

Comparison of self-esteem and body image of hearing impaired wrestlers and non-wrestlers hearing impaired

Nurettin KONAR, Betül AKYOL

*Department of Exercise and Sport Education for the Disabled, School of Physical Education and Sport, İnönü University, Malatya, Turkey.
Address correspondence to B. Akyol, e-mail: betul.akyol@inonu.edu.tr*

Abstract

This study was conducted to determine the degree to which hearing impaired wrestlers sport at the national team level contributed to their self-esteem and body image perceptions, and if so, to what extent. 40 hearing-impaired senior male wrestlers from the hearing impaired wrestling sports team preparatory camp and 50 non-wrestler, hearing impaired people participated in the study, in April 2016. Coopersmith Self-Esteem Scale and Body Image Perception Scale were used to collect the data. Independent t-test and inter-parameter correlation Pearson Correlation analysis were performed for the differences between the groups. As a result of this study, it was seen that the hearing impaired wrestler have higher self-esteem and body image perception levels than non-wrestler hearing impaired. It was seen that the sport of wrestling affected the emotional qualities of hearing impaired individuals.

Keywords: Body image perception, hearing impaired, self-esteem, wrestling.

INTRODUCTION

Self, which is defined as the special aspect of personality, affects the personality considerably. Self is a spiritual and physical concept as a dynamic compound of opinions regarding the talents, values, targets and ideals of individuals. It can be defined as whole physical and mental potential of the individual and his/her perception and evaluation of himself/herself according to this potential (2,31,38,39).

The concept of self is the awareness of the individual of his/her own identity (21) Self-esteem is an important personality variable affecting human behavior (38). An individual should be accepted by the others and he/she should demonstrate success in some areas in order to build a positive self-esteem and accept himself/herself (12,50). Individuals with high self-esteem tend to perceive themselves as important and useful people worth being respected and accepted (14). Individuals with low self-esteem tend to target at success under their level of capacity. They are afraid of being rejected. They have difficulty in demonstrating themselves, determining targets and solving problems. They avoid being in the front (40,46, 53).

It is emphasized by many educators, psychologists, therapists, social service experts and experts of sports for disabled people that the physical skills and consequential success make important contributions to the development of the self-concept (17).

Body image is related to the attractiveness, balance, confidence and gender role. It is also an assessment tool in terms of appearance, physical power, physical, sexual maturity and attractiveness. Individuals experience the confusion of physical appearance and internal self-image (13). In accepting own body, the individual is expected to have a positive body image. Body image is defined as the emotions of an individual regarding his/her own body. The definition and evaluation style of an individual regarding his/her physical appearance is formed before other characteristics and accepting one's own body provides a realistic point of view regarding the body, regardless of the body style he/she has and allows being happy with it. Perceived capability and valuableness lay the foundation of self-esteem. Self-esteem, which is formed as a result of these emotions, is an important determiner of the point of view and behaviors of the individual regarding both himself / herself and external world. Therefore high or low level of self-

esteem directly affect the life. Negativity in body image may cause decrease in self-esteem (33, 45).

Body image forms an important aspect of self-value and mental health in life (20). Body image has important effects on self-acceptance, social confidence, popularity for opposite sex and skills (10).

It was emphasized by many researchers that involvement of disabled people in activities, games and sports contributes positively to their psychomotor and personality development (6,7,11,28,34,41). However, while realizing physical education and sports activities, it should be fun, away from stress, socially interactive and encouraging personality development for disabled individuals (44). Hearing impairment can be defined as deafness, heavy hearing loss, hearing disorder (4). Some experts and authors in the field define mild and medium level hearing loss as hearing inadequacy, while others define any hearing loss from mild to heavy as hearing inadequacy (50). However, due to the difficulties in acquiring speech, using language and communication because of the hearing ability is lost partially or totally, the individual is called individual with hearing impairment (35,4,17). Hearing loss may occur due to genetic reasons before, during or after birth or impairment of the capability of perceiving and understanding sounds (47).

For children with hearing impairment, sportive activity opportunities provided during childhood, starting from pre-school period, shall provide required communication opportunities for acquiring linguistic and social skills. In such an environment, children with hearing impairment will have the means to use the language, they will be able to develop their physical development and social skills by observing their peers and adults in their environment (16). Sport for disabled totally targets at integration and rehabilitation and increasing quality of life. The biggest target of sport in terms of disabled people is to make important contributions to professional and social life by affecting the personality positively (8,30,29)

In a research, Schüle (43) emphasized that disabled people who do sports are in better social relations in social life compared to those who don't do sports. Tiryaki et al. (48) stated that those who engage in sports are more extrovert and emotionally balanced compared to those who don't engage in sports. By including hearing impaired people in the scope of research, self-esteem and body images of

hearing impaired people who do and don't do sports and effect of sport on hearing impaired people are examined.

MATERIAL & METHOD

Forty hearing-impaired senior male wrestlers from the Hearing Impaired Wrestling Team preparatory camp and 50 non-wrestler hearing impaired people participated in the research in April 2016.

Body Image Scale (BIS) and Coopersmith Self Esteem Scale (CSES) were used in order to determine the body images and self-esteem of hearing impaired people in study who were wrestlers and not wrestlers. These forms have been applied to hearing-impaired wrestlers through the sign language translators in Elmadağ camp training center and to those who are not hearing-impaired wrestlers through hearing-impaired associations and hearing-impaired schools in İstanbul through sign language speakers, parents and teachers.

Body Image Scale (BIS) was developed by Secard & Jurard in 1953. It is a measure of satisfaction with the body's 40 separate body parts or functions. The scale used in our country is a five-point Likert-type measurement consisting of 40 items. The most positive expression is 1 point and the most negative one is 5 points. According to this, the lowest possible total score is 40, the highest total score is 200. The increase in the total score means that the person's satisfaction decreases in, and decrease in scores means that person's satisfaction increases (54)

Coopersmith self-esteem inventory was a self-assessment scale of 25 items, developed by Coopersmith, rated on a two-step response scale. It is answered "Yes" or "No". These items were included individual's point of view regarding life, family and social relations, self-evaluation and self-image. In the scale, in which high scores indicated high level of Self Esteem and low scores indicated low level of Self Esteem. The minimum score was 0 and maximum score was 100 (39).

Correlation Coefficient (r): It was defined by Karl Pearson at the beginning of 20th century (9). Correlation Coefficient determined the degree of relevance in the changes of two variables. It builds no relation of reason and result. In fact, in many situations, it is unknown that which one of the variables of the model is independent and which one is dependent. In such cases, "correlation coefficient", which is a proportional measurement in

determining the degree of relation, is used. The lowest value of correlation coefficient is -1, the highest value is +1. In other words, correlation coefficient r takes a value between -1 and +1. If the sign of correlation coefficient is positive, it indicates that while the value of one of the variables decreases (increases) the other increases (decreases). If the sign of correlation coefficient is negative, it indicates that while the value of one of the variables decreases (increases) the other increases (decreases). So there is an inverse relationship. When $r=0$, it can be said that there is no direct relation between the variables. R being +1 indicates a positive and direct relationship between variables. R being -1 determines a negative and direct relation between the variables. As the relation between the variables get stronger, correlation coefficient is close to \pm , when the relation is weaker, it is close to 0 (51).

Statistical analysis

The data were evaluated using IBM SPSS Statistics 21.0 package software, and the level of significance was taken as $p < 0.05$. Independent t -test and inter-parameter correlation Pearson Correlation analysis were performed for the

differences between the groups.

RESULTS

There is no statistically difference between hearings impaired wrestlers and non-wrestling hearing impaired of age, height, body mass, and body mass index (Table 1).

There was found significant different at the Self Esteem and Body Image Scales between wrestlers with hearing impaired and non-wrestling with hearing impaired (Table 2).

There was significant moderate correlation between the Self Esteem and Body Image on hearing impaired wrestler. There was no correlation between the Self Esteem and Body Image on hearing impaired non wrestler (Table 3).

DISCUSSION

In this research a significant relation was determined between the body image perception and self-esteem on hearing impaired wrestlers. Many studies suggesting findings about a relationship between the body image and self-esteem support this study.

Table 1. Physical characteristics of hearing impaired wrestlers and non-wrestlers hearing impaired.

Variables	Groups	N	Mean	Std. Deviation	t	p
Age (Years)	Wrestler with HI	40	20.97	3.96	-1.796	.076
	Wrestler without HI	50	22.34	3.24		
Height (m)	Wrestler with HI	40	1.70	.081	-.035	.972
	Wrestler without HI	50	1.70	.078		
Body Mass (kg)	Wrestler with HI	40	74.52	13.97	-.412	.681
	Wrestler without HI	50	75.62	11.23		
BMI (kg/m ²)	Wrestler with HI	40	25.42	3.70	-.572	.569
	Wrestler without HI	50	25.79	2.33		

HI: Hearing Impaired, BMI: Body mass index

Table 2. Difference of self-esteem and body image of hearing impaired wrestlers and non-wrestlers hearing impaired.

Variables	Groups	N	Mean	Std. Deviation	t	p
Self Esteem	Wrestler with HI	40	17.27	3.22	6.921	.000*
	Wrestler without HI	50	12.74	2.97		
Body Image	Wrestler with HI	40	175.55	19.09	4.277	.000*
	Wrestler without HI	50	155.72	23.82		

HI: Hearing Impaired, * $p < 0.05$

Table 3. Correlation of the self-esteem and body image between hearing impaired wrestlers and non-wrestlers hearing impaired.

	r	p
H.I. Wrestler	.473	.001**
H.I. Non wrestler	.076	.642

HI: Hearing Impaired, * $p < 0.05$

In the study of Sayil et al. (42) in adolescents, it was found that the relation of self-esteem and body image perception affected each other. Pense et al. emphasized that body image perception was as an important factor affecting self-esteem (36). In a research by Allgood-Merten et al. (3), it was emphasized that positive perception of body image could increase the self-esteem value and body image wasn't a separate structure, on the contrary, it was an important part of self-esteem (3).

Canpolat et al. determined in their study that general self-esteem was related to being content with the body image (10). In a research on weightlifters by Karademir et al. (24), it was concluded that there was a positive significant relation between their level of self-esteem and body image perception levels.

The other study of Karademir et al. (23) on determining self-esteem levels of visually impaired elite lifters, self-esteem score averages of visually impaired sportsmen were higher. They determined that belonging to a group and being accepted by the group with sport increased the confidence of visually impaired sportsmen, thus creating positive reflections on self-perceptions of sportsmen and affecting their self-esteem positively.

In a study in which the relation between body and self-perception was examined in university students, body perception levels of the students of various faculties and those of Physical Education and Sports High School were compared and it was concluded that the body perception values of Physical Education and Sports High School were higher in comparison to the students of other faculties and those engaging in physical activity were more content with their bodies than those do not engage in physical activity (15).

In a study by Baştuğ & Kuru (5) on the body perception levels of female athletes, a significant relationship was determined between the engagement in sport and body perception of women. It was found that female athletes attached importance to health, appearance and physical capability, they were content with their body parts due to their muscular bodies developing with sport and their levels of body perception were higher than those who didn't engage in sports. Also, they emphasized that sport was a factor increasing the level of body perception (5).

In a study on the body image of professional athletes, it was observed that body image scores of

athletes increased independently from the variable of sporting years (25). In Kaner's research on physically handicapped and non-handicapped males, while there was a significance and positive relation between the self-esteem and body image on non-handicapped males, no relation was found between these two variables in orthopedically handicapped males. While the best determiner variables of self-esteem on non-handicapped male were height, feet and skill of sports, these were legs, skin, shoulders, body hair and hair in physically handicapped males (22). The study conducted by Pense et al. it was determined that educational levels and sporting experience of disabled athletes had important effects on self-esteem levels (36).

In a study in which Self Esteem in Children between ages 10-12 who engage and don't engage in sports was examined, a statistically significant difference was found between the self-esteem scores of children who did sports and who didn't do sports and it was emphasized that sport was a very important factor increasing self-esteem of children (27). In a research by Karakoç et al. (26), it was emphasized that the self-esteem of hearing impaired individuals who engaged in sports were higher than those who didn't engage in sports.

In a study by Açak & Karademir, it was determined that there was no statistically significant difference in self-esteem score averages of hearing impaired students in terms of the gender variable, and according to the variable of participation in sports, there was a difference in favour of those who participate in sports and according to the variable of disability status, there was statistically significance differences in favor of students hearing with device. It was stated that the increase of sportive and social activities, which were believed to have positive effects on hearing impaired athletes, was important in terms of facilitating communication and integration with society and increasing self-esteem (1).

In a research by Gün on adolescents who engaged and didn't engage in sports in Ankara and Diyarbakır, it was determined that in both cities adolescents who engaged in sports had higher levels of self-esteem than those who didn't engage in sports, differences were observed between those who engaged in sports in Ankara and Diyarbakır but no statistical significance was determined. An important and significance relationship was observed between those who engaged in sports in both socio-cultural levels (19).

Many studies in the field support our study on examining the relation between Body Image Perception and Self Esteem of Hearing Impaired Wrestlers. Besides studies on individual sports such as weight-lifting, Judo, findings consistent with our findings were found in studies on team sports, even disabled athletes. Similar studies on athletes from other disability group can enrich the researches in the field.

As a result of this study; it was seen that the hearing impaired wrestler have higher self-esteem and body image perception levels than non-wrestler hearing impaired. According to which hearing-impaired individuals are encouraged to improve their self-esteem and body sensation and to direct their sport in order to maintain self-confidence and independence in their daily life activities.

REFERENCES

- Açak M, Karademir T. İşitme engelli öğrencilerin benlik saygılarının bazı değişkenlere göre incelenmesi. İnönü Üniversitesi Eğitim Fakültesi Dergisi, 2011; 12(2): 165-179.
- Adams FJ. Ergenliği Anlamak. Ankara: İmge Yayınları, 2001.
- Allgood-Merten B, Lewinson P, Hops H. Sex differences and adolescent depression. Abnormal, Psychology Journal, 1990; 99: 55-63.
- Avcıoğlu H. İşitme Yetersizliği olan Öğrenciler. In: Özel Eğitime Gereklinimi Olan Öğrenciler ve Özel Eğitim. Editör: Diken, Hİ, Ankara: Pegem Akademi, 2008.
- Baştuğ G, Kuru E. Bayan sporcuların bedenlerini algılama düzeyleri ve cinsiyet rolleri üzerine bir araştırma. G.Ü, Gazi Eğitim Fakültesi Dergisi, 2009; 29(2): 533-555.
- Beasley CR. Effects of a jogging programme on cardiovascular fitness and working performance on mentally retarded adults. American Journal of Mental Deficiency, 1982; 86(6): 609-613.
- Beuter A. Effect of mainstreaming on motor performance of intellectually normal and trainable mental retarded students. American Corrective Therapy Journal, 1983; 37(2): 48-52.
- Brettschneider UD, Rheker U. Bewegung, Spiel und Sport mit körperbehinderten Kindern und Jugendlichen. Materialien zum Sport in Nordrhein-Westfalen, Heft 45, Ministerium für Stadtentwicklung, Kultur und Sport des Landes Nordrhein-Westfalen, 1996.
- Büyüköztürk Ş. Sosyal Bilimler İçin Veri Analizi El Kitabı. 2. Baskı, Ankara: Pegem Yayıncılık, 2002.
- Canpolat BI, Örsel S, Akdemir A, Özbay MH. The impact of body mass index and body image on the self-perception in adolescents. 3P Psikiyatri Psikoloji Psikofarmakoloji Dergisi, 2003; 11: 143-154.
- Chasey W, Wyrick W. Effects of a physical developmental program on psychomotor ability of retarded children. American Journal of Mental Deficiency, 1971; 75: 566-570.
- Cooke AK. Gender differences and self-esteem. J Gend Specif Med, 1999; 2(3): 46-52.
- Çelen N. Ergenlik ve Genç Yetiskinlik. İstanbul: Papatya Yayıncılık, 2007.
- Dönmez A. Denetim odağı, kendine saygi ve üç değişken: çevre büyüklüğü, yaş, aile ortamı. Eğitim ve Bilim, 1985; 10: 4-15.
- Ergür E. Üniversite öğrencilerinde beden- benlik algısı ile ruh sağlığı arasındaki ilişki. Yüksek Lisans Tezi, Ege Üniversitesi, Sosyal Bilimler Enstitüsü Psikoloji Anabilim Dalı, 1996.
- Ertürk B. İşitme engelli çocukların ailelerine öneriler. Ankara: Başbakanlık Özürlüler İdaresi Başkanlığı, 2003.
- Friend M. Special Education. Contemporary Perspectives for School Professionals. Boston: Allyn and Bacon, 2006.
- Gallahue D, Ozmun JC. Understanding Motor Development: Infants, Children, Adolescents, Adults. C. Brown & Benchmark Publishers, Dubuque, 1995.
- Gün E. Spor yapanlarda ve spor yapmayan ergenlerde benlik saygısı. Çukurova Üniversitesi, Sağlık Bilimleri Enstitüsü Beden Eğitimi ve Spor Anabilim Dalı, Adana, 2006.
- Harter S. Developmental differences in the nature of self-representations: Implications for the understanding. Assessment and Treatment of Maladaptive Behaviour, Cognitive Therapy and Research, 1990; 14: 113-142.
- İkizler C, Karagözoğlu C. Sporda başarının psikolojisi. İstanbul: Alfa Basım Yayım Dağıtım, 1997.
- Kaner S. Ortopedik engelli ve engelli olmayan erkek ergenlerde benlik saygısı ve beden imajı. Özel Eğitim Dergisi 2000; 2(4): 13-22.
- Karademir T, Çalışkan E, Döşyılmaz E, Açak M. Determination of self esteem level of visually impaired elite weight lifters. I. International Physical Education and Sport Congress for Disabled Persons (May 2011), Abstract Book, pp: 81-82, Konya, Turkey.
- Karademir T, Türkçarpar Ü, Ulucan H, Bahadır Z. Haltercilerde benlik saygısı ile yaşam doyum ve vücut benlik algısı arasındaki ilişkinin incelenmesi. Ahi Evran Üniversitesi Kırşehir Eğitim Fakültesi Dergisi (KEFAD) 2013; 14(3): 285-294.
- Karagöz N, Karagün E. Profesyonel sporcuların beden imajı üzerine betimsel bir çalışma. NWSA Sport Sciences, 2015; 10(4): 34-43.
- Karakoç Ö, Çoban B, Konar N. The differences between deaf athletes and deaf non athletes in the levels of self respect. Selçuk University Journal of Physical Education and Sport Science, 2012; 14(1): s.12-17.
- Karaman Ç, Murat Son, Beyazıt B, Dinçer Ö, Çolak E. Spor yapan ve yapmayan 10-12 yaş grubu çocuklarda benlik saygısının incelenmesi. I. Rekreasyon Araştırmaları Kongresi, 12-15 Nisan 2012, Antalya, pp: 431 - 438.
- Keller M. Implementing an Adaptive Physical Education Program for Educable Mentally Retarded Children, Kindergarten Through Third Grade. Practicum Report I, Nova University, Florida, 1983.
- Konar N. www.zb-sport.dshs-koeln.de/ Dissertationen/.../Nurettin-Konar.html, 2006.
- Kosel H, Froböse I. Rehabilitation und Behindertensport. Körper- und Sinnesbehinderte. München, Pflaum Verlag, 1999.

31. Lawrence D. Enhancing Self-Esteem in the Classroom. Paul Chapman Publishing Ltd., 1988.
32. Nittrouer S, Burton LR. The role of early language experience in the development of speech perception and language processing abilities in children with hearing loss. *The Volta Review*, 2003; 103: 5-57.
33. Oktan V, Şahin M. Examination of the relationship between the body image and self-esteem of female adolescents. *International J Human Sciences*, 2010; 7(2): 543-556.
34. Oliver JN. The effects of physical conditioning on the sociometric status of educationally sub-normal boys. *Physical Education*, 1960; 156: 38-46.
35. ÖEHY Özel Eğitim Hizmetleri Yönetmeliği, 31.05.2006 tarih ve 26184 sayılı Resmi Gazete. 2006.
36. Pense M, Demir H, Yaman Lesinger F. Examination on self perceptions of athletes with disabilities in terms of some variables. *Selcuk University J Physical Education and Sport Sciences*, 2011; 13(Supplement): 48-53.
37. Pesa JA, Syre TR, Jones E. Psychosocial differences associated with body weight among female adolescents: the importance of body image. *Journal of Adolescent Health* 2000; 26: 330-337.
38. Pişkin M. Türk ve İngiliz Lise Öğrencilerinin Benlik Saygısı Yönünden Karşılaştırılması. III. Ulusal Psikolojik Danışma ve Rehberlik Kongresi Bilimsel Çalışmaları, Kongre Kitabı. Adana: Ç.Ü. Eğitim Fakültesi Rehberlik ve Psikolojik Danışma Anabilim Dalı ve Psikolojik Danışma ve Rehberlik Derneği Yayını, 1997.
39. Pişkin, M. (2006), Özsaygıyı Geliştirme Eğitimi, içinde: İlköğretimde Rehberlik, Editör: Kuzgun Y, 6. Baskı, Ankara: Nobel Yayın Dağıtım, 2006.
40. Plummer D. Helping Children to Build Self-Esteem: A Photocopiable Activities Book, London, 2001.
41. Rarick GL, Widdop JH, Broadhead GD. Physical Fitness and Motor Performance of Educable Mentally Retarded Children. Implications for Curriculum Development, U.S Office of Education, Washington, 1976.
42. Sayıl M, Uçanok Z, Güre A. Erken ergenlik döneminde duygusal gereksinimler, aileyle çatışma alanları ve benlik kavramı: Betimsel bir inceleme. *Çocuk ve Gençlik Ruh Sağlığı Dergisi*, 2002; 9: 155-166.
43. Schüle K. Effektivität und Effizienz in der Rehabilitation, Richarz Verlag, St. Augustin, 1987.
44. Sherril C. Leadership Training in Adapted Physical Education. Human Kinetics Books, Champaign, Illinois, 1988.
45. Sivribaşkara S. Özsaygının farklı değişkenler açısından incelenmesi. Yüksek Lisans Tezi, Ankara Üniversitesi Sosyal Bilimler Üniversitesi, Ankara, 2003.
46. Skaalvik EM, Hagtvet KA. Academic achievement and self-concept: an analysis of causal predominance in a developmental perspective. *Journal of Personality and Social Psychology*, 1990; 58: 292-307.
47. Smith DD. Introduction to Special Education: Teaching In An Age Of Challenge (6th ed.), Boston: Allyn and Bacon, 2007.
48. Tiryaki Ş. Spor Psikolojisi Kavramlar, Kuramlar ve Uygulama. 1. Baskı, İstanbul: Eylül Yayınevi, 2000.
49. Wells E, Marwell G. Self -Esteem: Its conceptualization and Measurement, Sage Publications, Inc. Beverly, 1976.
50. Werts MG, Culatta RA, Topkins JR. Fundamentals of Special Education: What every teacher needs to know. (2nd Ed.), Illus: Upper Saddle River NJ: Pearson/Merrill Prentice Hall, 2006.
51. Yıldız N, Akbulut Ö, Bircan H. İstatistiğe Giriş. Erzurum: Aktif Yayınevi, 2006.
52. Yoshinaga-Itano C, Sedey A. Early speech development in children who are deaf or hard-of-hearing: interrelationships with language and hearing. *The Volta Review*, 2000; 100: 181-211.
53. Yörükoğlu A. Gençlik Çağı Ruh Sağlığı Eğitimi ve Ruhsal Sorunları. 5. Baskı, İstanbul: Türkiye İş Bankası Kültür Yayınları Sosyal ve Felsefi Eserler Dizisi, 1988.
54. Robinson BE, Post P. Work addiction as a function of family of origin and its influence on current family functioning. *The Family Journal*, 1995; 3: 200-206.