Research Article

Examination of General Quality of Life, Communication Skills and Satisfaction with Body Parts of Individuals Who Do and Do Not Do Sports

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Abstract: In this study, communication skills, body part satisfaction levels and general quality of life of individuals who do and do not do sports were examined. 825 women between the ages of 20-40 participated in the study. 374 of the participants were regular exercisers and 451 were sedentary individuals. The scales used in the study had sufficient reliability levels and the data showed normal distribution. As a result of the analysis of the data, it was seen that the average body satisfaction of individuals who do regular exercise was lower than the average body satisfaction of the sedentary group. In addition, it was deter-mined that the quality of life of individuals who do regular exercise was higher than that of sedentary individuals. In terms of nutrition, a significant difference was observed in terms of all parameters. It was seen that there was a positive relationship between communication skills and body satisfaction, body satisfaction and quality of life and communication skills and quality of life. As a result, it can be said that doing sports is beneficial in terms of quality of life, sedentary individuals are happier in terms of body satisfaction and that exercise has no positive or negative effects on communication skills.

Keywords: Exercise; quality of life; body satisfaction; communication.

1. Introduction

Regular and controlled exercises form the basis of training the body. Sports activities that push the limits of human power make it easier for people to adapt to today's conditions by using many disciplines (Öztürk et al. 2004). Many countries agree that creating a healthy society is possible by protecting human health. In addition, sports activities positively affect not only physical conditions but also psychological and sociological phenomena. For these reasons, individuals should be encouraged to exercise regularly and consistently. Individuals who want to start sports usually aim to achieve a healthier body, lose weight, increase flexibility and agility, or increase muscle strength (Zorba, 2004). However, doing sports also has features such as increasing self-confidence, strengthening communication, ensuring social integration, and encouraging success in the professional field (Turan, 2010).

Physical activity is considered to be a phenomenon that essentially improves the physical, mental and spiritual health of the person and contributes to the development of character and personality. It can also provide people with knowledge, skills and abilities. However, these are behaviors that aim to increase personal competitive power while competing, motivating and winning in line with the principles of struggle within the framework of certain rules (Yetim, 2015). In general, the important goals of sports are to create a balanced personality, support personality development, act in accordance with discipline and rules, respect traditions and customs, ensure personal control and overcome social patterns. Sports help people look at life more positively. The physical strength of people who do sports will be positively affected. Exercise will make the human body more beautiful, more aesthetic and psychologically healthier (Akdoğan, 2017). From an educational perspective, sports, which is an effective and attractive element of the teaching process, have a great impact on the individual development of children and young people. In this respect, sports integrate people

with society, facilitate the social adaptation of innovative and productive young people, teach them to act towards the solution of psychosocial problems and increase the communication skills of society (Aracı, 1999).

Health is an important factor that affects people's quality of life. Health cannot be defined only as a person's physical, cognitive and psychological well-being; individual and environmental factors also affect human health (Kutlu, 2018). When evaluating quality of life, it should be considered as a whole and physical activity should have an important role in this evaluation Today, as in the recent past, more than 115 million people in developing countries suffer from many health problems, such as obesity, hypertension, type 2 diabetes and cardiovascular diseases, due to lack of physical activity (Yaffe et al., 2001). When the literature is examined, it is seen that regular physical activity provides many health benefits to the individual, including obesity, reduced risk of cardiovascular disease, mental health and brain functions (Erdem et al., 2021). Physical activity is important to prevent obesity, which negatively affects quality of life, from becoming a widespread health problem (Garber et al., 2011). The culture of being healthy; This can only be achieved by creating awareness, and as a result, regulating eating habits, increasing physical activity levels, and encouraging weight loss form the basis of the most important elements for maintaining a healthy life (Jensen et al., 2013).

Sports play an important role in the socialization of a person as it is a social activity that allows the person to interact with social circles. In this respect, doing sports is an element that leads the person to use their communication skills. Since sports are usually done collectively in modern societies, it allows those who do sports to establish close social ties with different communities. Through sports, a person can leave their narrow circle and enter into dialogue with other individuals. In this respect, sports enable new friends to be made and connections to be established with social groups. In addition, sports serve as an important communication tool not only for athletes but also for spectators (Tazegül, 2014). In this respect, spending time in sports environments can provide individuals with a sense of belonging within the society (Kaplan & Akkaya, 2014). Exercising contributes positively to the improvement of physical appearance and the increase of the individual's self-confidence. In order to be happy and peaceful in society, the person's body perception should include positive emotions. When we look at the literature, there are many definitions of body perception, some of which are; It is the evaluation of the person's positive and negative feelings towards the parts of their body and their functions or how the individual visualizes their physical appearance in their mind and how their body looks to them (Aslan, 2004; Ziyalar, 1983; Abakay et al., 2017). Schilder defines body perception as the person's own picture that they have formed in their mind (Polat, 2007; Dunham, 2002). The more the individual likes this picture, the more positive their mood becomes.

When all the elements are evaluated, it is seen that there are many parameters that affect the quality of life of individuals. These parameters include both emotional and physical elements. When it comes to the effects of exercise, it is a matter of curiosity that social integration can be possible with correct communication, and the effect of doing sports, which has many psychosocial benefits, on communication skills. In addition, the body appearance that makes individuals feel good physically is also affected by exercise. It is also important to what extent this effect affects the level of satisfaction of people with their bodies. When the physical and psychological effects of exercise are considered, its role in human life becomes important because quality of life is a result of the evaluation of all the mentioned elements. In the study carried out for this purpose, the effect of exercise on communication skills, body satisfaction and quality of life was examined.

2. Materials and Methods

2.1. Research Design

In the study, a general screening model (cross-sectional) was used to determine communication skills, body satisfaction levels and general quality of life. The screening model is a research approach that aims to describe past or current situations as they are, and the inquiry model tries to define the individual or subject under study in its own terms (Karasar, 2012).

2.2. Research Group

The population of this study consists of women between the ages of 20-40 in Van province. 374 of the participants are regular exercisers (at least three days a week) and 451 are sedentary individuals. A total of 825 women participated in

the study, 242 of whom were between the ages of 20-25, 186 of whom were between the ages of 26-30, 180 of whom were between the ages of 31-35, and 217 of whom were between the ages of 36-40.

2.3. Data Collection Instruments

Demographic information and responses to items in the scales to be obtained in line with the objectives of the study were obtained by providing a suitable environment.

2.4. Data Collection Tools

Demographic Information Form: It consists of a number of questions such as the participants' age, height, weight, regular exercise status, attention to nutrition and current health status level.

Body Parts and Features Satisfaction Scale (BPFS): The Body Parts and Features Satisfaction Scale was developed by Berscheid et al. (1973) to determine the body satisfaction levels of individuals. The Turkish standardization study of this scale was conducted by Gökdoğan (1988). The scale consists of 26 questions for female participants. The Body Parts and Features Satisfaction Scale is a Likert-style scale. The higher the total score on this scale, the higher the body satisfaction is considered (Oğlağu, 2012).

Communication Skills Assessment Scale (CSS): A 5-point Likert-type scale with 25 statements was used to determine the communication skill levels of the participants. The highest score that can be obtained from the Communication Skills Assessment Scale, which was modified by Korkut (1996) and whose validity and reliability studies were conducted, is 100, while the lowest score is 0. The factor analysis results conducted for the validity study of the CSS show that the scale is one-dimensional.

EQ-5D General Quality of Life Scale (GQOL): EQ-5D is known as a general health scale used to measure general quality of life. It was developed by the EuroQol group, which is the Western European Quality of Life Research Society. The EQ-5D general health scale has been translated into over 60 languages by the EuroQol group. One of these languages is Turkish. The scale consists of two parts. EQ-5D index scale: It consists of five dimensions: mobility, self-care, usual activities, pain/discomfort and anxiety/depression.

2.5. Statistical Analysis

The obtained data were analyzed and evaluated in SPSS 22 statistics program. It was determined that the kurtosis and skewness values of the scale items used in the study were between +2 and -2. The fact that the kurtosis and skewness values were between +2 and -2 indicates that the data are normally distributed and that it would be correct to apply parametric statistical tests (George & Mallery, 2010). In the analysis of the data, frequency and percentage distributions, mean and standard deviation were used for descriptive statistics, T-Test for comparisons between the means of two independent groups, and One Way Anova test was used for multiple comparisons. The relational analysis of the scales was evaluated with Pearson Correlation. The margin of error for statistical analyses was determined as (p<.05).

2.6. Ethical Approval

This study received ethical approval from the Ethics Committee for Social and Human Sciences at Van Yüzüncü Yıl University (Meeting Date: March 20, 2025; Session No: 2025/06; Decision No: 2025/06-13). All procedures were conducted in accordance with the principle of voluntary participation and adhered strictly to ethical standards. The research was carried out in line with the Directive on Scientific Research and Publication Ethics of Higher Education Institutions and the ethical principles of the Declaration of Helsinki. Prior to data collection, participants were fully informed about the purpose and procedures of the study and subsequently provided written consent.

3. Results

A total of 825 women participated in the study; 242 people between the ages of 20-25, 186 people between the ages of 26-30, 180 people between the ages of 31-35, and 217 people between the ages of 36-40.

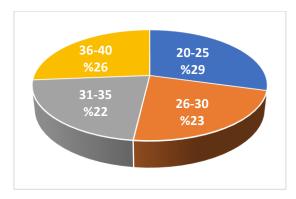


Figure 1. Age groups

374 of the participants exercise regularly, while 451 do not exercise.

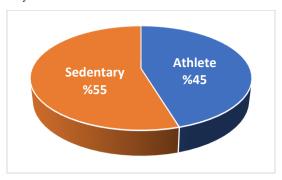


Figure 2. Distribution of participants who exercised regularly and those who did not

459 people who consistently maintained healthy eating habits and 366 people who did not pay attention to nutrition took part in the study.

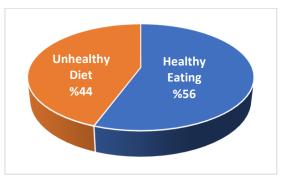


Figure 3. Distribution of participants who pay attention to their nutrition and those who do not

Table 1. Reliability Scores of the Scales

Reliability	BPFS	CSA	GQOL
Cronbach's Alpha	.920	.931	.700

When the reliability analysis results of the scales used in the study are examined, it can be said that the BPFS and CSA are very reliable, and the GQOL is at a reliable level.

Table 2. Kurtosis and Skewness Values of the Scales

Normality	BPFS	CSA	GQOL
Skewness	.703	.869	1.23
Kurtosis	.878	.781	1.89

The kurtosis and skewness values obtained in the normality analysis performed to determine whether the data are normally distributed indicate that the data are normally distributed and parametric tests are appropriate.

Table 3. Comparison of Scale Scores According to Exercise Status

Variables	Groups	n	Х	SS	t	р
C	Athlete	374	44.04	13.72	0.61	710
Communication Skills	Sedentary	451	43.70	13.05	361	.718
D. I. C. C. C. C.	Athlete	374	49.07	15.19	4.24	.00
Body Satisfaction	Sedentary	451	53.84	16.10	4.34	
Quality of Life	Athlete	374	1.25	.33	F F0	0.01
	Sedentary	451	1.39	.35	5.50	0.01
General Quality of Life	Athlete	374	75.27	16.93	2.07	00
	Sedentary	451	71.49	19.18	- 2.97	.00

In the comparison of individuals who exercise regularly and those who do not exercise in terms of communication skills, although the communication skills average of individuals who exercise is higher than the average of individuals who do not exercise regularly, no statistically significant difference was found between the two groups (p<.05).

In the comparison of the satisfaction parameter of body parts and features in terms of individuals who do regular sports and those who do not, it was seen that the body satisfaction average of individuals who do regular sports is lower than the body satisfaction average of the sedentary group, there is a statistically significant difference (p<.05).

In the evaluation of the quality of life of individuals who do regular sports and those who are sedentary, it was found that individuals who do regular sports have a statistically significant higher quality of life than sedentary individuals (p<.05).

According to the scale with a value between one and one hundred, where individuals evaluate their own momentary health status in the General Quality of Life Scale, a significant difference was found between the scale average of individuals who exercise regularly and the scale average of sedentary individuals (p<0.05).

Table 4. Comparison of Scale Scores According to Nutritional Status

Variables	Groups	n	х	sd	t	р
Communication Skills -	Healthy Diet	459	42.36	12.8	2.62	00
	Unhealthy Diet	366	45.72	13.58	3.62	.00
Body Satisfaction	Healthy Diet	459	48.26	13.83	(0 (00
	Unhealthy Diet	366	55.96	17.17	- -6.96	.00
Quality of Life	Healthy Diet	459	1.24	.31	7.00	.00
	Unhealthy Diet	366	1.43	.37		
General Quality of Life	Healthy Diet	459	76.17	16.41	.	20
	Unhealthy Diet	366	69.48	19.79	- 5.9	.00

The communication skills average of individuals who are careful about their nutrition is statistically significantly lower than the average of individuals who do not pay attention to their nutrition (p<.05). The body satisfaction average of individuals who pay attention to their nutrition (48.26) is significantly lower than the body satisfaction average of individuals who do not pay attention to their nutrition (p<.05). According to the quality-of-life parameter, individuals who pay attention to their nutrition have a statistically significantly better level than individuals who do not pay attention (p<.05). According to the general quality of life scale in which the participants stated their own opinions, the average of individuals who pay attention to their nutrition is significantly higher than the average of individuals who do not pay attention to their nutrition (p<.05).

Table 5. Correlational analysis of Communication Skills and Body Satisfaction scores

Variables	n	х	sd	Communication Skills	Body Satisfaction
Communication Skills	825	43.87	13.35	1	.303
Body Satisfaction	825	51.77	15.86	.303	1

When we look at the relationship between communication skills and body satisfaction averages, we see that there is a positive but weak relationship.

Table 6. Correlational analysis of Body Satisfaction and Quality of Life scores

Variables	n	х	sd	Body Satisfaction	Quality of Life
Body Satisfaction	825	51.77	15.86	1	.301
Quality of Life	825	1.33	.35	.301	1

When we interpret the relationship between the average body satisfaction score and the quality-of-life score, we can say that there is a positive but weak relationship.

Table 7. Correlational analysis of Communication Skills and Quality of Life scores

Variables	n	Х	sd	Communication Skills	Quality of Life
Communication Skills	825	43.87	13.35	1	.146
Quality of Life	825	1.33	.35	.146	1

It was determined that there was a positive and weak relationship between communication skills and quality of life average scores.

Table 8. Evaluation of Communication Skills scores according to age groups

Variables	Age	n	Х	sd	F	p
	20-25	242	43.76	12.71		
Communication Chills	26-30	186	43.05	12.60	– .382 .: –	77
Communication Skills	31-35	180	44.38	13.13		.76
	36-40	217	44.25	14.82		

No statistically significant difference was found between the mean scores of communication skills according to age groups.

Table 9. Evaluation of Body Satisfaction scores according to age groups

Variables	Age	n	х	sd	F	р	Difference	
	20-25	242	51.42	14.64				
D - 1 C-C-C-CC	26-30	186	48.24	15.54	((2	00	0.4	
Body Satisfaction	31-35	180	51.69	13.84	6.63	.00	2<4	
	36-40	217	55.39	18.32	=			

There is a significant difference between the average body satisfaction scores by age group, only between the 36-40 age group and the 26-30 age group. The body satisfaction of the 36-40 age group is higher than the body satisfaction of the 36-30 age group.

In the evaluation of the average quality of life scores according to age group, there is a statistically significant difference between the 36-40 age group and the 20-25, 26-30 and 31-35 age groups. The 36-40 age group has a higher score than the other age groups, but a high quality of life score indicates a low quality of life. Therefore, the age group with the lowest quality of life is the 36-40 age group. (Table 10).

sd F Variables Difference Age n х p 20-25 242 1.31 .34 1<4 26-30 186 1.27 .32 5.98 .00 Quality of Life 2 < 431-35 1.30 .33 180 3<4

1.41

.37

217

Table 10. Evaluation of Quality of Life scores according to age groups

36-40

4. Discussion

When the data obtained in the study was examined, although there was no statistically significant difference in terms of communication skills of those who exercised regularly and those who did not, the average communication skill of those who exercised was higher than the average of those who did not exercise. In a similar study, Ulukan et al. (2012) reported that there was no statistically significant difference in the communication levels of university students according to their sports activities. Another study stated that sports activities had no effect on communication skills (Gönen, 2015). In a study claiming the opposite of these results, it was emphasized that regular and gradually increasing physical activity would increase communication skills (Fişne, 2009). Contrary to the results obtained in this study, in a study conducted with the participation of 658 university students regarding communication skills, the communication skills of university students who regularly did sports and those who did not were compared, and it was found that the communication skills of students who did sports were higher than sedentary university students (Tepeköylü et al., 2009). The results obtained in this study statistically report a judgment outside of the general opinion. It can be said that this situation arises because the exercises performed were performed individually rather than as a team, some of the participants exercised with a personal trainer, and they could not fully adapt to the gym environment due to their responsibilities.

When the body satisfaction parameter of those who exercise regularly and those who do not, was compared, it was determined that the average body satisfaction value of those who exercise regularly was lower than those who do not exercise regularly. When the literature is examined, it is seen that in the studies conducted on the reasons why women turn to sports, they turn to sports for reasons such as delaying aging, being fit, having a well-shaped body, losing weight, staying in shape, in other words, to provide body satisfaction and to get the shape they want (Özdinc, 2005). Contrary to the data obtained in the study, a study conducted with the participation of university students found that the body image scores of female students who do sports were higher than sedentary individuals (Abakay et al., 2017). According to literature, when looking at the studies examining the relationship between sports and body satisfaction, it is seen that the changes that occur in the body of individuals interested in sports cause an increase in the body satisfaction of the individuals (Hausenblas & Fallon, 2006). When the literature is examined, it is seen that the judgments contrary to the results obtained in this study are more intense. The main reason why individuals who exercise are not satisfied with their bodies may be due to their high levels of physical awareness. One of the important factors that encourage and trigger individuals to exercise is that individuals are not satisfied with their physical appearance and try to eliminate the deficiencies they see in themselves. For this reason, it can be said that the satisfaction of the exercising group is low compared to the sedentary group due to their higher body awareness.

When the quality of life of physically active and sedentary individuals was evaluated, it was found that the quality of life of physically active individuals was higher than that of sedentary individuals. In a study parallel to the results obtained in this study, it was reported that individuals who engage in physical activity have a high quality of life (Ayhan, 2017). In another study examining the quality of life in women, it was aimed to evaluate the physical capacity and quality of life in housewives and it was determined that women who started sports were more energetic and better spiritually in their lives compared to inactive women (Ateş, 2009). It is obvious that physically active individuals have a better quality of life than sedentary individuals. There is no information in the literature that claims the opposite. The main reason why individuals who exercise regularly feel fitter and healthier than sedentary individuals when moving around in their social lives, performing simple tasks or doing tasks that require effort may be due to their being in a better physical and physiological condition and having a higher level of body strength.

When the results obtained in this study are evaluated, the communication skills average of individuals who are careful about their nutrition is lower than the average of individuals who do not pay attention to their nutrition. The body satisfaction average of individuals who pay attention to their nutrition is lower than the body satisfaction average of individuals who do not pay attention to their nutrition. According to the quality-of-life parameter, individuals who pay attention to their nutrition have better scores than individuals who do not pay attention. According to the general quality of life scale in which the participants stated their own opinions, the average of individuals who pay attention to their nutrition is significantly higher than the average of individuals who do not pay attention to their nutrition. Unalan et al. (2009) aimed to examine the relationship between students' eating attitudes and healthy lifestyle behaviors in a study they conducted, and according to the findings, it was seen that the rate of eating disorders was higher in those who did sports than in sedentary individuals. In contrast to these studies, Vardar et al. (2012) investigated the relationship between exercise addiction and eating behavior in participants who regularly exercised and reported that no significant difference was found in the eating behavior characteristics of participants with exercise addiction. Individuals who are cautious about their nutrition have a better quality of life than sedentary individuals because they make an effort to control their physical condition and overcome the problems they encounter. In fact, when their own statements about healthy living are examined, it is concluded that individuals who pay attention to their nutrition see themselves as healthier than sedentary individuals.

5. Conclusions

When the analysis results of the data obtained in this study are evaluated and the literature is examined, it is seen that exercising has positive results on social life. Many studies report that exercising will help develop communication skills. In addition, exercising regularly will provide improvement in physical appearance and bring people closer to the aesthetic body phenomenon, even if they do not like themselves. In order to achieve and stay healthy in life, regular exercise must be done, and attention must be paid to the diet.

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Declaration of Data Availability: The data is publicly available.

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References

Abakay, U., Alıncak, F., & Ay, S. (2017). Üniversite öğrencilerinin beden algısı ve atılganlık düzeylerinin incelenmesi. *Uluslararası Türk Eğitim Bilimleri Dergisi*, 9(2), 12–18.

Akdoğan, B. (2017). Lise öğrencilerinin ve ebeveynlerinin beden eğitimi dersine ilişkin tutumları [Yayımlanmamış yüksek lisans tezi]. İstanbul Gelişim Üniversitesi.

Aracı, H. (1999). Okullarda beden eğitimi. Bağırgan Yayın Evi.

Aslan, D. (2004). Beden algısı ile ilgili sorunların yaratabileceği beslenme sorunları. Sürekli Tıp Eğitimi Dergisi, 13(9), 326–329.

Ateş, B. (2009). Ev hanımlarındaki fiziksel kapasite ve yaşam kalitesinin değerlendirilmesi [Yayımlanmamış yüksek lisans tezi]. Muğla Üniversitesi.

Ayhan, C. (2017). Aktif sporcuların rekreatif etkinliklere katılımlarına engel oluşturabilecek faktörlerin yaşam tatmini ve yaşam kalitesi üzerine etkisi [Yayımlanmamış yüksek lisans tezi]. Sakarya Üniversitesi.

Berscheid, E., Walster, E., & Bohrnstedt, G. (1973). Body Parts Satisfaction Scale (BPSS) [Database record]. APA PsycTests. https://doi.org/10.1037/t04579-000

Dunham, J. M. (2002). *Perfectionism and attitudinal body image in developmental, high performance and elite figure skaters* [Unpublished master's thesis]. University of Alberta.

Erdem, H. R., Sayan, M., Gökgöz, Z., & Ege, M. R. (2021). Yaşlılarda fiziksel aktivite: Derleme. Yüksek İhtisas Üniversitesi Sağlık Bilimleri Dergisi, 2(1), 16-22.

- Fişne, M. (2009). Fiziksel aktivitelere katılım düzeyinin, üniversite öğrencilerinin akademik başarıları, iletişim becerileri ve yaşam tahminleri üzerine etkilerinin incelenmesi [Yayımlanmamış yüksek lisans tezi]. Erciyes Üniversitesi.
- Garber, C. E., Blissmer, B., & Deschenes, M. R. (2011). American College of Sports Medicine position stand: Quantity and quality of exercise for developing and maintaining cardiorespiratory, musculoskeletal, and neuromotor fitness in apparently healthy adults: Guidance for prescribing exercise. *Medicine & Science in Sports & Exercise*, 43(7), 1334–1359. https://doi.org/10.1249/MSS.0b013e318213fefb
- George, D., & Mallery, M. (2010). SPSS for Windows step by step: A simple guide and reference. Pearson.
- Gökdoğan, F. (1988). Orta öğretime devam eden ergenlerde beden imajından hoşnut olma düzeyi [Yayımlanmamış yüksek lisans tezi]. Ankara Üniversitesi.
- Gönen, M. (2015). Akdeniz Üniversitesi Beden Eğitimi ve Spor Yüksekokulu öğrencilerinin iletişim beceri düzeyleri ile atılganlık düzeylerinin incelenmesi [Yayımlanmamış yüksek lisans tezi]. Akdeniz Üniversitesi.
- Hausenblas, H. A., & Fallon, E. A. (2006). Exercise and body image: A meta-analysis. *Psychology and Health*, 21(1), 33–47. https://doi.org/10.1080/14768320500105270
- Janssen, B., & Szende, A. (2013). Population norms for the EQ-5D. In A. Szende, B. Janssen, & J. Cabases (Eds.), *Self-reported population health: An international perspective based on EQ-5D* (pp. 19–30). Springer.
- Jensen, M. D., Ryan, D. H., & Apovian, C. M. (2013). AHA/ACC/TOS guideline for the management of overweight and obesity in adults. *Circulation*, 129(25 Suppl 2), 102–138. https://doi.org/10.1161/01.cir.0000437739.71477.ee
- Kaplan, Y., & Akkaya, C. (2014). Spor kültürü ve Türkiye'de spor. International Journal of Science Culture and Sport, 2(2), 114–119.
- Karasar, N. (2012). Bilimsel araştırma yöntemleri. Nobel Yayıncılık.
- Korkut, F. (1996). İletişim becerileri değerlendirme ölçeğinin geliştirilmesi: Güvenirlik ve geçerlik çalışmaları. *Turkish Psychological Counseling and Guidance Journal*, 2(7), 18–23.
- Kutlu, R. (2018). Çevresel faktörlerin mekân kalitesi ve insan sağlığına etkileri. *The Turkish Online Journal of Design, Art and Communication*, 8(1), 67–78. https://doi.org/10.7456/10801100/007
- Oğlağu, Z. (2012). Yeme bozukluğu hastalarında çocukluk çağı travmalarının benlik saygısı ve beden algısı değişkenleri üzerine etkisi [Yayımlanmamış yüksek lisans tezi]. İstanbul Üniversitesi.
- Özdinç, Ö. (2005). Çukurova Üniversitesi öğrencilerinin sporun ve spora katılımın sosyalleşmeyle ilişkisi üzerine görüşleri. *Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi, 3*(2), 77–84.
- Öztürk, S. A. (2004). Hizmet pazarlaması. Ekin Kitabevi.
- Polat, A. (2007). Düzce ilindeki hemodiyaliz hastalarının beden imajı ve benlik saygısı düzeylerinin belirlenmesi [Yayımlanmamış yüksek lisans tezi]. Abant İzzet Baysal Üniversitesi.
- Tazegül, Ü. (2014). Sporun kişilik üzerindeki etkisinin araştırılması. The Journal of Academic Social Science Studies, 8(25-I), 537-544.
- Tepeköylü, Ö., Soytürk, M., & Çamlıyer, H. (2009). Beden eğitimi ve spor yüksekokulu (BESYO) öğrencilerinin iletişim becerisi algılarının bazı değişkenler açısından incelenmesi. *Spormetre Beden Eğitimi ve Spor Bilimleri Dergisi*, 7(3), 115–124.
- Turan, İ. (2010). Bazı batı ve türk çocuk klasiklerinde dini ve ahlaki değerler. Dinbilimleri Akademik Araştırma Dergisi, 10(3), 171-194.
- Ulukan, H. (2012). İletişim becerilerinin takım ve bireysel sporculara olan etkisi [Yayımlanmamış yüksek lisans tezi]. Karamanoğlu Mehmetbey Üniversitesi.
- Ünalan, D., Öztop, D. B., Elmalı, F., Öztürk, A., Konak, D., Pırlak, B., & Güneş, D. (2009). Bir grup sağlık yüksekokulu öğrencisinin yeme tutumları ile sağlıklı yaşam biçimi davranışları arasındaki ilişki. *Journal of Turgut Ozal Medical Center*, 16(2), 75–82.
- Vardar, E., Vardar, S. A., Toksöz, İ., & Süt, N. (2012). Egzersiz bağımlılığı ve psikopatolojik özelliklerinin değerlendirilmesi. *Düşünen Adam Psikiyatri ve Nörolojik Bilimler Dergisi*, 25(1), 51–57. https://doi.org/10.5350/DAJPN2012250106
- Yaffe, K., Barnes, D., Nevitt, M., Lui, L. Y., & Covinsky, K. (2001). A prospective study of physical activity and cognitive decline in elderly women: Women Who Walk. *Archives of Internal Medicine*, 161(14), 1703–1708. https://doi.org/10.1001/archinte.161.14.1703
- Yetim, A., Tolukan, E., & Şahin, M. Y. (2015). Spor tesisi yöneticilerinin dönüşümcü liderlik davranış özelliklerinin incelenmesi. International Journal of Science Culture and Sport, 3(3), 133–147.
- Ziyalar, A. (1983). Beden imaji kavramı. Yeni Sempozyum, 31(1-2), 31-37.
- Zorba, E. (2004). Endüstride verimlilik açısından spor tesislerinin planlanması. Gazi Üniversitesi Yayınları.

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