



INVESTIGATION ON THE EFFECT OF SPORT AND ART EDUCATION ON BODY IMAGE

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Abstract:

The purpose of this study is determining body image in individuals with sports and fine arts education. 137 male and 120 female, total of 257, sports and fine arts students were participated in the study. Body-Cathexis Scale (BCS) were used. Independent Samples t- test was used for statically processing. Body Image score according to gender found at male 77.96 and female 80.12. Body Image score found at sports students 74.05 and fine arts students 84.03. There was a significant no difference in between sports students and fine arts students in Body Image Score ($p>0.05$) in gender. There was a significant difference in between sports faculty and fine arts faculty according male and female students in Body Image Score at $p<0.001$ level. Female students are according male students under greater risk regarding the body image. Body image points were more positively at student of sports than student of fine art. It is thought that sport education affects body image more positively than fine arts education. Getting with sports education could contribute to a positive body image levels.

Keywords: body image, fine arts, theological education

1. Introduction

Body image has significant effects on self-acceptance, social self-confidence, popularity in opposite sex and athletic abilities. Negatives in body image may cause decrease in self-esteem. Besides, a mismatch between the ideal and perceived body image is associated with dissatisfaction about body image (Çakar and Karayol, 2015). Body image is defined as an individual's emotions about his/her own body. Identification and assessment method related to individual's body image come forefront more than others (Akin et al., 1992).

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Research indicates that body dissatisfaction is associated with weight-related concerns and unhealthy weight loss practices (e.g., crash dieting, vomiting) even in underweight and healthy weight individuals, and can lead to a variety of health problems, including depression and eating disorders (Stice and Shaw, 2002; Stice et al., 2011; Hausenblas and Fallon, 2006) noted that one way to improve body image is through exercise.

The Body Cathexis Scale (BCS) was the first psychometric instrument devised to measure body dissatisfaction (Orlandi et al., 2006). Body image may be defined in simple terms as the way a person perceives or thinks about his body and how it looks to others. Females are more interested with their body compared to males (Acar, 2010). It is emphasized that perfect female and male models offered to individuals with the concept of physical attractiveness contributes to establishment of a distorted body image, also brings along various unhealthy behaviors (Oktan & Şahin, 2010). Russell (2004) found that female rugby players, cricketers, and netballers reported feeling good about their bodies in a sport context, but had a different, more negative perception of their bodies when focused on norms of heterosexual physical attractiveness. Krane et al. (2004) interviewed female collegiate athletes who were about 20 years old participating in college varsity sports (i.e., basketball, cross-country distance running, gymnastics, soccer, softball, swimming, tennis, track, volleyball) as well as club sports (i.e., rugby and hockey). George (2005) interviewed female soccer players who said that they actively participated in practice and competition to develop strong bodies, thereby ignoring the attractiveness ideals of society. However, they reported that their male peers perceived them as less feminine than other women.

Body Cathexis Scale also assesses subjective representations of physical appearance, whereby respondents rate the degree of satisfaction they feel about various body parts (Giffin and Kirby, 2007). It is wondered how the body image scale of art and sports education.

In this study, it is aimed to investigate the body image score in men and women who have studied fine arts and sports.

2. Material and Method

Research data were obtained from 257 adolescents who were attending of university and accepted to voluntarily participate in the research. Gender distribution for students was acquired female 120 and male 137. Students were excluded from the study if they had diet-related illnesses (such as diabetes mellitus and food allergies), heart problems and/or physical disabilities.

2.1 Data Collection Instrument

Body-Cathexis Scale (BCS). Developed by Secard and Jurard in 1953, is a scale that determines a person's satisfaction from 40 different body parts or their functions. Form of the scale used in our country is a measurement tool of five-point Likert type consisting of 40 items (1 = "I like very much" —5 = "I do not like"). The most positive

expression receives 1 point, and the most negative statement receives 5 points. The cut-off score of the scale is 135, those with scores below 135 are defined as the group of low body image perception. Increase in total score obtained from the scale indicates a decline in a person's satisfaction from his/her body or body parts and lower scores indicate an increased satisfaction. According to this, the lowest score that can be achieved in the scale is 40, the highest score is 200. Level of received score shows the height of satisfaction level. In the reliability study, two half-reliability of the test was obtained as $r=0.81$ for body satisfaction and as $r=0.90$ for the self. In adaptation study of the scale for university students in our country, two-half reliability was determined as 0.75, item test correlations were determined as $r=0.45$ and $r=0.89$, and Cronbach's alpha coefficient was found as $r=0.91$ (Hovardaođlu, 1992; Çakar and Karayol, 2015). To ensure a sample of sufficient size, a sensitivity analysis was conducted. Based on the results of that analysis (power = 0.82).

2.2 Statistical analyses

The data were analyzed using SPSS 21.0 Version producing basic descriptive statistics – rankings, means and standard deviations. Independent Samples tests were used for statically processing. Statistical significance was set at $p < 0.05$ and $p < 0.001$.

3. Results

Participants were 257 Turkish University Students in Table 1 for Anthropometrics data. Descriptive statistics for the Body-Cathexis Scale (BCS) in Tables 2 and 3.

Table 1: Anthropometrics Characteristics of the Study Subjects

Mean Std. D		N	Mean	Std. D.	t-test
Age (Year)	Faculty Sport	130	22.08	1.74	1.24
	Faculty Fine Arts	127	22.01	1.80	
Height (cm)	Faculty Sport	130	175.35	8.64	3.85*
	Faculty Fine Arts	127	170.34	9.12	
Weight (kg)	Faculty Sport	130	71.34	13.58	3.37*
	Faculty Fine Arts	127	67.86	16.36	

* $p < 0.05$

Table 2: Body Image Score According to Gender

Sex	N	Mean	Std. D.	t-test
Female	120	80.12	21.66	1.78
Male	137	77.96	20.32	

Table 3: Body Image Score According to Faculty Type

		N	Mean	Std. D.	t- test
Female	Faculty Sport	67	75.14	13.37	12.15**
	Faculty Fine Arts	53	85.1	19.48	
Male	Faculty Sport	63	72.96	13.42	13.40**
	Faculty Fine Arts	74	82.96	24.53	
Total	Faculty Sport	130	74.05	14.80	15.72**
	Faculty Fine Arts	127	84.03	23.12	

* $p < 0.05$ ** $p < 0.001$

4. Discussion and Conclusion

Table 1 shows that there are 257 students in Faculty Sport 22.08 and in Faculty Fine Arts 20.67 year age. Body height is in Faculty Sport 175.35 and in Faculty Fine Arts 170.34 cm. Body weight are in Faculty Sport 71.34 and in Faculty Fine Arts 67.86 kg. There was a significant difference in between height and weight at $p < 0.05$ level.

In this study, Body Image score according to gender found at male 77.96 and female 80.12 (Table 2). There was a significant no difference in between Gender ($p > 0.05$). In females, body image scale was worse than Males. This difference was not values. This difference did not matter. Body image scale of Students of Fine Arts was worse than Students of Sports. In this study, Female students' body image was more negative than those of Male students. First of all, it was observed that girls' body image is more negative compared to that of males, and that girls are less satisfied with their bodies. This conclusion is also supported by other research (Çakar and Karayol, 2015; İmamođlu and Demirtaş, 2017 c).

In this study, Body Image score found Sports faculty at male students 72.96 and Fine arts faculty at male students 82.96. Body Image score found Sports faculty at female students 75.14 and Fine arts faculty at female students 85.10. Total score Body Image was sport faculty 74.05 and Faculty Fine Arts 84.03 (Table 3). There was a significant difference in between Sports faculty and Fine arts faculty according male and female students in Body Image Score at $p < 0.001$ level. It is thought that sport education affects body image more positively than art education. Sport education can also be recommended for art education. Traditional mold judgments imposed on both genders socially cast different roles on the male and the woman. Accordingly, while males are expected to be more athletic, free, extrovert and effective compared to women; expectations from girls differ more in this sense. Kundakcı (2005) in his study has found out that girl achieved higher score averages from Body Image Scale compared to boys; and that girls admired their bodies less than boys. In this study, Body Image score of girl students found higher from boy students. In this case, while girls are expected to obey physical appearance considered as ideal based on their social roles; girls may have to focus on ideas related to their bodies more. It has seen observed that girls showed more interest in positive-negative thoughts about physical appearances expected from them (Çakar and Karayol, 2015).

Griffin and Kirby (2007) findings of the present show that body image improved in those male subjects that took part in the physical activity intervention. In this study body image improved as a consequence of aerobic exercise. İmamođlu and Demirtaş (2017a) study, Female students are according male students under greater risk regarding the body image. In this study, Female students are according male students under greater risk regarding the body image. It is of the physical structure of females are slight, weak and less strong compared to males (Örüş, 2015). Sensation of body is the picture that shows sensation of individual's body and all of its impression on individuals mind (Göksan, 2006). Among the reasons for this, female students may be considered to be less active than male students. İmamođlu and Demirtaş (2017a) study,

Men have higher body-image points than women whereas men have lower stress levels than women at 5% significance level ($p < 0.05$). Deryahanođlu et al (2016) has been found better body image than sedentary in women doing sports. Physical activity can improve body image. Students of sports faculty may be more active than the students of fine arts. Men may be more active than women in the physical direction. Getting with sports education could contribute to a positive body image levels.

İmamođlu and Demirtaş (2017c) study, while there found sports faculty students with the best body image, the faculty of fine arts students watched it. The worst body image was found in students of the Faculty of Education and the Faculty of Theology. It is thought that sport and art education affects body image more positively than religious education. Sedentary students have worse body image scores than sportsmen. In this study, body image points was more positively at student of sports than student of fine art. Sports students can also be caused to pay more attention to their bodies than Fine art students. Considering the fact that students are under risk in terms of body image, school-based programs to be developed may target increasing improving body image starting from changes that students experience during adolescence. Furthermore, in the future, the studies could be done larger groups of students by variety of socio-economic backgrounds and different cultures (İmamođlu and Demirtaş, 2017a; İmamođlu and Demirtaş, 2017d).

It is thought that Sports education affects body image more positively than Fine arts education. Getting with sports education could contribute to a positive body image levels. More sports and arts activities should be provided during the education and training phase.

References

1. Acar, Ö. T. (2010). Kocaeli Üniversitesi Beden Eğitimi Yüksekokulu ve Mimarlık-Mühendislik Fakültesi Öğrencilerinde Beden Algısı ve İyilik Halinin Beden Kitle İndeksi ve Vücut Yağ Dağılımı ile İlgisi. Yayınlanmamış Tıpta Uzmanlık Tezi, Kocaeli: Kocaeli Üniversitesi
2. Akın, T., Baykara, A., Miral, S., & Özakbaş, S. (1992). Youth body image and self-esteem relations' child and adolescent (pp. 418-424). Psychiatry Days Congress' Book, Izmir Medical Bookstore.
3. Deryahanođlu, G., İmamođlu, O., Yamaner, F., & Uzun, M. (2016). Anthropometric characteristics of sedentary women and comparison of their psychological states Sedanter kadınların antropometrik özellikleri ve psikolojik durumlarının karşılaştırılması. *Journal of Human Sciences*, 13(3), 5257-5268.
4. George, M. (2005). Making sense of muscle: The body experiences of collegiate women athletes. *Sociological inquiry*, 75(3), 317-345.
5. Göksan, B. (2007). Ergenlerde beden imajı ve beden dismorfik bozukluğu. *Yayınlanmamış Uzmanlık Tezi. İstanbul: Şişli Etfal Eğitim ve Araştırma Hastanesi Psikiyatri Kliniđi.*

6. Griffin, M., & Kirby, S. (2007). The effect of gender in improving body image and self-esteem. *Athletic Insight*, 9(3), 83-92.
7. Hausenblas, H. A., & Fallon, E. A. (2006). Exercise and body image: A meta-analysis. *Psychology and Health*, 21(1), 33-47.
8. Hovardaođlu, S. (1992). Body Perception Scale: Psychiatry, Psychology. *Journal of Psycho-pharmacology (3P)*.
9. İmamođlu G., Demirtaş Ö., (2017a). Güzel Sanatlar Eđitimi Alan Bireylerde Vücut İmajı, Benlik Tasarımı ve Stres Düzeyi, 15th International Sport Sciences Congress, Book Of Abstracts, sbk2017.org/SBK2017.pdf.,s. 850.
10. İmamođlu G., Demirtaş Ö., (2017b). Investigation of The Effect of Art, Sport and Religious Education on Body Image. The 9th Conference of the International Society for the Social Science, Abstract Book, www.issss2017.org, s.84.
11. İmamođlu G., Demirtaş Ö., (2017c). Sanat ve Din Eđitimi Alan Öğrencilerin Vücut İmajı Hakkındaki Düşüncelerinin İncelenmesi, [2nd international Eurasian Conference on Sport](#), Education, and Society, Abstact Book, www.iecses.org/s.53
12. İmamođlu, G., & Demirtaş, Ö. (2017). Investigation of Students' Views Who Receive Art and Religious Training about Body Image. *Uluslararası Kültürel ve Sosyal Araştırmalar Dergisi (UKSAD)*, 3(Special Issue 2), 476-483.
13. Krane, V., Choi, P. Y. L., Baird, S. M., Aimar, C. M., & Kauer, K. J. (2006). Living the paradox: female athletes negotiate femininity and muscularity. *Women and Language*, 29(1), 62-63.
14. Kundakçı, A. H. (2005). Üniversite Öğrencilerinin Yeme Tutumları, Benlik Algıları, Vücut Algısı ve Stres Belirtileri Açısından Karşılaştırılması, Yayınlanmamış Yüksek Lisans Tezi, Ankara Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
15. Oktan, V., & Şahin, M. (2010). Examination of the relationship between the body image and self-esteem of female adolescents. *Journal of Human Sciences*, 7(2), 543-556.
16. Orlandi, E., Covezzi, R., Galeazzi, G. M., & Guaraldi, G. P. (2006). The Italian version of the Body Cathexis Scale. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity*, 11(3), e79-e84.
17. Öruş, M. (2015). Aqua Fitness Çalışmalarının Sedanter Bayanlarda Fiziksel ve Motor Parametreler Üzerinde Etkilerinin İncelenmesi, Yüksek lisans tezi. *İstanbul: Haliç Üniversitesi*.
18. Russell, K. M. (2004). On versus off the pitch: The transiency of body satisfaction among female rugby players, cricketers, and netballers. *Sex roles*, 51(9-10), 561-574.
19. Savi-Çakar, F., & Savi-Karayol, S. (2015). The Impact of Body Image and Self-Esteem on Turkish Adolescents' Subjective Well-Being. *Psychology*, 5(9), 536-551.
20. Stice, E., & Shaw, H. E. (2002). Role of body dissatisfaction in the onset and maintenance of eating pathology: A synthesis of research findings. *Journal of psychosomatic research*, 53(5), 985-993.

21. Stice, E., Marti, C. N., & Durant, S. (2011). Risk factors for onset of eating disorders: Evidence of multiple risk pathways from an 8-year prospective study. *Behaviour research and therapy*, 49(10), 622-627.

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