

Investigation of Psychological Resilience and Self-Esteem of Sports High School Students

Dr. Eyup Acar,

Ministry of Education, Turkey. E-mail: eyupacar800@gmail.com, ORCID 0000-0002-1855-2028

Abstract--- Psychological resilience, which refers to being able to effectively overcome a negative situation, adapt to this situation, and be successful by controlling the negative effects of this negative situation, has become even more important with the COVID-19 pandemic, which has recently affected the whole world. People's psychology was adversely affected during this pandemic.

Psychological weaknesses can cause many ailments, as well as cause a decrease in self-confidence and self-esteem. In addition, it is known that regular exercise contributes to the physiological and psychological well-being of the individual. The aim of this study is to examine the psychological resilience and self-esteem of sports high school students who have the opportunity to exercise more regularly than their peers.

While the universe of the research is composed of sports high school students studying in five sports high schools at Istanbul in the 2021-2022 academic year, the study group consists of 522 sports high school students who voluntarily participated in the research. The "Short Psychological Resilience Scale" developed by Smith et al. (2008) and adapted into Turkish by Doğan (2015) and Rosenberg's Self-esteem Scale were used as data collection tools in the study. Descriptive statistics, independent sample t-test, One-way analysis of variance and correlation analysis techniques were used in the analysis of the data.

According to the results of the research, significant differences were determined between male and female participants in terms of the level of psychological resilience and weekly exercise status. In addition, a moderately positive relationship was found between psychological resilience and self-esteem. It has been concluded that exercising 5-6 times per week regularly increases the psychological resilience and self-esteem in a positive way.

Keywords--- Psychological Resilience, Self-Esteem, Sports, Exercise.

I. Introduction

The concept of psychological resilience is used in our language as the equivalent of the foreign concept "resilience". It is also seen in the literature that different terms are used in our language as the equivalent of this concept. These include; "Indomitableness" (Demirbaş, 2010), "Endurance" (Gökmen, 2009), "Recovery Power" (Terzi, 2006). In this study, the term psychological resilience is used as a synonym for the concept of "resilience".

Psychological resilience, is defined as being able to effectively overcome a negative situation, adapt to this situation, and be successful by controlling the negative effects of this negative situation (Luthar and Cicchetti, 2000). The obligation to fight against the Covid-19 pandemic for several years actually shows us an example of facing a difficult situation. It is considered important to stay psychologically healthy in addition to protecting physical health during this process.

Although it is difficult to talk about a common definition for the concept of psychological resilience, it is seen that this concept is related to risk factors, protective factors and the adaptation that emerges at the end of the process (Ruther, 1999; Gizir, 2007; Windle, 2011). Psychological risk factors are expressed under three main headings as personal factors, family related factors and social factors (Coleman, Coleman & Hagell, 2007). Risk factors are characteristics of a group of individuals or situations that predict negative consequences for the future. Stressful life events, namely stressors, are considered as a variety of risk factors (Masten and Reed, 2002). These factors are individual and environmental characteristics that increase the likelihood of negative consequences in an individual's life (Iwaniec, 2006). Protective factors are those that eliminate the effect of risk factors or reduce the possibility of inconsistent outcomes (Iwaniec, 2006; Masten and Reed, 2002). Individuals with strong psychology benefit from some "internal" and "external" resources in coping with negative life events (Kararmak, 2006). While factors such as effective problem solving skills, self-efficacy, self-esteem, self-confidence, internal locus of control, positive and optimistic perspective on the future constitute internal protective factors; some familial and environmental characteristics create external protective factors (Gizir, 2007; Kararmak, 2006).

Another variable that can be a protective factor for psychological resilience is self-esteem. Self-esteem can be defined as the individual's self-love, self-confidence, self-worth and accepting and respecting himself/ herself (Yavuzer, 2000; Aktaran, Yiğit, Yılmaz, Acar and Dalbudak, 2019). Self-esteem, which is also expressed as a holistic evaluative dimension of the ego (Santrock, 2012), includes our self-assessments (Dusek and McIntyre,

2003). Positive self-esteem is seen as one of the important indicators of a healthy personality (Wolberg & Kildahl, 1970), positive adjustment and mental health (Harter, 2006). Therefore, high self-esteem can be accepted as an important protective factor for psychological resilience. In other words, high self-esteem is one of the important indicators of high psychological resilience.

When the literature is examined, the results of the studies show that individuals who do sports have lower levels of depressive symptoms compared to individuals who do not do sports (Hall, 2011), participation in exercise helps to reduce stress and has a supportive feature in the prevention of diseases caused by stress (Yeltepe and Hakim. 2011). and regularly performed physical activity supports psychological resilience (Martinek and Hellison 1997).

As a result, the individual may face many risks during adolescence. In the face of these risks, maintaining the normal development process is particularly important. Studies have shown that individuals with low levels of resilience experience more internal and external orientation problems (Kabasakal and Arslan, 2014; Kim and Im, 2014; Lee and Cranford, 2008). This situation makes it even more important to investigate the characteristics of individuals who can adapt positively in the face of negative experiences. In this context, the aim of this study is to examine the psychological resilience and self-esteem levels of individuals studying at sports high schools.

II. Methodology

Study Model

Relational survey model, one of the general survey model types, was used for the model of this research, which was conducted to examine the psychological resilience and self-esteem of high school students studying at sports high schools. Relational screening models are the research models aiming to determine the presence and/or level of change between two or more variables and to specify the relationships between the variables (Fraenkel and Wallen, 2009; Karasar, 2020).

Study Group

The universe of the research consists of students of five sports high school that are active in the 2021-2022 academic year.

The sample of the research consists of 522 Sports high school students, 244 women and 278 men, who voluntarily participated in the research.

Certain demographic information about the students participating in the research can be seen in Table 1.

Table 1: Demographic Information of the Participants

		Frequency	%	Cumulative%
Gender	Male	278	53,3	53,3
	Female	244	46,7	100,0
	Total	522	100,0	-
Grade	9th Grade	209	40,0	40,0
	10th Grade	144	27,6	67,6
	11st Grade	87	16,7	84,3
	12nd Grade	82	15,7	100,0
	Total	522	100,0	-
Weekly Regular Exercise	1-2 times /week	182	34,9	34,9
	3-4 times /week	185	35,4	70,3
	5-6 times /week	155	29,7	100,0
	Total	522	100,0	-

When Table 1 is examined, it is seen that 53.3% of the 522 participants participating in the research are male and 46.7% are female participants. When Table 1 is examined, it is seen that 53.3% of the 522 participants participating in the research are male and 46.7% are female participants. On the other hand, according to grade levels, 40.0% of them are 9th grade, 27.6% are 10th grade, 16.7% are 11th grade and 15.7% are 12th grade. According to their weekly regular exercise status, 34.9% of them exercise 1-2 times a week, 35.4% exercise 3-4 times a week, and 29.7% exercise 5-6 times a week.

Data Collection Tools

Data collection tools in the research consist of three parts. In the first part, a personal information form was used to determine the gender, grade and weekly regular exercise status of the sports high school students participating in the research. The "Short Psychological Resilience Scale" was used in the second part and Rosenberg's "Self-Esteem Scale" (RBSS) was used in the third part.

The Psychological resilience scale is a five-point Likert type self-report scale consisting of six items developed by Smith et al. in 2008 and adapted to Turkish by Doğan (2015) in order to measure the resilience of individuals. It is scored as "Not at all Appropriate" (1), "Not Appropriate" (2), "Slightly Appropriate" (3), "Appropriate" (4),

“Totally Appropriate” (5). In the adaptation study of the scale to Turkish culture, Doğan (2015) determined that the internal consistency coefficient of the scale was .83 and a single factor structure explained 54% of the total variance. In the reliability test performed in this study, the Cronbac's Alpha value was found as .78.

Rosenberg Self-Esteem Scale (RBSS), developed by Rosenberg in 1965, is a four-point Likert-type scale and consists of 10 items. Rosenberg's scale, consisting of 63 items, has 12 subscales. The first part of these subscales, consisting of ten items, measures self-esteem. In the reliability test of the self-esteem scale adapted to Turkish by Çuhadaroğlu (1986), Cronbac's Alpha value was found as .84.

Analysis of Data

The data of the research were analyzed using the IBM SPSS 26.0 vs package program. The normal distribution of the scores was analyzed using the skewness and kurtosis coefficient method (Büyüköztürk 2017) in order to determine the appropriate tests. The skewness and kurtosis values obtained as a result of the analysis are presented in Table 2.

Table 2: Kurtosis and Skewness Values of the Scales

Variables	N	Mean	S.D.	Skewness	Kurtosis
Gender	522	1,4674	,49942	,131	-1,391
Grade	522	2,0805	1,09143	,569	-1,019
Regular weekly exercise	522	1,9483	,80259	,094	-1,441
Psychological Resilience Scale	522	19,0134	4,95835	-,195	,408
Self-Esteem Scale	522	35,0594	5,40902	-,390	,311

When Table 2 is examined, the kurtosis and skewness values of the variables are seen. It can be interpreted that these values have a value between ± 1.5 and this value does not show a significant deviation from the normal distribution (Tabachnik and Fidell, 2013). When the graphical values of the normal distributions of the data were evaluated, abnormality was not observed in the normality.

Test methods were determined by assuming that the data showed a normal distribution. In the analysis of the data, independent sample t-test for two-group variables, one-way analysis of variance technique (One-Way ANOVA) for three or more group variables, and Pearson correlation test methods were used to test the correlational conditions between scales.

III. Results

In this part of the study, the data collected from the sample group were analyzed with appropriate test methods and tabulated.

Table 3: T-test Results Showing the Differences Between the Psychological Resilience and Self-Esteem Scale Scores According to the Gender Variable of the Participants

Scales	Gender	N	Mean	S.D.	S.E.	T	P
Psychological Resilience	Male	278	19,68	4,57	,274	3,327	,001*
	Female	244	18,25	5,26	,337		
Self-esteem	Male	278	35,46	4,81	,288	1,845	,066
	Female	244	34,59	5,99	,383		

When Table 3 is examined, there is no significant difference between the self-esteem scores of the participants according to the gender variable ($p > .05$), while there is a significant difference between the psychological resilience scores ($p < .05$). When the mean values are examined, it is seen that this difference is high in favor of male participants. The psychological resilience levels of male participants participating in the study are higher than female participants.

Table 4: ANOVA Test Results Showing the Differences Between the Psychological Resilience and Self-Esteem Scale Scores of the Participants According to Grade

Scales	Grade	N	Mean	S.D.	F	P
Psychological Resilience	9 th Grade	209	19,27	4,70	,578	,630
	10 th Grade	144	18,86	5,21		
	11 th Grade	87	19,14	4,62		
	12 nd Grade	82	18,47	5,49		
	Total	522	19,01	4,95		
Self-esteem	9 th Grade	209	35,33	5,06	,482	,695
	10 th Grade	144	35,04	5,94		
	11 th Grade	87	34,93	5,29		
	12 nd Grade	82	34,51	5,44		
	Total	522	35,05	5,40		

When Table 4 is examined, no significant difference was found in the psychological resilience and self-esteem scores of the participants according to the grade ($p > .05$). The grade variable is not an important determinant of psychological resilience and self-esteem.

Table 5: ANOVA Test Results Showing the Differences Between the Psychological Resilience and Self-Esteem Scale Scores According to the Weekly Exercise Status of the Participants

Scales	Weekly exercise	N	Mean	S.D.	F	P
Psychological Resilience	1-2 times /week	182	18,42	5,00	4,066	,018*
	3-4 times /week	185	18,83	4,85		
	5-6 times /week	155	19,92	4,93		
	Total	522	19,01	4,95		
Self-esteem	1-2 times /week	182	34,03	4,94	6,089	,002*
	3-4 times /week	185	35,22	5,70		
	5-6 times /week	155	36,05	5,39		
	Total	522	35,05	5,40		

When Table 5 is examined, a significant difference was found in the psychological resilience and self-esteem scores of the participants according to their weekly exercise status ($p < .05$). According to the results of Tukey test, one of the subtests made to determine this difference, psychological resilience and self-esteem scores were found to be significantly lower in those who exercised 1-2 times a week than those who exercised 5-6 times. Those who exercised 5-6 times a week both had higher psychological resilience and self-esteem scores.

Table 6: Pearson Correlation Analysis Results Showing the Relationship Between Psychological Resilience and Self-Esteem Scale Scores

Variables		Self-esteem
Psychological Resilience	R	,464**
	P	,000
	N	522
**. Correlation is significant at the 0.01 level (2-tailed).		

When Table 6 is examined, it has been determined that there is a moderately positive ($r = .464$) relationship between psychological resilience and self-esteem. Self-esteem increases in a correlation with psychological resilience increase.

IV. Discussion and Conclusion

With the Covid-19 pandemic, which has affected the whole world recently, deaths and diseases have increased and it has become even more important to protect health. The pandemic, which caused some physical problems, has become a threat to psychological health by significantly affecting social life as a result of restrictions.

It is known that doing regular exercise and sports on a weekly basis improves self-esteem as well as physical and mental health benefits (Polat, 2014; Sipahioğlu, 2019). In this context, important findings were obtained in this study, which was conducted to investigate the psychological resilience and self-esteem of sports high school students who have more practical course content than their peers.

According to the gender variable, the psychological resilience levels of men were found to be higher than women. When the literature is examined, there are results showing that the psychological resilience of men is higher than that of women (Quatman and Watson 2001; Akça, 2012; Sarıkaya, 2015; Erdoğan, 2015; Taşğm, Bozgeyikli and Boğazlıyan, 2017; Hoşoğlu, Kodaz, Bingöl and Batık, 2018). These results in the literature support the findings of the study. However, contrary to the results of the study, there are also research results showing that the psychological resilience of women is higher than that of men (Dayıoğlu, 2008; Önder and Gülay, 2008; Gündas and Koçak, 2015; Güngörmüş et al., 2015; Turgut, 2015; Kılıç and Alver, 2017; Bozdağ, 2020; Moccia et al., 2020). There are also studies that conclude that psychological resilience does not differ in terms of gender (Kumar et al., 2016; Arslan, 2018; Aydın and Egemberdiyeva, 2018; Kurtoğlu, 2019). In the literature, there are different results regarding the levels of resilience that vary by gender. It is debated whether psychological resilience varies according to gender difference.

There was no significant difference in psychological resilience and self-esteem scores according to the grade variable. In the literature, there are studies that conclude that psychological resilience differs according to grade level (Sun & Stewart, 2007; Kurtoğlu, 2019), as well as studies that conclude that there is no difference (Im & Kim, 2011; Salami, 2010). There are different results in the literature. Therefore, it is controversial whether psychological resilience differs in terms of grade or age variable.

When the weekly exercise status is examined, psychological resilience and self-esteem increase as the number of weekly exercises increases. In Öner's (2019) study, it was observed that psychological resilience scores increased

with increasing weekly training frequency. On the other hand, Demir and Çiftçi (2020) concluded that the psychological resilience levels of the participants who exercised during the Covid-19 social isolation process were higher than those who did not exercise. Lades et al. (2020) revealed that regular exercise contributes positively to the individual's mood. Simpson & Katsanis (2020) stated that regular exercise during the pandemic is effective in reducing negative emotional states such as stress. Huang et al. (2020) stated that spending time without exercising in the home environment may cause an increase in the level of depression. Rahmati-Ahmadabad & Hosseini (2020) emphasized that exercise is an effective method in coping with Covid-19 in their study. Increasing the number of weekly exercises will contribute to our psychological well-being. The results in the literature support the findings in this study.

It was determined that there was a moderately positive ($r=.464$) relationship between psychological resilience and self-esteem. As psychological resilience increases, self-esteem also increases. Sarıkaya (2015) concluded that there is a relationship between psychological resilience and self-esteem, and that as the level of self-esteem increases, the level of resilience also increases. Schütz (1998) also obtained similar results. According to this, it is stated that as the self-esteem level of the individual increases, the positive perception of the person towards himself/herself will also increase, and this situation may affect the level of psychological resilience positively. Dumont and Provost (1999) also concluded that individuals who are described as psychologically sound have high self-esteem levels. It is seen that there is a positive relationship between psychological resilience and self-esteem. The results in the literature support this finding.

References

- [1] Akça, Z.K. (2012). Genç yetişkinlikte algılanan anne-baba tutumlarının, kendini toparlama gücü ve benlik saygısı arasındaki ilişki, (Master's Thesis). Maltepe Üniversitesi, Sosyal Bilimler Enstitüsü.
- [2] Arslan, H. (2018). Psikolojik Danışmanların Mutluluk, Psikolojik Sağlık ve Bağımlılık Durumları Arasındaki İlişkiler. Sağlık Bilimlerinde Eğitim Dergisi, 1(1), 17-35.
- [3] Aydın, M. & Egemberdiyeva, A. (2018). Üniversite öğrencilerinin psikolojik sağlık düzeylerinin incelenmesi. Türkiye Eğitim Dergisi, 3(1), 37-53.
- [4] Bozdağ, F. (2020). Mülteci çocukların psikolojik sağlıkları ve kültürlenme stratejileri. (Doctoral Thesis). Hacettepe Üniversitesi, Eğitim Bilimleri Fakültesi.
- [5] Büyüköztürk, Ş. (2017). Sosyal bilimler için veri analizi el kitabı. Ankara: Pegem Akademi.
- [6] Coleman, J., & Hagell, A. (2007). Adolescence, risk and resilience: A conclusion. Adolescence, risk and resilience. Against the odds. Chichester: John Wiley & Sons Ltd, 165-174.
- [7] Çuhadaroğlu F. (1986). Adölesanlarda benlik saygısı. (Master's Thesis), Hacettepe Üniversitesi, Tıp Fakültesi Psikiyatri Anabilim Dalı, Ankara.
- [8] Dayıoğlu, B. (2008). Üniversite giriş sınavına hazırlanan adaylarda psikolojik sağlık: Öğrenilmiş güçlülük, algılanan sosyal destek ve cinsiyetin rolü. (Master's Thesis), Ortadoğu Teknik Üniversitesi, Sosyal Bilimler Enstitüsü, Ankara.
- [9] Demir, A. & Çiftçi, F. (2020). COVID-19 Pandemi sürecinde egzersizin lise öğrencilerinin psikolojik sağlık düzeylerine etkisinin incelenmesi. SPORMETRE, 18(3), 169-179.
- [10] Demirbaş, N. (2010). Yaşamda anlam ve yılmazlık. (Master's Thesis), Hacettepe Üniversitesi, Ankara.
- [11] Doğan, T. (2015). Kısa psikolojik sağlık ölçeği'nin türkçe uyarlaması: Geçerlik ve güvenilirlik çalışması. The Journal of Happiness & Well-Being, 3(1), 93-102.
- [12] Dumont, M. & Marc, A.P. (1999). Resilience in Adolescents: Protective Role of Social Support, Coping Strategies, Self-Esteem and Social Activities on Experience of Stress and Depression. Journal of Youth and Adolescence, 28(3), 343-363.
- [13] Dusek, J.B. & McIntyre, J.G. (2003). Self-concept and self-esteem development. G.R. Adams ve M.D. Berzonsky (Eds.), Blackwell Handbook of Adolescence. (pp.290-309.) Oxford, UK: Blackwell Publishing.
- [14] Erdoğan, E. (2015). Tanrı algısı, dini yönelim biçimleri ve öznel dindarlığın psikolojik dayanıklılıkla ilişkisi: üniversite örnekleme. Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 12(29), 223-246.
- [15] Fraenkel, Jack R., & Wallen, Norman E. (2009). How to design and evaluate research in education (Seventh ed.). New York: McGraw-Hill.
- [16] Gizir, C.A. (2007). Psikolojik sağlık, risk faktörleri ve koruyucu faktörler üzerinde bir derleme çalışması. Türk Psikolojik Danışmanlık ve Rehberlik Dergisi, 3(28), 113-128.
- [17] Gökmen, D. (2009). Kadın Sığınma Evi'nde Yaşayan Şiddet Görmüş Kadınlar ile Eşyle Birlikte Yaşayan Şiddet Görmüş Kadınlar Arasındaki Psikolojik Dayanıklılık ve Bağlanma Durumlarının Karşılaştırılması. (Master's Thesis), Maltepe Üniversitesi, Sosyal Bilimler Enstitüsü, İstanbul.

- [18] Gündaş, A. & Koçak, R. (2015). Lise öğrencilerinde psikolojik sağlamlığın yordayıcısı olarak benlik kurgusu. *Uluslararası Sosyal Araştırmalar Dergisi*, 8(41), 795-802.
- [19] Güngörmüş, K., Okanlı, A. & Kocabeyoğlu, T. (2015). Hemşirelik öğrencilerinin psikolojik dayanıklılıkları ve etkileyen faktörler. *PsikiyatriHemşireliğiDergisi*, 6(1), 9-14.
Doi: 10.5505/phd.2015.80299
- [20] Hall, N. (2011). "Give it everythingyougot": Resilience for young males through. *Sport International Journal of Men'sHealth*, 10(1), 65.
- [21] Harter, S. (2006). The Self. (Ed: N. Eisenberg) *Handbook of Child Psychology: Social, Emotional, and Personality Development* (pp. 505-560), New Jersey: John Wiley & Sons, Inc.
- [22] Hoşoğlu, R., Kodaz, A.F., Bingöl, T.Y. & Batk, M.V. (2018). Öğretmen adaylarında psikolojik sağlamlık. *UluslararasıToplumAraştırmalarıDergisi*, 8(14), 217-239.
DOI: <http://doi.org/10.26466/opus.405751>
- [23] Huang, Y., Li, L., Gan, Y., Wang, C., Jiang, H., Cao, S. & Lu, Z. (2020). Sedentary behaviors and risk of depression: a meta-analysis of prospective studies. *Translational Psychiatry*, 10(1), 1-10.
<https://doi.org/10.1038/s41398-020-0715-z>
- [24] Im, Y.J. & Kim, D.H. (2011). Factors associated with the sesilience of schoolaged children with atopic dermatitis. *Journal of Advanced Nursing*, 21, 80-88.
- [25] Iwaniec, D. (2006). *The emotionally abused and neglected child: Identification, assessment and intervention a practice handbook*, England: JohnWileyveSon, Ltd.
- [26] Kabasakal, Z. & Arslan, G. (2014). Ergenlikte Görülen anti-sosyal davranışlar, psikolojik sağlamlık ve aile sorunları arasındaki ilişki, *Uluslararası Hakemli Aile ÇocukveEğitimDergisi*, 2(3), 76-90.
- [27] Kararımak, O. (2006). Resilience, risk and protective factors. *Turkish Psychological Counseling and Guidance Journal*, 26(3), 129-142.
- [28] Karasar N. (2020). *Bilimselaraştırmayöntemleri*,(36. Basım) Nobel Yayınevi, Ankara.
- [29] Kılıç, Ş.D. & Alver, B. (2017). Üniversite öğrencilerinin yalnızlık düzeyleri ve psikolojik dayanıklılıkları arasındaki ilişkilerin bazı değişkenlere göre incelenmesi. *International Journal of Education Technology and Scientific Researches*, 2(3), 116-147.
- [30] Kim, D.H. & Im, Y.J. (2014). Resilience as a protecti, factor for the behavioral problems in school-aged children with atopic dermatitis. *Journal of Child Health Care*, 18(1), 47-56.
- [31] Kumar, S., Singh, N.S. & Mitra, S. (2016). Comparison of mental toughness between male and female volleyball players of 12th south Asian games. *International Journal of Applied Research*, 2(6), 268-270.
- [32] Kurtoglu, S.S. (2019). Ortaöğretim öğrencilerinin psikolojik sağlamlık düzeylerinin algılanan sosyal destek, benlik saygısı ve çeşitli değişkenler açısından incelenmesi, (Master's Thesis) Ufuk Üniversitesi Sosyal Bilimler Enstitüsü, Ankara.
- [33] Lades, L., Laffan, K., Daly, M. & Delaney, L. (2020). Daily emotional well-being during the COVID-19 pandemic. <https://doi.org/10.31234/osf.io/pg6bw>
- [34] Lee, H.H. & Cranford, J.A. (2008). Does resilience moderate the associations between parental problem drinking and adolescents' internalizing and externalizing behaviors?: A study of Korean adolescents. *Drug and alcohol dependence*, 96(3), 213-221.
- [35] Luthar, S.S. & Cicchetti, D. (2000). The construct of resilience: Implications for interventions and social policies. *Development and psychopathology*, 12(4), 857-885.
- [36] Martinek, T.J. & Hellison, D.R. (1997). Fostering resiliency in undeserved you ththrough Physical Activity. *Quest*, 49, 34-49.
- [37] Masten, A.S. & Reed, M.G. (2002). Resilience in development. S.R. Snyder ve S.J. Lopez (Eds.) *The handbook of positive psychology*. England: Oxford University Press.
- [38] Moccia, L., Janiri, D., Pepe, M., Dattoli, L., Molinaro, M., De Martin, V., Di Nicola, M. (2020). Affective temperament, attachment style, and the psychological impact of the COVID-19 outbreak: an early report on the Italian general population. *Brain, Behavior, and Immunity*.
<https://doi.org/10.1016/j.bbi.2020.04.048>
- [39] Önder, A. & Gülay, H. (2008). İlköğretim 8. sınıf öğrencilerinin psikolojik sağlamlığının çeşitli değişkenler açısından incelenmesi. *Dokuz Eylül Üniversitesi Buca Eğitim Fakültesi Dergisi*, (23), 192-197.
- [40] Öner, Ç. (2019). Genç yetişkin egzersiz liderlerinin benlik saygıları ve psikolojik dayanıklılıklarının incelenmesi. *Spor Eğitim Dergisi*, 3(2), 121-136.
- [41] Polat, G. (2014). Düzenli egzersiz yapan kadınlarda egzersizin benlik saygısı ve beden memnuniyeti üzerine etkisi (Master's Thesis). Kahramanmaraş Sütçü İmam Üniversitesi Sağlık Bilimleri Enstitüsü, Kahramanmaraş.

- [42] Quatman, T. & Watson, C.M. (2001). Gender Differences in Adolescent Self-Esteem: An Exploration of Domains, *The Journal of Genetic Psychology*, 161(1), 93-117.
- [43] Rahmati-Ahmadabad, S. & Hosseini, F. (2020). Exercise against SARS-CoV-2 (COVID-19): Does workout intensity matter? (A mini review of some indirect evidence related to obesity). *Obesity Medicine*, 100245. <https://doi.org/10.1016/j.obmed.2020.100245>
- [44] Rutter, M.B. (1999). Resilience concepts and findings: Implications for family therapy. *Journal of Family Therapy*, 21, 119-144.
- [45] Salami, S.O. (2010). Moderating effects of resilience, self-esteem and social support on adolescents' reactions to violence. *Asian Social Science*, 6(12), 101.
- [46] Santrock, J.W. (2012). *Adolescence*. New York: McGraw-Hill Companies, Inc.
- [47] Sarıkaya, A. (2015). 14-18 Yaş arası gençlerin benlik saygısı ve psikolojik dayanıklılık düzeyleri arasındaki ilişki (Master's Thesis). İstanbul Bilişim Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- [48] Schütz, A. (1998). Coping with Treats to self-esteem: The differing patterns of subjects with high versus low trait self-esteem in first person accounts. *European Journal of Personality*, 12, 169-186.
- [49] Simpson, R.J. & Katsanis, E. (2020). The immunological case for staying active during the COVID-19. *Pandemic. Brain, Behavior, and Immunity*. doi: 10.1016/j.bbi.2020.04.041
- [50] Sipahioğlu, R. (2019). Sedanter kadınlarda 8 haftalık rekreatif etkinlikli yürüyüş egzersizinin benlik saygısı üzerine etkisi, (Master's Thesis). Batman Üniversitesi Sosyal Bilimler Enstitüsü, Batman.
- [51] Sun, J. & Stewart, D. (2007). Age and gender effects on resilience in children and adolescents. *International Journal of Mental Health Promotion*, 9(4), 16-25.
- [52] Tabachnick, B.G. & Fidell, L.S. (2013). *Using multivariate statistics* (Sixth edition). United States: Pearson Education.
- [53] Taşğın, Ö., Bozgeyikli, H. & Boğazlıyan, E.E. (2017). Üniversiteli gençlerin işsizlik kaygıları ile psikolojik dayanıklılıkları arasındaki ilişki. *Hak İş Uluslararası Emek ve Toplum Dergisi*, 6(16), 551-567. <https://dergipark.org.tr/en/pub/hakisderg/issue/33300/364605>.
- [54] Terzi, Ş. (2006). Kendini toplarlama gücü ölçeği'nin uyarlanması: Geçerlik ve güvenilirlik çalışmaları. *Türk Psikolojik Danışma ve Rehberlik Dergisi*, 26(3), 77-86.
- [55] Turgut, Ö. (2015). Ergenlerin psikolojik sağlamlık düzeylerinin, önemli yaşam olayları, algılanan sosyal destek ve okul bağlılığı açısından incelenmesi, (Master's Thesis). Anadolu Üniversitesi, Eskişehir.
- [56] Windle, G. (2011). What is resilience? A review and concept analysis. *Reviews in Clinical Gerontology*, 21(02), 152-169.
- [57] Wolberg, L.R. & Kildahl, J.P. (1970). *The Dynamics of Personality*, London: GruneveStratton, Inc.
- [58] Yavuzer, H. (2000). *Çocuk Psikolojisi. Remzi Kitabevi*. İstanbul.
- [59] Yeltepe, H. & Yargıç, L. (2011). Egzersiz ve stres. *Türkiye Klinikleri Psikiyatri Özel Dergisi*, 4(3), 51-58.
- [60] Yiğit, Ş., Yılmaz, T., Acar, E., & Dalbudak, İ. (2019). An investigation of self and aggression levels of weightlifters. *International Journal of Applied Exercise Physiology*, 8(3), 84-89.