Original Article

Determination of Depression, Anxiety and Stress Levels of Sports Sciences Students

Sır Elif [1]
Sarı Yunus [2]
Lök Neslihan [3]
Lök Sefa [4*]

[1,2,3] *Selcuk University, Konya 42250, Turkey*
[4]*Selcuk University (Corresponding author), Konya 42250, Turkey*

Abstract

In this study, it was aimed to determine the depression, anxiety and stress levels of students studying at the sports science faculty of a university. This descriptive study was conducted with 100 students from the sports sciences faculty coaching education department who did not have chronic mental disorders in themselves or in their families without choosing a sample. Personal information form and depression, anxiety, stress scale were used as data collection tools. A positive, strong (r: 0.812) and significant relationship was found between depression and stress (p <0.001). Depression, anxiety and stress levels of the participants increase significantly with a strong relationship.In line with the findings obtained from the study, it was observed that the students' levels of depression, anxiety and stress were high.

1. Introduction

The youth period, which includes the university years, is the period when the effort to form one's own identity, in which a person is in conflict with sexual, emotional, academic, economic and society, increases (, Tunç & Yapıcı 2019). In addition to the problems experienced by normal young people in university youth, they have to face difficulties such as alienation from the family, new circle of friends, economic problems, future working life and a new education life (Şanal Karahan, 2016). Considering all these, depression, anxiety, and stress appear as common psychological disorders in university students (Shamsuddin et al., 2013). Depression is characterized by loss of interest and inability to enjoy activities

---

* *E-mail*: sefalok@selcuk.edu.tr

enjoyed (Sözeri Varma, Karadağ, Kalkan Oğuzhanoğlu, & Özdel, 2017), and a condition that disrupts the functionality of the person for at least two weeks (WHO, 2021). Deep sadness, depression, fluctuating affect, anxiety, stagnation in thought, movement, speech and physiological functions, worthlessness, weakness, pessimism, reluctance, smallness (Tekir et al., 2018), suicidal feelings and thoughts are dominant in people with depression (Sözeri Varma et al., 2017). Depression is among the most common diseases worldwide. It ranks second in disability (Ekmekçi Ertek et al., 2020). Depression, which affects more than 264 million people (WHO, 2021), is more common in women than in men. Although depression can occur in all age groups, it is more common in the late 20s (Ekmekçi Ertek et al., 2020).

Anxiety; It is a state of distress, anxiety, fear, anxiety and tension that people experience in certain periods of their lives, accompanied by various physiological symptoms (Çam & Engin, 2014). Anxiety is defined as a person's fear or anxiety state that is not based on a valid reason and whose sources are caused by external causes (Belge, 2019). This situation inherent in human nature (Sarıçam, 2018) warns the person against dangers and enables them to react. In the presence of danger, a harmonious functioning of the mechanism starts, and unreal perceptions occur due to the impairments in perception. However, if stimulation occurs in the mechanism despite the lack of danger and this impairs the functionality of the person, a mental disorder can be mentioned (Dündar, 2020). Anxiety prevents the individual from continuing his normal life (Ströhle, 2018). Anxiety causes impairment in the individual's perception, learning and thinking abilities (Yılmaz, Boz & Arslan, 2017). Stress is a situation of difficulties or distress felt in interpersonal relationships, the situations faced by a person in his / her daily life (Newbury-Birch & Kamali, 2001). When the person's internal balance is disturbed, the emotion he experiences is stress. The response to stress causes complex behavioral and physiological responses (Sürme, 2019). In studies conducted at different universities abroad and in our country, it has been concluded that more than half of the students who are studying have depression, anxiety and stress problems (Cheung et al., 2016; Basudan, Bınanzan & Alhassan, 2017; Yeniocak Tunç & Yapıcı, 2019; Asif et al., 2020).

In a study conducted at a university in Hong Kong, it was determined that moderate and extremely severe depression was 24.3%, anxiety was 39.9%, and stress was 20.0% (Cheung et al., 2016). In a study conducted with students studying at the faculty of dentistry in Riyadh, Saudi Arabia; 55.9% of the students had depression, 66.8% anxiety, 54.7% stress (Basudan et al., 2017). In another study conducted in Pakistan, in different departments of different universities; The prevalence of depression was mild 16%, moderate 35.8%, severe 14.6%, extreme severe 8.6%, anxiety prevalence was mild 4.4%, moderate 19.4%, severe 17.8% and extremely severe 46% 8, and stress was found to be 33.8% mild, 35.4% moderate, 13.2% severe, and 2.8% extremely severe (Asif et al., 2020). In a study conducted at a university in our country, advanced or very advanced depression was found to be 22.2%, anxiety 22.1%, and stress 15.5% (Yeniocak Tunç &

Yapıcı, 2019). In another study conducted in Turkey, moderate or severe depression was found to be 27.1%, anxiety was 47.1%, and stress was 27% (Bayram & Bilgel, 2008). This study was planned due to the future anxiety experienced by the students of sports sciences, the competition between them and the lack of sufficient studies on this subject in literature.

2. Material and methods

Type of research: This study was planned as a descriptive research.

The place and features of the research:It was conducted with students enrolled in the Sport Sciences Faculty of a University.

Study group of the research:In the study, without choosing a sample, the faculty's coaching education will constitute a sample of all students studying in the first grade. The sample of the study consisted of 100 students who agreed to participate in the study and were diagnosed and who did not have any chronic mental illnesses in themselves or in their family.

Data Collection Techniques and Tools:The data of the research were collected via Google Forms between 15-30 April 2021. The questionnaires were delivered to the participants via social media; After the sample size was reached, the data collection process was ended. In collecting data; The personal information form and the Depression Anxiety Stress Scale (DASS), which questioned the socio-demographic characteristics and prepared by the researchers, were used.

Depression Anxiety and Stress Scale (DASS)

It is a scale developed by Lovibond and Lovibond, valid and reliable in Turkish by Akın and Çetin (2007). In the scale, there are a total of 42 items, 14 of which are depression, 14 are anxiety, and 14 are stress dimensions. For each item, students are asked to evaluate their last week. The scale has a 4-point Likert-type grading such as 0 - not suitable for me, 1 - slightly suitable for me, 2 - generally suitable for me, and 3 - completely suitable for me. The total score of the non-inverse scale varies between 0 and 42 for each sub-dimension. The fact that the scores obtained from each of the dimensions of depression, anxiety and stress are higher in the scale reveals that the individual has the relevant problem. Cronbach's Alpha (α), internal consistency coefficients of DASS were found as .89 for the whole scale, and .90, .92 and .92 for depression, anxiety and stress sub-dimensions, respectively.

Data Evaluation

The data of the study were evaluated using the SPSS for Windows 22.0 (Statistical Package for Social Science) statistical package program. Unit number (n), percentage (%), mean ± standard deviation (mean (SD)) values will be used as summary statistics. Normal distribution of data was evaluated by Shapiro-Wilk test and Q-Q graph. Pearson's correlation analysis was used to analyze the data. Results were evaluated at 95% confidence interval and $p < 0.05$ significance level.

3. Results and Discussions

The average age of the participants was determined as 21.17 ± 2.41 (n = 100). 60% of the participants in the study are female students and 40% are male students. 31% (n = 31) of the students live in nuclear family, 42% (n = 42) in extended family, 27% (n = 27) in divorced parents. While the mothers of 32% (n = 32) of the students are primary school graduates, the fathers of 39% of the students are university graduates. The mothers of 58% (n = 58) of the participants are working, and the fathers of 30% (n = 30) are not working.

While 35% (n = 35) of the students evaluated their perceived income level as good, 24% (n = 24) evaluated their perceived health status as medium, 55% (n = 55) answered yes to smoking (Table 1).

Table 1. *Distribution of Students' Sociodemographic Characteristics*

Variables	Mean±SD	
Age	21,17±2,41	
	Number (n)	**Percent (%)**
Gender		
Girl	60	%60
Male	40	%40
Family Type		
Nuclear family	31	%31
Extended family	42	%42
Mother and father divorced separately	27	%27
Mother's education status		
Primary education	32	%32
High school	47	%47
University	21	%21
Mother's working status		
Working	58	%58
Not working	42	%42
Father's education status		
Primary education	14	%14
High school	47	%47
University	39	%39
Father's employment status		
Working	70	%70
Not working	30	%30
Perceived Income Level		
Good	35	%35
Middle	36	%36
Bad	29	%29
Perceived Health Status		
Good	36	%36
Middle	24	%24
Bad	40	%40
Smoking status		
Yes	55	%55
No	45	%45

When the students' depression, anxiety and stress mean scores were evaluated, their average depression scores were 33.79 ± 4.37 (min = 19, max = 41), anxiety scores 28.76 ± 5.51 (min = 21, max = 40) and stress scores It was determined as 30.28 ± 4.67 (min = 20, max = 38) (Table 2).

Table 2. *Distribution of Students' Depression Anxiety and Stress Scores*

Scales	Mean±SD	Min-Max
Depression Score Average	33.79±4.37	19-41
Anxiety Score Average	28.76±5.51	21-40
Stress Score Average	30.28±4.67	20-38

A strong positive (r: 0.772) and significant (p <0.029) relationship was found between depression and anxiety. A strong positive (r: 0.812) and significant (p <0.001) relationship was found between depression and stress. A strong positive (r: 0.812) and significant (p <0.001) relationship was found between anxiety and stress. Depression, anxiety and stress levels of the participants increase significantly with a strong relationship. The variance explained by depression and anxiety on each other was 60%, the variance explained by depression on each other was 66%, and the variance explained by anxiety on stress was 61%. According to these results, depression and anxiety may affect each other by 60%, depression and stress may affect each other by 66%. Stress and anxiety may affect 61% of them.

Table 3. *Relationship between Depression Anxiety and Stress Levels of Students*

DASS Scale	Depression	Anxiety	Stress
Depression	1,00		
Anxiety	r:0.772 p:0.029*	1.00	
Stress	r:0.812 p:0.001*	r:0.783 p:0.04*	1.00

r: Pearson correlation analysis, *p<0,05

Discussions

This study was conducted with the aim of evaluating the factors related to depression, anxiety and stress levels of the students of a sports science faculty. Although there are researches conducted in different departments of universities, there are few studies conducted with students studying at the faculty of sports sciences. In our research, the situation of these students in the last week was evaluated. When evaluated according to the criteria in the scale, it was determined that the students experienced different levels of depression, anxiety and stress.

In our study, the average age of the participants was found to be 21.17 ± 2.41, including 60% female and 40% male participants. In another study in which female students were in the majority and the average age was 20.1 ± 2.0, the smoking rate was found to be 18.8 (Pesen & Mayda, 2020). When the findings of our study are compared with this study, the rate of smoking was found to be quite high. There may be a link between smoking because the other study was conducted with medical students and the average age was low.

In the study conducted by Öncü and his friends (2013) a significant relationship was found between students' difficulties in meeting essential needs and their depression, anxiety and stress situations. In our study, the fact that 40% of the students answered the perceived income level as bad supports the high average score for depression, anxiety and stress. In addition, the high depression, anxiety and stress scores of students with financial difficulties in the study conducted by Cheung et al. (2016) is consistent with the results of the study.

In our study, 32% of the mothers of the students were primary school graduates and 14% of the fathers. According to the data obtained, most of the students' parents have low educational level. Although a significant difference was found in the study conducted by Shao et al. (2020), the anxiety level of students with low education level of parents was found to be higher than students with higher education level of parents. This situation sheds light on the result of our research. In a study conducted in Saudi Arabia, it was found that low education level of the mother increased the stress level in students, while low education level of the father increased the levels of depression, anxiety and stress in students (Mohammad et al., 2020).

In our study, the rate of not working mothers was determined as 42%, and the rate of not working fathers was 30%. In a systematic study conducted in China, it was concluded that the unemployment rate of parents, especially the father's not working, increases the stress factor in students (Mao et al., 2019). In our study, it was thought that it may be an effective factor in the high average stress score.

As a result of our study, the mean depression score was 33.79 ± 4.37, the anxiety mean score was 28.76 ± 5.51, and the stress score average was 30.28 ± 4.67. Considering the Turkey Mental Health Profile Report, while the rate of depressive episodes in the society after the age of 18 was 4.0%, this rate was found to be 2.3% for men and 5.4% for women (Yeniocak Tunç & Yapıcı, 2019). In a study examining the relationship between depression and anxiety in young people who do sports, it was found that these mental problems are less common in young people doing sports (Canan and Ataoğlu 2010). In the study conducted by Pesen and Mayda with medical faculty students in 2020 using the DAS scale, the percentages of depression, anxiety and stress were determined as 49.19%, 56.74% and 49.80%, respectively. In the study of 80 students studying in different departments of the university by Erçim et al. (2020). Considering the data 3 weeks before the exam period, the students' mean depression score was 12.6 ± 9.9, the anxiety mean score was 12.6 ± 8.6, and the stress score average was 14, It was found to be 6 ± 9.7. In another study, students studying in different departments

and different classes of the university were evaluated and their depression score averages were 23.46, their anxiety mean scores were 23.85, and their stress score averages were determined as 26.31 (Akdeniz & Deniz, 2019).

When the data of our study were compared with the findings obtained from the studies conducted in our country and in the world, it was concluded that the depression, anxiety and stress scores of the students of the faculty of sports sciences were lower than the medical students. It can be thought that this difference emerged as the students in our study did not experience their future anxieties intensely because they were first grade and they were studying at the faculty of sports sciences. In addition, it may be thought that students who are studying at the medical faculty are concerned with human health and fear of harm, and the intensity of the course is higher than the other faculties, which may lead to mental problems above the average. When we look at the studies conducted in different departments of the university, the average score is low according to our study, these students adapt to the university environment, create a circle of friends and overcome the problems of leaving the family, and the rate of students studying at the faculty of sports sciences is low compared to other departments of the university. and having more future concerns. Mofatteh's study (2020), in which he examined studies on depression, anxiety and stress with university students between 2010 and 2020, concluded that 1st grade students experience more depression, anxiety and stress, which supports this situation.

In a study conducted in China, which included different university departments, students' mean depression score was 7.22-7.79, stress score average was 9.53-11.68, and anxiety mean score was 7.40-7.24-7.10. has been determined. In this study, it was determined that first and second year students' scores were higher than third and fourth year students (Liu, Ping, & Gao, 2019). This situation supports the difference between our work and studies conducted with different classes in different departments of universities.

As a result of another study, female students' depression, anxiety and stress scores were found to be significantly higher than male students. In addition, social support systems were found to be a related factor in preventing the emergence of depression and anxiety problems in students (Cantürk, 2014). The fact that the students participating in our study are female students and the students who have a fragmented family at a rate of 27% may explain the high average scores. The fact that students from a broken family had high mean depression in the study by Kaya et al. Supports the result of our study (Kaya et al., 2007).

Again, when the data of our study were evaluated, a strong positive (r: 0.772) and significant (p <0.029) relationship was found between depression and anxiety. Depression and anxiety disorder have a very broad set of intersections. As can be seen in the studies conducted, the high rate of depression and anxiety diagnoses (Türkçapar, 2004; Karamustafalıoğlu & Yumrukçal, 2011) confirms our study. Depression and anxiety have many similarities with each other, as well as triggering each other.

4. Conclusions

As a result, depression, anxiety and stress levels were found to be above average in sports sciences faculty students. It was concluded that parents' education level, family income level, students' receiving social support and class level play a role in the change in students' depression, anxiety and stress levels. At the same time, it was determined in the results that depression, anxiety and stress significantly affect each other. More comprehensive research should be conducted for these students who have just started their university education and students should be provided with psychological support. This step will be a positive move for the development of healthy athletes and healthy fitness trainers in the future.

References

1. AKDENIZ, S., & DENIZ, M.E., (2019). Farklı Merhamet Düzeylerine Sahip Üniversite Öğrencilerinde Depersyon, Anksiyete, Stres Ve Duygusal Zekanın İncelenmesi. *Karatay Sosyal Araştırmalar Dergisi,* 2, 183-207.
2. AKIN, A. & ÇETIN, B. (2007). Depresyon Anksiyete Stres Ölçeği (DASS): Geçerlilik Ve Güvenilirlik Çalışması. *Eğitim Bilimleri: Teori Ve Uygulama*, 7, 260-268.
3. ASIF, S., MUDASSAR, A., SHAHZAD, TZ, RAOUF, M., & PERVAIZ, T. (2020). Üniversite Öğrencilerinde Depresyon, Kaygı Ve Stres Sıklığı. *Pakistan Tıp Bilimleri Dergisi* , *36* (5), 971-976. DOI.org/10.12669/pjms.36.5.1873.
4. BASUDAN, S., BINANZAN, N., & ALHASSAN, A. (2017). Depression, Anxiety And Stress In Dental Students. *International Journal Of Medical Education*, *8*, 179–186. DOI.org/10.5116/ijme.5910.b961.
5. BAYRAM, N. & BİLGEL, N. (2008). The Prevalence And Socio-Demographic Correlations Of Depression, Anxiety And Stress Among A Group Of University Students. *Social Psychiatry and Psychiatric Epidemiology,* 43, 667-672.
6. BELGE, J. (2019, December 21). Bir Grup Yetişkinde Depresif Semptomlar, Anksiyete Semptomları Ve Belirsizliğe Tahammülsüzlük Arasındaki İlişkinin Belirlenmesi (Yüksek Lisans Tezi). Retrieved from http://acikerisim.gelisim.edu.tr/xmlui/handle/11363/1568.2019-12-21T18:45:03Z.
7. CANTÜRK. H. (2014). Üniversite Öğrencilerinin İlişki Niteliklerinin Depresyon, Stres Ve Anksiyete İle İlişkisi (Yüksek Lisans Tezi). Retrieved from http://docs.neu.edu.tr/library/6531576602.pdf.
8. CHEUNG, T., WONG, S. Y., WONG, K. Y., LAW, L. Y., NG, K., TONG, M. T., WONG, K. Y., NG, M. Y., AND YİP, P. S. (2016). Depression, Anxiety and Symptoms of Stress among Baccalaureate Nursing Students in Hong Kong: A Cross-Sectional Study. *International journal of environmental research and public health*, *13*(8), 779. DOI.org/10.3390/ijerph130807.

9. ÇAM, O., & ENGİN E. (2014). *Anksiyete bozuklukları, In: Ruh Sağlığı ve Hastalıkları Hemşireliği Bakım Sanatı*, 1.baskı, İstanbul, İstanbul Tıp Kitapevi, Turkey.

10. DÜNDAR, A.,G. (2020). Adölesan Sporcuların Depresyon, Anksiyete Ve Stres Düzeylerinin İncelenmesi (Yüksek Lisans Tezi), Retrieved from http://docs.neu.edu.tr/library/7037656786.pdf.

11. EKMEKCİ ERTEK, İ., ÖZKAN, S., CANDANSAYAR, S., & İLHAN, M.N. (2020). Tıp Fakültesi Öğrencilerinde Stres, Tükenmişlik Ve Depresyon. *Gazi Sağlık Bilimleri Dergisi*, 5 (1), 10-20. Retrieved from https://dergipark.org.tr/tr/pub/gsbdergi/issue/56318/665090.

12. ERÇİM, R.E., KÖSE, H., BUDAK, Y., & YILDIRIM, H. (2020). Üniversite Öğrencilerinin Sınav Dönemi Öncesi, Sırası ve Sonrasında Depresyon, Anksiyete ve Stres Durumu ile Beslenme Alışkanlıklarındaki Değişimin İncelenmesi. *Cumhuriyet Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi,* 5 (3), 133-143. Retrieved from http://cusbed.cumhuriyet.edu.tr/tr/pub/issue/58451/750633.

13. KARAMUSTAFALIOĞLU, O., & YUMRUKÇAL, H. (2011). Depresyon Ve Anksiyete Bozukluğu. *Şişli Eftal Hastanesi Tıp Bülteni,* 45(2), 65-74.

14. KAYA, M., GENÇ, M., KAYA, B., & PEHLİVAN, E. (2007). Tıp Fakültesi Ve Sağlık Yüksekokulu Öğrencilerinde Depresif Belirti Yaygınlığı, Stresle Başaçıkma Tarzları Ve Etkileyen Faktörler. *Türk Psikiyatri Dergisi,* 18(2), 137-146.

15. LİU, X., PİNG, S., & GAO, W. (2019). Changes in Undergraduate Students' Psychological Well-Being as They Experience University Life. *International Journal Of Environmental Research And Public Health*, *16*(16), 2864. https://doi.org/10.3390/ijerph16162864.

16. MAO, Y., ZHANG, N., LİU, J., ZHU, B., HE, R., & WANG, X. (2019). A Systematic Review Of Depression And Anxiety İn Medical Students İn China. *BMC medical education*, *19*(1), 327. DOI.org/10.1186/s12909-019-1744-2.

17. MOFATTEH, M. (2020). Risk factors associated with stress, anxiety, and depression among university undergraduate students. *AIMS Public Health*, *8*(1), 36–65. https://doi.org/10.3934/publichealth.2021004.

18. MOHAMMAD, S., ALMAKRAN, I. W., AL-MONTASHRİ, A. S., MURSİ, A. M., ALHARBİ, S. M., PASHA, T. S., & KHALİD, I. (2020). Depression, anxiety and stress and their associated social determinants in the Saudi college students. *Health psychology research*, *8*(3), 9263. DOI.org/10.4081/hpr.2020.9263.

19. NEWBURY-BİRCH, D., & KAMALİ, F. (2001). Psychological Stress, Anxiety, Depression, Job Satisfaction, And Personality Characteristics İn Preregistration House Officers. *Postgraduate medical journal*, *77*(904), 109–111. DOI.org/10.1136/pmj.77.904.109.

20. ÖNCÜ, B., ŞAHİN, T., ÖZDEMİR, S., ŞAHİN, C., ÇAKIR, K. & ÖCAL, E. (2013). Tıp Fakültesi Öğrencilerinde Depresyon, Anksiyete Ve Stres Düzeyleri Ve İlişkili Etmenler. Kriz Dergisi, 21(1), 1-10. DOI: 10.1501/Kriz_0000000333.

21. PESEN, A. & MAYDA, A. S. (2020). Tıp Fakültesi Öğrencilerinin Depresyon, Anksiyete, Stres Düzeyleri ve İlişkili Faktörler. *Sakarya Tıp Dergisi* , 10 (2) , 240-252 . DOI: 10.31832/smj.673120.

22. SHAMSUDDİN, K., FADZİL, F., ISMAİL, W. S., SHAH, S. A., OMAR, K., MUHAMMAD, N. A., JAFFAR, A., ISMAİL, A., & MAHADEVAN, R. (2013). Correlates of depression, anxiety and stress among Malaysian university students. *Asian journal of psychiatry*, *6*(4), 318–323. DOI.org/10.1016/j.ajp.2013.01.014.

23. SARIÇAM, H. (2018). The Psychometric Properties Of Turkish Version Of Depression Anxiety Stress Scale-21 (DASS-21) İn Health Control And Clinical Samples. *Journal of Cognitive-Behavioral Psychotherapy and Research, 7*(1), 19-30. DOI.org/10.5455/JCBPR.274847.

24. SÖZERİ VARMA, G., KARADAĞ, F., KALKAN OĞUZHANOĞLU, N., & ÖZDEL, O. (2017). Depresyon Tedavisinde Grup Psikoterapisi Ve Psikodramanın Yeri. *Klinik Psikiyatri,* 20(4), 308-317. DOI: 10.5505/kpd.2017.86158.

25. SHAO, R., HE, P., LİNG, B., TAN, L., XU, L., HOU, Y., KONG, L., & YANG, Y. (2020). Prevalence Of Depression And Anxiety And Correlations Between Depression, Anxiety, Family Functioning, Social Support And Coping Styles Among Chinese Medical Students. *BMC psychology*, *8*(1), 38. DOI.org/10.1186/s40359-020-00402-8.

26. STRÖHLE, A., GENSİCHEN, J., & DOMSCHKE, K. (2018). The Diagnosis and Treatment of Anxiety Disorders. *Deutsches Arzteblatt international*, 155(37), 611–620. https://doi.org/10.3238/arztebl.2018.0611.

27. SÜRME, Y. (2019). Stres, Stres İle İlişkili Hastalıklar Ve Stres Yönetimi. *Uluslararası Sosyal Araştırmalar Dergisi,* 12(64), 526-529. DOI.org/10.17719/jisr.2019.3374.

28. ŞANAL KARAHAN, F. (2016). Üniversite Öğrencilerinde Çözüm Odaklı Düşünmenin Depresyon, Anksiyete, Stres Ve Psikolojik İyi Oluş İle İlişkisi (Doktora Tezi). Retrieved from https://hdl.handle.net/20.500.12452/520.

29. TEKİR, Ö., YAŞAR, Ö., ÇEVİK, C., DİKOĞLU, M. & ÖZSEZER KAYMAK, G. (2018). Sağlık Yüksekokulu Öğrencilerinin Depresyon ve Benlik Saygısı Düzeylerinin İncelenmesi. *Düzce Üniversitesi Sağlık Bilimleri Enstitüsü Dergisi,* 8(1), 15-21. Retrieved from https://dergipark.org.tr/tr/pub/duzcesbed/issue/34701/346725.

30. TÜRKÇAPAR, H. (2004). Anksiyete Bozukluğu Ve Depresyonun Tanısal İlişkileri. *Klinik psikiyatri*, 4, 12-16.

31. YENİOCAK TUNÇ, A. & YAPICI, G. (2019). Bir Tıp Fakültesindeki Öğrencilerin Depresyon, Anksiyete Ve Stres Düzeylerinin Değerlendirilmesi.

Turkish Journal of Public Health, 17(2), 153-168. DOI: 10.20518/tjph.423636.

32. YILMAZ, Ö., BOZ, H. & ARSLAN, A. (2017). Depresyon Anksiyete Stres Ölçeğinin(Dass 21) Türkçe Kisa Formunun Geçerlilik-Güvenilirlik Çalişmasi . *Finans Ekonomi ve Sosyal Araştırmalar Dergisi*, 2 (2), 78-91. Retrieved from https://dergipark.org.tr/tr/pub/fesa/issue/30912/323190.

33. World Health Organization (WHO). (2021, January 2021). *Depression,* Retrieved 25 January 2021. From https://www.who.int/health-topics/depression#tab=tab_1.