



## Investigating the Relationship between Psychological Resilience Level and Enjoyment of Physical Activities in University Students

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### Abstract

This study aims to examine the relationship between the psychological resilience levels of university students and their enjoyment of physical activities. The study was conducted on 1226 students from three universities in the Central Anatolia Region of Turkey. Data were collected using the Protective Factor Scale for Psychological Resilience (PFRS) and the Physical Activity Enjoyment Scale (PACES). The findings show that the level of psychological resilience varies according to age and gender. Gender analysis shows that male students have higher levels of psychological resilience than female students. It was determined that the level of enjoyment of physical activities decreases as students age. A strong positive relationship was found between psychological resilience and enjoyment of physical activities. This relationship emphasizes that strengthening social support systems (peer and family support) and encouraging physical activities are of critical importance in increasing students' psychological resilience. As a result, it was concluded that educators and institutions should support students in adopting healthy lifestyles by creating awareness.

### Orijinal Makale

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## Üniversite Öğrencilerinde Psikolojik Sağlamlık Düzeyi ile Fiziksel Aktivitelerden Keyif Alma Düzeyi Arasındaki İlişkinin İncelenmesi

### Öz

Bu araştırma, üniversite öğrencilerinin psikolojik sağlamlık düzeyleri ile fiziksel aktivitelerden keyif alma düzeyleri arasındaki ilişkiyi incelemeyi amaçlamaktadır. Araştırma, Türkiye'nin İç Anadolu Bölgesi'ndeki üç üniversiteden 1226 öğrenci üzerinde gerçekleştirilmiştir. Veriler, Psikolojik Sağlamlıklar için Koruyucu Faktör Ölçeği (PSKFÖ) ve Fiziksel Aktivitelerden Keyif Alma Ölçeği (FAKÖ) kullanılarak toplanmıştır. Elde edilen bulgular, psikolojik sağlamlık düzeyinin yaş ve cinsiyete göre değişiklik gösterdiğini ortaya koymaktadır. Cinsiyet analizi sonuçları, erkek öğrencilerin psikolojik sağlamlık düzeylerinin kadın öğrencilerden daha yüksek olduğunu göstermektedir. Fiziksel aktivitelerden keyif alma düzeyinde, öğrencilerin yaşı ilerledikçe keyif alma düzeyinin azaldığı belirlenmiştir. Psikolojik sağlamlık ile fiziksel aktivitelerden keyif alma arasında güçlü bir pozitif ilişki saptanmıştır. Sonuç olarak, sosyal destek sistemlerinin (akran ve aile desteği) güçlendirilmesi ve fiziksel aktivitelerle teşvik edilmesinin, öğrencilerin psikolojik sağlamlıklarını artırmak için kritik öneme sahip olduğunu belirlenmiştir. Eğitimcilerin ve kurumların, farkındalık oluşturarak öğrencilerin sağlıklı yaşam tarzlarını benimsemelerine destek olmaları gerektiği önerilmektedir.

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## **INTRODUCTION**

Psychological resilience is a crucial concept that refers to an individual's ability to adapt, recover, and grow in the face of stress, trauma, negative life events, and challenges (Valiente et al., 2021; McManama O'Brien et al., 2021). Recent studies demonstrate that psychological resilience plays a vital role in protecting mental health, supporting academic success, and enhancing overall quality of life (Sabouripour et al., 2021; Yang et al., 2024). University students, in particular, often encounter various stressors, including academic pressures, social challenges, economic concerns, and uncertainty about their future (Logan & Burns, 2023; Hagedorn et al., 2022). Identifying the factors that enhance students' psychological resilience and developing interventions in this area can help them become more balanced and successful in their academic and social lives (Diab & Green, 2024; van Wyk et al., 2022). In this context, physical activity emerges as an essential lifestyle component that improves both physical and mental health (Emlek et al., 2023; Ugurlu et al., 2023).

The World Health Organization emphasizes that physical activity has positive effects on both physical and mental health (Vella et al., 2023; Carty et al., 2021). Regular physical activity contributes to stress reduction, alleviates symptoms of depression and anxiety, enhances cognitive functions, and increases feelings of energy (Chastin et al., 2021; Yapici et al., 2023). However, the sustained participation in physical activity is closely linked to how much individuals enjoy these activities (Hayes, 2022). Those who derive high levels of enjoyment from physical activity are more likely to engage in regular exercise, which positively impacts their physical and psychological health over the long term (Buecker et al., 2021).

For university students, physical activity is seen as both a physical and psychological balance in the intense pace of academic life (Fernández-Gavira et al., 2021; Luo et al., 2022). In addition to reducing stress levels, physical activity also provides psychosocial benefits such as strengthening social bonds and increasing self-confidence (Husain et al., 2024). However, students' level of participation in physical activities and the enjoyment they derive from these activities vary depending on individual differences, motivation levels, and psychological resilience levels (Deng & Wang, 2024).

This study aims to examine the relationship between the level of psychological resilience and enjoyment of physical activities in university students. In the study, it was investigated how psychological resilience affects attitudes towards physical activity and continuity of participation and how the enjoyment of physical activities is associated with psychological resilience. The findings are expected to contribute to the development of sports and exercise programs that support students' psychological resilience in universities.

## **MATERIALS and METHODS**

### **Research Model**

This study is a quantitative research conducted to examine the relationship between the level of psychological resilience of university students and their enjoyment of physical activities. It was designed within the framework of the relational screening model, which is one of the general screening models. Relational survey models aim to determine the relationships

between two or more variables and how they change together (Karasar, 2019). The study was approved by the Kırıkkale University Social and Human Sciences Research Ethics Committee, under decision number 2024/11-6.

### Research Group

The population of the study consists of university students studying at Kırıkkale University, Gazi University, and Ankara University, located in the Central Anatolia Region. The sample group of the study was determined by a random selection method (Khosla, 2021), and the participants were expected to participate in the study voluntarily. A power analysis was conducted to determine the total number of students representing the population. The sample size determined as a result of this analysis was found to be sufficient to ensure the reliability and validity of the study. In this context, the relationship between the size of the population and sample selection was evaluated in the light of the analysis.

**Table 1:** Demographic characteristics and physical activity profile of participants

Variables		N=1226	%
Gender	Men	461	37,6
	Women	765	62,4
Age	18	280	22,8
	19	259	21,1
	20	231	18,8
	21 and over	456	37,2
Socio Economic Status	Low	273	22,3
	Middle	890	72,6
	High	63	5,1
Weekly Physical Activity Level	1-2	831	67,8
	3-4	260	21,2
	5 + Over	135	11,0

Table 1 shows the demographic characteristics and physical activity levels of the participants. When the age distribution of the participants is analyzed, it is seen that individuals aged 21 years and over have the highest rate (37.2%). In gender distribution, female participants (62.4%) were significantly more than males (37.6%). In terms of perceived socio-economic status, the majority (72.6%) made a moderate assessment. The frequency of physical activity showed that 67.8% of the participants were active 1-2 times a week, which is noteworthy in terms of general health and lifestyle.

### Data Collection

Data were collected using a personal information form that included participants' age, gender, perceived socio-economic status, and weekly physical activity levels. The Protective Factors for Psychological Resilience Scale (PFRS) was adapted into Turkish by Tanko et al. (2021). This scale comprises 15 items across three sub-dimensions, rated on a 7-point Likert-type scale, with higher scores indicating greater psychological resilience (Cronbach's alpha = .93). The level of enjoyment of physical activities was assessed using the Scale of Enjoyment of Physical Activities (PACES), developed by Mullen et al. (2011) and adapted into Turkish by

Özkurt et al. (2022a). This scale consists of eight items, rated from 1 (strongly disagree) to 7 (strongly agree), with higher scores reflecting greater enjoyment (Cronbach's alpha = .93).

## Data Analysis

Cronbach's alpha analysis was conducted to assess the reliability of the study. The data were found to be normally distributed, as assessed by the Shapiro-Wilk test ( $p > 0.05$ ), confirming that they met the prerequisites for parametric tests. Consequently, an independent samples t-test was utilized for pairwise group comparisons, while an ANOVA test was employed for comparisons involving three or more groups. If a significant difference was detected, a Tukey post hoc test was applied to identify which groups differed. The analysis was carried out using statistical package software, with a significance level set at  $p < 0.001$ .

Additionally, correlation analysis was performed to explore the relationship between psychological resilience and enjoyment of physical activities. This analysis aimed to assess the nature and strength of the relationship between the two variables, using correlation coefficients for evaluation. Through this approach, potential links between psychological resilience and enjoyment of physical activities were identified.

## RESULTS

**Table 2:** Comparison of psychological resilience levels (PFRS) and physical activity enjoyment (PACES) Levels of University Students According to Gender

Variables	Women (n=765)	Men (n=461)	t	p
Personal	26.20 ± 5.7	27.02 ± 5.3	2.529	0,001*
Peer	27.60 ± 6.6	26.90 ± 6.6	-1.973	0,001*
Family	30.37 ± 6.3	28.81 ± 5.5	-1.217	0,001*
PACES	5.02 ± 1.1	5.84 ± 1.2	4.398	0,001*

\* $p < 0,001$

Table 2 shows that when the psychological resilience levels of university students (PFRS) and the levels of enjoyment of physical activities (PACES) were compared according to gender, it was seen that there were significant differences in psychological resilience levels between female and male students. While female students had a level of  $26.20 \pm 5.7$  in the personal sub-dimension, male students had a level of  $27.02 \pm 5.3$  ( $p < 0.001$ ). In the peer support sub-dimension, female students scored  $27.60 \pm 6.6$ , while male students scored  $26.90 \pm 6.6$  ( $p < 0.001$ ). According to the family support sub-dimension, female students scored  $30.37 \pm 6.3$  and male students scored  $28.81 \pm 5.5$  ( $p < 0.001$ ). According to the data obtained in the scale of enjoyment levels of physical activity, the average of female students was  $5.02 \pm 1.1$ , while the average of male students was  $5.84 \pm 1.2$  ( $p < 0,001$ ).

**Table 3:** Comparison of psychological resilience levels (PFRS) and physical activity enjoyment (PACES) levels of university students according to age, economic status and physical activity

Variables							
Age	18 Age <sup>1</sup> (n=280)	19 Age <sup>2</sup> (n=259)	20 Age <sup>3</sup> (n=231)	21 Over <sup>4</sup> (n=231)	F	p	Tukey
Personal	24.0 ± 4.2	25.0 ± 5.0	26.0 ± 5.8	27.5 ± 2.7	2,210	0,001*	1<2<3<4
Peer	29.5 ± 5.2	28.5 ± 4.2	26.5 ± 5.3	25.0 ± 2.5	1,453	0,001*	4<3<2<1
Family	28.2 ± 5.9	29.2 ± 5.2	29.3 ± 4.0	33.0 ± 3.0	2,065	0,001*	1<2<3<4
PACES	6.1 ± 1.4	5.5 ± 1.0	4.8 ± 1.4	4.8 ± 1.1	2,512	0,001*	4<3<2<1

### Economic Situation

	Low <sup>1</sup>	Middle <sup>2</sup>	High <sup>3</sup>	F	p	Tukey
Personal	24.0 ± 4.2	25.0 ± 5.0	27.5 ± 2.7	1.980	0,001*	1<2<3
Peer	25.5 ± 5.2	28.5 ± 4.2	29.0 ± 2.5	1.721	0,001*	1<2=3
Family	28.2 ± 5.9	29.2 ± 5.2	33.0 ± 3.0	2.116	0,001*	1=2<3
PACES	3.9 ± 1.4	5.9 ± 1.0	6.1 ± 1.1	1.561	0,001*	1<2=3
<b>Weekly Physical Activity</b>						
	1-2 Day <sup>1</sup>	3-4 Day <sup>1</sup>	5 Over <sup>3</sup>	F	p	Tukey
Personal	25.3 ± 2.2	26.4 ± 3.0	28.5 ± 2.2	1.410	0,001*	1<2<3
Peer	26.1 ± 5.1	29.5 ± 4.2	30.1 ± 2.4	1.750	0,001*	1<2=3
Family	28.6 ± 4.7	30.2 ± 5.2	32.0 ± 3.0	2.135	0,001*	1=2<3
PACES	4.6 ± 1.5	6.3 ± 1.2	6.6 ± 1.6	2.612	0,001*	1<2<3

\*p< 0,001

Table 3 compares the relationship between university students' psychological resilience levels (PFRS) and physical activity enjoyment levels (PACES) according to age, economic status and weekly physical activity frequency. The data obtained revealed that psychological resilience and enjoyment of physical activity showed significant differences in terms of demographic variables. Particularly among the age groups, the PFRS values of the 18-year-old students were significantly lower than those of the 21-year-olds and above, whereas the highest levels of PFRS were recorded in the 18-year-old age group. In terms of economic status, students in the low-income group had lower levels of PFRS and PACES compared to the other groups, while an increase was observed in both measures as the frequency of weekly physical activity increased.

**Table 4:** Investigation of the relationship between university students' psychological resilience levels (PFRS) and enjoyment of physical activities (PACES) levels by gender

Variables		r	r <sup>2</sup>	p value
Women and Men	Age - Physical Activity	-0.105*	0.011	0.005
	Socio-Economic Status - Physical Activity	0.126**	0.016	0.001
	Physical Activity - Peer	0.101*	0.010	0.005
	Physical Activity - PACES	0.257**	0.066	0.001
	Personal - Peer	0.469**	0.220	0.001
	Personal - Family	0.495**	0.245	0.001
	Personal- PACES	0.425**	0.181	0.001
	Peer - Family	0.574**	0.329	0.001
	Peer- PACES	0.506**	0.256	0.001
	Family- PACES	0.445**	0.198	0.001
Women	Age - Physical Activity	-0.146**	0.021	0.001
	Age- PACES	0.080*	0.006	0.005
	Socio-Economic Status - Physical Activity	0.101**	0.010	0.001
	Socio-Economic Status - Peer	0.106**	0.011	0.001
	Sosyo-Ekonmik Durum- Personal	0.132**	0.017	0.001
	Socio-Economic Status - Family	0.103**	0.015	0.001
	Physical Activity Level - Personal	0.098**	0.010	0.001
	Physical Activity - PACES	0.115**	0.013	0.001
	Personal- Peer	0.383**	0.147	0.001
	Personal- Family	0.404**	0.163	0.001
	Personal- PACES	0.464**	0.215	0.001
	Peer - Family	0.332**	0.110	0.001
	Peer- PACES	0.316**	0.099	0.001
	Family- PACES	0.294**	0.086	0.001
Men	Age - Physical Activity	-0.124**	0.153	0.001
	Socio-Economic Status - Physical Activity	0.094**	0.009	0.001
	Socio-Economic Status - Personal	0.064*	0.004	0.005
	Socio-Economic Status - Peer	0.060*	0.004	0.005

Socio-Economic Status - Family	0.066*	0.004	0.005
Physical Activity Level - Personal	0.098**	0.009	0.001
Physical Activity - PACES	0.192**	0.037	0.001
Personal- Peer	0.413**	0.171	0.001
Personal- Family	0.439**	0.193	0.001
Personal- PACES	0.453**	0.205	0.001
Peer - Family	0.442**	0.195	0.001
Peer- PACES	0.382**	0.146	0.001
Family - PACES	0.346**	0.120	0.001

\*\*, Correlation is significant at the 0.01 level (2-tailed).

\*, Correlation is significant at the 0.05 level (2-tailed).

Table 4 shows that when the relationships between university students' psychological resilience levels (PFRS) and their enjoyment of physical activities (PACES) are analyzed according to gender, the findings reveal that there are significant differences between female and male students in the relationships of variables such as age, socio-economic status, peer relationships and family support with physical activity. While a negative relationship was observed between age and physical activity in female students ( $r = -0.146$ ,  $p < 0.001$ ), the effect of socio-economic status on physical activity was positive ( $r = 0.101$ ,  $p < 0.001$ ). Positive relationships were also found between peer relationships and family support and personal resilience levels ( $r = 0.383$  and  $r = 0.404$ , respectively,  $p < 0.001$ ).

## DISCUSSION AND CONCLUSION

The aim of this study is to examine the relationship between university students' psychological resilience levels and their enjoyment of physical activities. The findings indicate a significant relationship between the variables, revealing that the sub-dimensions of the psychological resilience scale are interconnected with the enjoyment of physical activity scale.

The demographic characteristics and physical activity level of the participants were examined. According to the age variable of the participants, the highest rate was observed to be individuals aged 21 and over. According to the gender variable, female participants were significantly more than males. According to the perceived socio-economic variable, the socio-economic status of the majority was seen to be at a medium level. According to the weekly physical activity levels, more than half of the participants were seen to be active 1-2 times a week. This constitutes a remarkable situation in terms of general health and lifestyle.

The psychological resilience levels and physical activity enjoyment levels of university students were compared according to the age variable, and it was observed that there was a significant difference in psychological resilience levels between age groups. According to the personal sub-dimension and family support sub-dimension scores of the psychological resilience scale, the psychological resilience levels of 18-year-old students were low, while the psychological resilience level scores of students aged 21 and over were high. According to the peer support sub-dimension of the psychological resilience scale and the physical activity enjoyment scale scores, the scores of students aged 18 and over were high, while the scores of students aged 21 and over were low. These findings reveal that personal resilience and family support levels increase as university students age, but the level of enjoyment from physical activity decreases with age. Atik (2013) stated in his study that there was a positive and



significant relationship between the level of psychological resilience and age. Özkurt et al. (2022b), Kaya, Filiz, and Yıldırım (2021) with Peker et al. (2023) stated in their study that there was no significant difference between the physical activity enjoyment scale according to the age level variable. Stated in their study that as the age level of university students increased, their attitudes towards games that included physical activity increased. Taş and Yıldız (2023) also stated in their study that there is a difference between the levels of psychological resilience according to age groups and found that students over the age of 25 have a higher level of psychological resilience than students aged 17-20 and 21-24. These findings are similar to the present study, which further supports the idea that as university students age, their psychological resilience improves due to increased education levels and family support. However, it is important to note that the decrease in enjoyment of physical activity with age requires further exploration to understand the underlying factors. The reason for this is that as students get older, their level of education increases, and they receive support from their families; their self-confidence improves.

The psychological resilience levels of university students (PFRS) and their enjoyment of physical activities (PACES) were analyzed based on gender. Significant differences were found between the psychological resilience and enjoyment levels of physical activities across genders. Specifically, female students scored lower in the personal resilience sub-dimension compared to male students. However, in the peer support and family support sub-dimensions of psychological resilience, female students had higher scores than their male counterparts. According to the data from the enjoyment of physical activity scale, female students had a lower average score, while male students had a higher average. These findings suggest that male students exhibit higher levels of psychological resilience and enjoyment of physical activities compared to female students. Karabulut (2024) indicated that gender is a significant factor influencing psychological resilience. Üstündağ (2024) found that the psychological resilience of adolescents varies by gender, noting that peer support plays a critical role in emotional regulation. Additionally, Taş and Yıldız (2023) reported higher psychological resilience levels in males compared to females. Conversely, Akdeniz, Savtekin, and Köylü (2021), along with Oktan, Odacı, and Çelik (2014), discovered that female students exhibited higher psychological resilience levels than male students. Furthermore, Kaya, Filiz, and Yıldırım (2021) noted that male students generally enjoy physical activities more than female students.

The relationship between the psychological resilience levels of university students and the level of enjoyment of physical activities according to gender (female-male), a weak relationship between age and perceived socio-economic status, and a significant negative relationship between age and physical activities performed per week were found. In addition, a significant positive relationship was found between perceived socio-economic status and weekly physical activities. Among the sub-dimensions of psychological resilience levels, there is a significant relationship between the personal resilience sub-dimension and the peer support sub-dimension, between the family support sub-dimension and the personal resilience sub-dimension, and between peer support and family support. It was also observed that there was a positive relationship between the level of enjoyment of physical activities (PACES) and the sub-dimensions of personal resilience, peer support, and family support. Aydın and

Egemberdiyeva (2018) stated in their study that the level of psychological resilience did not differ by gender and that the level of psychological resilience was related to peer support. Karabulut (2024) stated that gender and perceived socio-economic level affected psychological resilience. This study shows that there is a relationship between all sub-dimensions of psychological resilience level and enjoyment of physical activities scores, and further research is needed to understand the effects of gender on these relationships.

In examining the relationship between the psychological resilience levels of female university students and their enjoyment of physical activities, a weak relationship was observed between age and perceived socio-economic status. However, a significant negative relationship was found between age and weekly physical activities. Additionally, a positive correlation was identified between perceived socio-economic status and weekly physical activities. A significant relationship emerged between the personal resilience sub-dimension and peer support, as well as a positive relationship between family support and personal resilience. Furthermore, a significant connection was found between the level of enjoyment of physical activities (PACES) and personal resilience. Positive relationships were also observed between the enjoyment of physical activities scale (PACES) and both peer support and family support. These findings indicate that relationships exist between psychological resilience, its sub-dimensions, and the level of enjoyment of physical activities among female students. Notably, the strongest relationship was found between the personal resilience sub-dimension and the level of enjoyment of physical activity, favoring women. This study is significant as it contributes to the literature, particularly in an area where scientific sources are currently limited.

In the context of the relationship between male university students' levels of psychological resilience and their enjoyment of physical activities, a weak relationship was found between age and perceived socio-economic status. Conversely, a significant negative relationship was identified between age and weekly physical activities. Additionally, there is a positive correlation between perceived socio-economic status and weekly physical activities. The analysis revealed a significant relationship between personal resilience and peer support, as well as a positive relationship between family support and personal resilience. A significant connection was also found between psychological resilience and personal resilience scores. Moreover, positive relationships were observed between the enjoyment of physical activities scale (PACES) and both peer support and family support. These findings indicate that relationships exist between the sub-dimensions of the psychological resilience scale and the level of enjoyment of physical activities among male students. The results suggest that attitudes associated with self-confidence, opportunities, privileges, and the encouraging and motivating approaches adopted by males from childhood contribute to a high relationship between personal resilience, family support, peer support, and the enjoyment of physical activities. The lack of studies addressing these relationships in the existing literature highlights the significance of this research. Consequently, this study serves as a valuable resource for future research in this area.

As a result, the data obtained from the study reveal that the level of psychological resilience varies according to age, and gender. It was observed that 21-year-old students had higher levels of psychological resilience than 18-year-old students. It was observed that the level of



psychological resilience increased with age. This shows that age and experience positively affect psychological resilience. In the analyses conducted in terms of gender, it was concluded that the psychological resilience levels of male students were higher than female students. This shows that this may be a reflection of the different perceptions and experiences of men towards the sub-dimensions of the psychological resilience level scale. The level of enjoyment of physical activities was also found to vary according to age. Younger students (18 years old) enjoyed physical activities more, while this level of enjoyment decreased with increasing age. This may be associated with the increase in educational obligations and stress levels of students. In addition, it was determined that the level of enjoyment of physical activities was positively correlated with psychological resilience, especially with peer and family support. This suggests that strengthening the systems in the sub-dimension of the psychological resilience scale may help students enjoy physical activities more and thus increase their psychological resilience. Correlation analyses revealed strong positive relationships between the level of psychological resilience, personal resilience, peer support, family support and enjoyment of physical activities. These findings suggest that the systematic use of peer support, family support and personal resilience sub-dimensions will play an important role in increasing students' psychological resilience.

The results of this study provide important clues for the development of strategies to increase the psychological resilience levels of university students. In particular, strengthening social support systems (peer support, family support, personal resilience) and encouraging physical activity are of great importance in terms of increasing students' psychological resilience and improving their quality of life. In addition, it will help educators and educational institutions to adopt a healthier lifestyle by providing support to students in these areas.

## **RECOMMENDATIONS**

In order to increase the psychological resilience levels of university students and to enable them to enjoy physical activities more, support programs should be established in universities that will facilitate the work of students and provide opportunities to meet their needs by getting the support of institutions, instructors, administrators, and staff, and support groups for students should be encouraged. Activities can be organized to increase peer support. In addition, sports events and clubs should be organized to encourage physical activity, and students should be provided with easily accessible opportunities to engage in regular physical activity. Training seminars and workshops can be organized to provide students with knowledge and skills on psychological resilience, stress management, and healthy living. Awareness should be raised and informative brochures and online content should be prepared to help students understand the positive effects of physical activities on psychological health. Regular sports activities, competitions, and social events can be planned on campus to increase students' social interactions. University administrations should develop policies and strategies on physical activity and psychological resilience to promote student health. Implementation of these recommendations will make significant contributions to the overall health and quality of life of university students.

## REFERENCES

- Akdeniz, H., Savtekin, G. & Köylü, K. (2021). Üniversite öğrencilerinin yaşam doyumlarının, psikolojik sağlık düzeylerine etkisinin incelenmesi. *Spor ve Rekreasyon Araştırmaları Dergisi*, 3(1), 36-52. <https://doi.org/10.52272/srad.927472>
- Atik, E. L. (2013). Liseli ergenlerde bağlanma stilleri ve psikolojik sağlık düzeyleri arasındaki ilişkide öz-yansıtma ve içgörünün rolü (Yayımlanmamış yüksek lisans tezi). İstanbul Bilim Üniversitesi Sosyal Bilimler Enstitüsü, İstanbul.
- Aydın, M. & Egemberdiyeva, A. (2018). Üniversite öğrencilerinin psikolojik sağlık düzeylerinin incelenmesi. *Türkiye Eğitim Dergisi*, 3(1), 37-53.
- Buecker, S., Simacek, T., Ingwersen, B., Terwiel, S. & Simonsmeier, B. A. (2021). Physical activity and subjective well-being in healthy individuals: A meta-analytic review. *Health Psychology Review*, 15(4), 574-592. <https://doi.org/10.1080/17437199.2020.1760728>
- Carty, C., van der Ploeg, H. P., Biddle, S. J., Bull, F., Willumsen, J., Lee, L. & Milton, K. (2021). The first global physical activity and sedentary behavior guidelines for people living with disability. *Journal of Physical Activity and Health*, 18(1), 86-93. <https://doi.org/10.1123/jpah.2020-0629>
- Chastin, S. F., Abaraogu, U., Bourgois, J. G., Dall, P. M., Darnborough, J., Duncan, E. & Hamer, M. (2021). Effects of regular physical activity on the immune system, vaccination and risk of community-acquired infectious disease in the general population: Systematic review and meta-analysis. *Sports Medicine*, 51(8), 1673-1686. <https://doi.org/10.1007/s40279-021-01466-1>
- Deng, Y. & Wang, X. (2024). The impact of physical activity on social anxiety among college students: The chain mediating effect of social support and psychological capital. *Frontiers in Psychology*, 15, 1406452. <https://doi.org/10.3389/fpsyg.2024.1406452>
- Diab, A. & Green, E. (2024). Cultivating resilience and success: Support systems for novice teachers in diverse contexts. *Education Sciences*, 14(7), 711. <https://doi.org/10.3390/educsci14070711>
- Emlek, B., Yapıcı, H., Ayan, S., Ugurlu, D., Gök, O., Yılmaz, A. & Doğan, A. A. (2023). Investigation of physical activity levels in adolescents. *Journal of Exercise Science and Physical Activity Reviews*, 1(1), 46-56. <https://doi.org/10.5281/zenodo.8399816>
- Fernández-Gavira, J., Castro-Donado, S., Medina-Rebollo, D., & Bohórquez, M. R. (2021). Development of emotional competencies as a teaching innovation for higher education students of physical education. *Sustainability*, 14(1), 300. <https://doi.org/10.3390/su14010300>
- Hagedorn, R. L., Wattick, R. A. & Olfert, M. D. (2022). "My entire world stopped": College students' psychosocial and academic frustrations during the COVID-19 pandemic. *Applied Research in Quality of Life*, 17(2), 1069-1090. <https://doi.org/10.1007/s11482-021-09948-0>
- Hayes, M. (2022). Social media and inspiring physical activity during COVID-19 and beyond. *Managing Sport and Leisure*, 27(1-2), 14-21. <https://doi.org/10.1080/23750472.2020.1794939>
- Husain, H., Samsudin, S., Ayub, A. F. M., Ahmad, M. F. & Afwan, N. S. Z. S. (2024). A systematic literature review on the impact of participation in sport and physical activities on psychological resilience. *International Journal of Public Health Science*, 13, 1727. <https://doi.org/10.11591/ijphs.v13i4.24345>
- Karabulut, E. O. (2024). Sporcu ergenlerde algılanan helikopter ebeveynlik tutumlarının ve psikolojik sağlık düzeylerinin incelenmesi. *Gazi Journal of Physical Education and Sport Sciences*, 29(3), 134-143. <https://doi.org/10.53434/gbesbd.1447297>
- Karasar, N. (2019). *Bilimsel araştırma yöntemi: Kavramlar, ilkeler, teknikler* (2. baskı). Nobel Akademik Yayıncılık.
- Kaya, D. G., Filiz, B. & Yıldırım, N. (2021). Spor bilimleri fakültesi öğrencilerinin fiziksel aktivite içeren oyunlara yönelik tutumlarının belirlenmesi (18-22 yaş). *Sportmetre Beden Eğitimi ve Spor Bilimleri Dergisi*, 19(1), 116-126. <https://doi.org/10.33689/sportmetre.697578>
- Khosla, I. (2021). Book review: *Social research methods: Qualitative and quantitative approaches*. Pearson Education Limited.

- Logan, B. & Burns, S. (2023). Stressors among young Australian university students: A qualitative study. *Journal of American College Health*, 71(6), 1753-1760. <https://doi.org/10.1080/07448481.2021.1947303>
- Luo, Q., Zhang, P., Liu, Y., Ma, X. & Jennings, G. (2022). Intervention of physical activity for university students with anxiety and depression during the COVID-19 pandemic prevention and control period: A systematic review and meta-analysis. *International Journal of Environmental Research and Public Health*, 19(22), 15338. <https://doi.org/10.3390/ijerph192215338>
- McManama O'Brien, K. H., Rowan, M., Willoughby, K., Griffith, K. & Christino, M. A. (2021). Psychological resilience in young female athletes. *International Journal of Environmental Research and Public Health*, 18(16), 8668. <https://doi.org/10.3390/ijerph18168668>
- Mullen, S. P., Olson, E. A., Phillips, S. M., Szabo, A. N., Wójcicki, T. R., Mailey, E. L., Neha, P. G., Jason, T. F., Arthur, F. K. & McAuley, E. (2011). Measuring enjoyment of physical activity in older adults: Invariance of the physical activity enjoyment scale (PACES) across groups and time. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 103-110.
- Oktan, V., Odacı, H. & Çelik, Ç. B. (2014). Psikolojik doğum sırasının psikolojik sağlamlığın yordanmasındaki rolünün incelenmesi. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 14(1), 140-152.
- Özkurt, B., Küçükbiş, H. F. & Altın, Y. (2022b). Lise ve üniversite öğrencilerinin fiziksel aktivitelerden keyif alma düzeylerinin incelenmesi. *Sivas Cumhuriyet Üniversitesi Spor Bilimleri Dergisi*, 3(3), 91-98.
- Özkurt, B., Küçükbiş, H. F., & Eskiler, E. (2022a). Fiziksel aktivitelerden keyif alma ölçeği (FAKÖ): Türk kültürüne uyarlama, geçerlik ve güvenilirlik çalışması. *Anemon Muş Alparslan Üniversitesi Sosyal Bilimler Dergisi*, 10(1), 21-37. <https://doi.org/10.18506/anemon.976300>
- Peker, H., Teke, C., Çakar, B., Kabadayı, Y., & Caner, N. (2023). Fiziksel aktiviteden keyif alma, tekrar katılma niyeti ve mutluluk arasındaki ilişki: Kampüs rekreasyonuna katılan üniversite öğrencileri örneği. *Uluslararası Güncel Eğitim Araştırmaları Dergisi*, 9(2), 206-220.
- Sabouripour, F., Roslan, S., Ghiami, Z. & Memon, M. A. (2021). Mediating role of self-efficacy in the relationship between optimism, psychological well-being, and resilience among Iranian students. *Frontiers in Psychology*, 12, 675645. <https://doi.org/10.3389/fpsyg.2021.675645>
- Tanko, Ç., Ekşi, F., Hatun, O. & Ekşi, H. (2021). Psikolojik sağlamlık için koruyucu faktörler ölçeği Türkçe formunun geçerlik ve güvenilirliği. *Ege Eğitim Dergisi*, 22(1), 16-29. <https://doi.org/10.12984/eegefd.793597>
- Taş, S., & Yıldız, E. (2023). Üniversite öğrencilerinin psikolojik sağlamlık düzeylerinin çeşitli değişkenler açısından incelenmesi: Bir vakıf üniversitesi örneği. *Uluslararası Yönetim Araştırmaları ve Uygulamaları Dergisi*, 2 (1), 24-45.
- Uğurlu, D., Emlek, B., Yagin, F. H., Uygurtas, M. & Yapıcı, H. (2023). Examination of physical activity levels of university students. *Journal of Exercise Science and Physical Activity Reviews*, 1(1), 35-45. <https://doi.org/10.5281/zenodo.8399742>
- Üstündağ, A. (2024). The mediating effect of adolescents' emotional regulation strategies on their psychological resilience. *Psychology in the Schools*, 4569-4588. <https://doi.org/10.1002/pits.23300>
- Valiente, C., Vázquez, C., Contreras, A., Peinado, V. & Trucharte, A. (2021). A symptom-based definition of resilience in times of pandemics: Patterns of psychological responses over time and their predictors. *European Journal of Psychotraumatology*, 12(1), 1871555. <https://doi.org/10.1080/20008198.2020.1871555>
- van Wyk, M., Mason, H. D., van Wyk, B. J., Phillips, T. K. & van der Walt, P. E. (2022). The relationship between resilience and student success among a sample of South African engineering students. *Cogent Psychology*, 9(1), 2057660. <https://doi.org/10.1080/23311908.2022.2057660>
- Vella, S. A., Aidman, E., Teychenne, M., Smith, J. J., Swann, C., Rosenbaum, S. & Lubans, D. R. (2023). Optimising the effects of physical activity on mental health and wellbeing: A joint consensus statement from Sports Medicine Australia and the Australian Psychological Society. *Journal of Science and Medicine in Sport*, 26(2), 132-139. <https://doi.org/10.1016/j.jsams.2023.01.001>

- Yang, Y., Obrenovic, B., Kamotho, D. W., Godinic, D. & Ostic, D. (2024). Enhancing job performance: The critical roles of well-being, satisfaction, and trust in supervisor. *Behavioral Sciences*, 14(8), 688. <https://doi.org/10.3390/bs14080688>
- Yapıcı, H., Ugurlu, D., Emlek, B., Doğan, A. A., Alexe, D. I. & Al-Mhanna, S. B. (2023). Health Belief Scale for Sportive Recreational Activities in University Students. *Journal of Exercise Science and Physical Activity Reviews*, 1(2), 1-12. <https://doi.org/10.5281/zenodo.10438880>