation, motor performance, and personality traits. *Sports*, *5*(22). https://doi.org/10.3390/sports5020022
- Knox, M., Funk, J., Elliott, R., & Bush, E. G. (1998). Adolescents' possible selves and their relationship to global self-esteem. *Sex Roles*, 39(1–2), 61–80. https://doi.org/10.1023/A:1018877716225
- Kong, P., & Harris, L. M. (2015). The sporting body: Body image and eating disorder symptomatology among female athletes from leanness-focused and non-leanness-focused sports. *The Journal of Psychology: Interdisciplinary and Applied*, *149*(2), 141–160. <a href="https://doi.org/10.1080/00223980.2013.846291">https://doi.org/10.1080/00223980.2013.846291</a>
- Kundakçı, A. H. (2005). Comparison of eating attitudes, self-perception, body perception, and stress symptoms in university students. (Master's thesis). Ankara University, Social Sciences Institute, Ankara, Turkey.
- Kuzgun, Y. (1983). *Psychological counseling and psychology theories*. Unpublished lecture notes. Ankara University, Faculty of Educational Sciences, Ankara, Turkey
- Lozano, L. M. (2000). Relationship between motivation and learning. *Psicothema*, 12(2), 344–347.
- Lubans, D., Richards, J., Hillman, C., Faulkner, G., Beauchamp, M., Nilsson, M., Kelly, P., Smith, J., Raine, L., & Biddle, S. (2016). Physical activity for cognitive and mental health in youth: A systematic review of mechanisms. *Pediatrics*, *138*(3), e20161642. https://doi.org/10.1542/peds.2016-1642
- Luciano, E. C., & Orth, U. (2017). Transitions in romantic relationships and development of self-esteem. *Journal of Personality and Social Psychology*, 112(2), 307–328. <a href="https://doi.org/10.1037/pspp0000109">https://doi.org/10.1037/pspp0000109</a>
- Marsh, H. W., & Roche, L. A. (1996). Structure of artistic self-concepts for performing arts and non-performing arts students in a performing arts high school: "Setting the stage" with multigroup confirmatory factor analysis. *Journal of Educational Psychology*, 88(3), 461–477. https://doi.org/10.1037//0022-0663.88.3.461
- Maryam, S. I. (2019). Relationship between body image and self-acceptance of female students. *Jurnal Aplikasi IPTEK Indonesia*, *3*(3), 129–136. https://doi.org/10.24036/4.23280
- Megías, M. I. (2009). *Optimization in cognitive processes and its impact on dance learning*. University of Valencia, Department of Evolutionary and Educational Psychology.
- Mish, S. J. (2008). Activational effects of exogenous steroid hormones on cognitive performance: A study of anabolic-androgenic steroids in men (Doctoral dissertation).
- National Weather Service. (2013). *National climate forecasts [Data file]*. Retrieved from <a href="http://www.nws.noaa.gov/climate/">http://www.nws.noaa.gov/climate/</a>
- Nye, S., & Cash, T. F. (2006). Outcomes of manualized cognitive-behavioral body image therapy with eating disordered women treated in a private clinical practice. *Eating Disorders*, 14(1), 31–40. https://doi.org/10.1080/10640260500403840
- Paulk, A., Dowd, D. A., Zayac, R., Eklund, A., & Kildare, C. (2014). The relationship between culture, geographic region, and gender on body image: A comparison of college

- students in the Southeast and Pacific Northwest regions of the United States. Sociological Spectrum, 34(5), 442–452. https://doi.org/10.1080/02732173.2014.937653
- Petrie, T. A. (1996). Differences between male and female college lean sport athletes, nonlean sport athletes, and nonathletes on behavioral and psychological indices of eating disorders. *Journal of Applied Sport Psychology*, 8(2), 218–230. <a href="https://doi.org/10.1080/10413209608406478">https://doi.org/10.1080/10413209608406478</a>
- Poobalan, A. S., Aucott, L. S., Clarke, A., & Smith, W. C. S. (2012). Physical activity attitudes, intentions, and behavior among 18–25 year-olds: A mixed method study. *BMC Public Health*, 12, 640. https://doi.org/10.1186/1471-2458-12-640
- Ritan, A. F. G., Murdhiono, W. R., & Syafitri, E. N. (2018). The relationship between body image, eating patterns, and physical activity in obese students at the Faculty of Health Sciences, Respati University Yogyakarta. *Ilmu Gizi Indonesia*, 2(1), 25–32. <a href="https://doi.org/10.35842/ilgi.v2i1.85">https://doi.org/10.35842/ilgi.v2i1.85</a>
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton University Press. <a href="https://doi.org/10.1515/9781400876136">https://doi.org/10.1515/9781400876136</a>
- Šagát, P., Bartik, P., Lazić, A., Tohănean, D. I., Koronas, V., Turcu, I., Knjaz, D., Alexe, C. I., & Curițianu, I. M. (2021). Self-esteem: Individual versus team sports. *International Journal of Environmental Research and Public Health*, 18(24), 12915. <a href="https://doi.org/10.3390/ijerph182412915">https://doi.org/10.3390/ijerph182412915</a>
- Sanders, P., & Browne, L. (1998). Music self-concept of non-music majors. *Contributions to Music Education*, 25(1), 74–86.
- Saylan, E., & Soyyiğit, V. (2022). Dimensions of body image: Body image scale. *Turkish Psychological Counseling and Guidance Journal*, 12(65), 229–247. https://doi.org/10.17066/tpdrd.1138273
- Secord, P. F., & Journal, S. M. (1953). The appraisal of body-cathexis: Body-cathexis and the self. *Journal of Consulting Psychology*, 17(5), 343–347. <a href="https://doi.org/10.1037/h0060689">https://doi.org/10.1037/h0060689</a>
- Shavelson, R. J., Hubner, J. J., & Stanton, G. C. (1976). Self-concept: Validation of construct interpretations. *Review of Educational Research*, 46, 407–441. https://doi.org/10.3102/00346543046003407
- Taşgit, M. S. (2012). *Investigation of university students' self-esteem and decision-making levels* (Master's thesis). Karamanoğlu Mehmetbey University, Karaman, Turkey.
- Tian, L., Liu, L., & Shan, N. (2018). Parent-child relationships and resilience among Chinese adolescents: The mediating role of self-esteem. *Frontiers in Psychology*, 9, 1030. https://doi.org/10.3389/fpsyg.2018.01030
- Varnes, J. R., Stellefson, M. L., Janelle, C. M., Dorman, S. M., Dodd, V., & Miller, M. D. (2013). A systematic review of studies comparing body image concerns among female college athletes and non-athletes, 1997–2012. *Body Image*, 10(4), 421–432. <a href="https://doi.org/10.1016/j.bodyim.2013.06.001">https://doi.org/10.1016/j.bodyim.2013.06.001</a>
- Vispoel, W. P. (1995). Self-concept in artistic domains: An extension of the Shavelson, Hubner, and Stanton (1976) model. *Journal of Educational Psychology*, 87(1), 134–153. https://doi.org/10.1037/0022-0663.87.1.134
- Vispoel, W. P. (2003). Measuring and understanding self-perceptions of musical ability. In H. Marsh, R. G. Craven, & D. M. McInerney (Eds.), *International advances in self-research* (pp. 151–179). Information Age Publishing.
- Weiner, B. (1985). An attributional theory of motivation and emotion. *Psychological Review*, 92(4), 548–573. <a href="https://doi.org/10.1037/0033-295X.92.4.548">https://doi.org/10.1037/0033-295X.92.4.548</a>
- Woods, H. C., & Scott, H. (2016). Sleepyteens: Social media use in adolescence is associated with poor sleep quality, anxiety, depression, and low self-esteem. *Journal of Adolescence*, 51, 41–49. https://doi.org/10.1016/j.adolescence.2016.05.008

- World Health Organization. (2018). Global action plan on physical activity 2018–2030: More active people for a healthier world. World Health Organization.
- Wrzesińska, M., Lipert, A., Urzędowicz, B., & Pawlicki, L. (2018). Self-reported physical activity using the International Physical Activity Questionnaire in adolescents and young adults with visual impairment. *Disability and Health Journal*, 11(1), 20–30. <a href="https://doi.org/10.1016/j.dhjo.2017.05.001">https://doi.org/10.1016/j.dhjo.2017.05.001</a>
- Zamani Sani, S. H., Fathirezaie, Z., Brand, S., Pühse, U., Holsboer-Trachsler, E., Gerber, M., & Talepasand, S. (2016). Physical activity and self-esteem: Testing direct and indirect relationships associated with psychological and physical mechanisms. Neuropsychiatric Disease and Treatment. 12, 2617-2625. https://doi.org/10.2147/NDT.S116811
- Zhou, J., Li, X., Tian, L., & Huebner, E. S. (2020). Longitudinal association between low self-esteem and depression in early adolescents: The role of rejection sensitivity and loneliness. *Psychology and Psychotherapy: Theory, Research and Practice*, *93*, 54–71. <a href="https://doi.org/10.1111/papt.12207">https://doi.org/10.1111/papt.12207</a>
- Zimmerman, J. R. (2005). The effects of periodic self-recording, self-listening, and self-evaluation on the motivation and music self-concept of high school instrumentalists (Unpublished doctoral thesis). University of Minnesota.

# Author(s)' statements on ethics and conflict of interest

**Ethics statement:** We hereby declare that research/publication ethics and citing principles have been considered in all the stages of the study. We take full responsibility for the content of the paper in case of dispute.

**Conflicts of Interest:** There are no conflicts of interest declared by the authors.

Funding: None