



The relationship between paramedic students' anxiety levels and reasons for life

Paramedik öğrencilerinin kaygı düzeyleri ile yaşam nedenleri arasındaki ilişki

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ABSTRACT

Aim: This study was conducted to determine the relationship between paramedic students' anxiety levels and their reasons for living.

Methods: This study is descriptive and relationship-seeking type. The universe of the research consisted of 1st and 2nd year students studying in the First and Emergency Aid Program. Sample selection was not made and all students were included and 178 students participated in the study. Data were collected online. Personal Information Form, Beck Depression Scale and Reasons for Life Scale were used. SPSS 22.0 package program was used in the analysis of the data.

Results: It was determined that the depression level of male students was higher than that of female students ($p<0.05$). It was determined that the reasons for life of female students were higher than male students ($p<0.05$). There is a significant negative correlation between the scores from the Beck Depression Scale and the scores from the Reasons for Life Scale ($r= -0.346$ $p= 0.001$). It was determined that the level of depression had a significant effect on the reasons of life ($F=23.94$, $p=0.000$).

Conclusion: Depression level of paramedic students affects their reasons of life. In order to reduce students' depression levels, studies on social activities, hobbies and skill courses can be increased.

Keywords: anxiety states; paramedic; student; reasons for living

ÖZET

Amaç: Bu çalışma paramedik öğrencilerinin kaygı düzeyleri ile yaşam nedenleri arasındaki ilişkinin belirlenmesi amacıyla yapılmıştır.

Yöntem: Bu çalışma, tanımlayıcı ve ilişki arayıcı tiptedir. Araştırmanın evrenini İlk ve Acil Yardım Programında okuyan 1. ve 2. sınıf öğrencileri oluşturmuştur. Örneklem seçimine gidilmeyip tüm öğrenciler dahil edilmiş ve 178 öğrenci çalışmaya katılmıştır. Veriler online olarak toplanmış ve Kişisel Bilgi Formu, Beck Depresyon Ölçeği ve Yaşam Nedenleri Ölçeği kullanılmıştır. Verilerin analizinde SPSS 22.0 paket programı kullanılmıştır.

Bulgular: Erkek öğrencilerin depresyon düzeyinin bayan öğrencilerden daha yüksek olduğu, bayan öğrencilerin yaşam nedenlerinin erkek öğrencilere göre daha yüksek olduğu tespit edilmiştir ($p<0,05$). Beck depresyon ölçeğinden alınan puanlar ile Yaşam Nedenleri Ölçeğinden alınan puanlar arasında negatif yönde anlamlı bir ilişki vardır ($r= -0.346$ $p= 0.001$). Depresyon düzeyinin yaşam nedenleri üzerinde anlamlı düzeyde etkisi olduğu belirlenmiştir ($F=23.94$, $p=0.000$).

Sonuçlar: Paramedik öğrencilerinin depresyon düzeyi yaşam nedenlerini etkilediği sonucuna ulaşılmıştır. Öğrencilerin depresyon düzeylerini düşürmek için sosyal faaliyetlere, hobilere, beceri kurslarına vb. yönelik çalışmalar artırılabilir.

Anahtar kelimeler: anksiyete durumları; paramedik; öğrenci; yaşam nedenleri

Introduction

In the postmodern era, change and order have become an indispensable part of daily life, but it has also increased the level of stress in societies. Anxiety is one of the biggest triggers of stress (Loprinzi & Codey, 2014). The Covid-19 pandemic process, which has caused panic and anxiety all over the world, has been one of the best examples of the situation (Li et al., 2020).

Anxiety, which is one of the most common mental health problems in young people, negatively affects the future perspectives, social relations and life of young generations. In the literature, it is stated that the prevalence of anxiety among young people is between 1.81% and 49.51% and is higher in individuals in the health field (Giannopoulou, Efstathiou, Triantafyllou, Korkoliakou & Douzenis, 2021; Huang & Zhao, 2020; Ramón-Arhués et al., 2020).

Among the students studying in the field of health, the First and Emergency Aid (Paramedic) Program is seen as one of the departments where the anxiety levels of the working environment are high. Factors such as lack of experience,

future anxiety, entering the employment field for the first time trigger psychological, social and economic problems and increase the anxiety level of students (Zhang et al., 2020). In addition, paramedical field workers experience psychosocial difficulties due to situations such as intervening in repetitive traumatic and critical events in a short time, constant interaction with clinically serious patients, witnessing a large number of deaths (Hegg-deloey et al., 2014). It is necessary to minimize the anxiety of the students studying in the field where the study areas have such anxiety and to determine the causes of anxiety (Boğan, 2019).

While an individual's anxiety at certain intervals and being balanced contributes to the continuation of life; On the other hand, ongoing anxiety can harm both the physical and mental health of individuals, disrupt social relations, decrease motivation and leave the individual more vulnerable to negativities (Fraenza, 2016). When the anxiety level of the individual rises, they think that the situations they are experiencing are uncontrollable and they experience uncertainty about whether this situation threatens their life

goals (Ciarma & Mathew, 2017). Uncertainty is the root cause of all anxiety disorders and causes devastating trauma. It is stated that uncertainty makes it difficult to assess risk and make decisions (Kirazcı & Öztemel, 2021).

It is known that human nature is constantly in search of a reason to continue living. The increase in these reasons can connect people to life and positively affect their mental health. However, increasing uncertain situations may cause individuals to move away from their lives, social isolation, traumatic disorders, and may affect mortality-related factors (Landes, 2021).

University students have ups and downs, especially during emotional periods. Causes of life are needed to cope with emotional ups and downs (Amit, Ibrahim, Aga Mohd Jaladin & Che Din, 2017). Positive attitudes affect both health behaviors and personality traits in individual life, as well as their orientation towards vocational education and success (Türkyay, 2020).

Among these changes, it is very important for the paramedic students in question to make the right decision and to make an emergency response, with low levels of anxiety and a search for a positive reason for life; because it is thought that these attitudes and behaviors will affect himself in his present life and the society in his future life.

This study was conducted to determine the relationship between paramedic students' anxiety levels and their reasons for living.

Methods

Type of the study

It was conducted as a descriptive design in order to examine the relationship between paramedic students' anxiety levels and their reasons for living.

Research questions

Is there a relationship between paramedic students' anxiety levels and their reasons for living?

Variables of the study

The socio-demographic characteristics and anxiety levels of the students constituted the independent variable of the research, and the reasons for life were the dependent variable of the research.

Place and time of the research

The research was carried out on the students of the First and Emergency Aid Department (Paramedic) studying at Bingöl University between January and February 2022. Research data were collected on the online platform through google forms.

Sample of the research

The sample selection was not made in the research, and the study was completed with 178 students who were studying in the First and Emergency Aid Department of Bingöl University at the time of the study and could be accessed online.

Inclusion criteria

- Being a student in the First and Emergency Aid Program of Bingöl University,
- Accepting to participate in the study.

Data collection

Students' sociodemographic characteristics, Beck's Depression Inventory and Reasons for Life Scale were used.

Beck's Depression Inventory (BDI)

It was developed by Beck, Ward and Mendelson (1961). Hisli (1988) conducted the Turkish validity and reliability study. BDI reveals the physical and psychological symptoms of depression in individuals. It consists of 21 self-report questions in total. Self-report questions; It is a scale that emphasizes emotional and cognitive symptoms in the individual, while placing less emphasis on questions involving somatic status symptoms such as loss of appetite, weight loss, and decreased libido. Each question is evaluated with a number from 0 to 3. The total scale score takes a value between 0-63. An increase in the total score indicates an increase in the depression level of the individual or his/her predisposition. The Cronbach's alpha coefficient of the scale was stated as 0.920 (Beck et al., 1961). In this study, the cronbach's alpha coefficient for BDI was found to be 0.96.

Reasons for Life Scale (RLS)

It was developed by Osman et al. (1998). The scale includes investigating the reasons that drive adolescents to commit suicide and evaluating these factors. It consists of 32 self-report questions in total. Self-report questions include factors consistent with the multifaceted nature of the adolescent. The scale is examined with sub-dimensions of Optimism About the Future (7 items), Low Worries About Suicide (6 items), Family Ties (7 items), Peer Acceptance and Support (6 items), and Self-Acceptance (6 items). Each question is evaluated with a number from 1 to 5. The total scale score takes a value between 32 and 63. An increase in the total score indicates that the reasons for living are higher for the adolescents. The Cronbach's alpha coefficient of the scale was reported as 0.960 (Osman et al., 1998). In this study, the Cronbach's alpha coefficient for RLS was found to be 0.98

Table 1. Frequency analysis of demographic data

Variable	Group	n	%
Gender	Male	66	37.1
	Female	112	62.9
Age	18-25	175	98.3
	26-35	3	1.7
Marital status	Single	173	97.7
	Married	5	2.3
Extra income job	Yes	18	10.1
	No	160	89.9
	Total	178	100.0

Ethical principles

Within the scope of this research permission was obtained from the authors for the use of the scale. A written permission to conduct a questionnaire to the students was granted by Bingöl University, Vocational School of Health Services. Ethics committee approval (Decision no: 2022/14, Date: 19.01.2022) was received from Şırnak University Clinical Research Ethics Committee.

Statistical analysis

The data obtained from the study were evaluated with the SPSS 22 program. Frequency test in statistical analysis of data, independent sample t-test in binary groups in parametric distributions, Kruskal-Wallis test in nonparametric distributions were used. Spearman's Correlation Analysis and Multiple Regression Analysis were used. A 95% confidence interval was used in the analyzes and a $p < 0.05$ was considered statistically significant.

Table 2. Depression-reasons of life t-test by gender

Scales		N	Mean	SD	t	df	p		
Beck Depression	Gender	Female	112	16.7	15.09	0.572	176	0.042*	
		Male	66	18.08	16.41				
	Age	18-25	175	17.41	15.63	1.26	176	0.209	
		26-35	3	6.0	3.46				
	Marital status	Single	174	17.23	15.69	0.282	175	0.778	
		Married	4	15.0	13.11				
	Additional income status	Yes	18	16.33	16.59	-0.254	176	0.800	
		No	160	17.31	15.5				
	Reasons of Life	Gender	Female	112	110.52	37.33	-1.05	176	0.039*
			Male	66	104.1	42.11			
Age		18-25	175	108.38	39.11	0.615	176	0.540	
		26-35	3	94.33	49.9				
Marital status		Single	174	107.8	39.48	-0.387	175	0.699	
		Married	4	115.5	28.61				
Additional income status		Yes	18	105.72	38.91	-0.276	176	0.783	
		No	160	108.41	39.32				

*p<0.05

Results

When the demographic data of the research group is examined; The research group consisted of a total of 178 participants, 66 of which were male (37.1%) and 112 were female (62.9%). The majority of the participants are between the ages of 18-25, single and not working in a job that generates additional income (Table 1).

According to the t-test results, there is a statistically significant difference in the depression level scores of the students according to their genders ($p < 0.05$). The depression level of male students is higher than female students. It is seen that there is no statistically significant difference according to the depression levels of the students, age, marital status and working in an income generating job ($p > 0.05$) (Table 2). There is a statistically significant difference in the students' reasons for life scores according to their genders ($p < 0.05$). The life reasons of female students are higher than male students. It is seen that there is no statistically significant difference according to the reasons of life of the students, age, marital status and working in a job that generates income ($p > 0.05$) (Table 2).

There is a significant negative correlation between the scores from the Beck's Depression Inventory and the scores from the Reasons for Life Scale ($r = -0.346$, $p = 0.001$). In other words, as the reasons for life increase, the level of depression decreases (Table 3).

When the results of the regression analysis are examined, it is seen that the level of depression has a significant effect on the reasons of life ($F = 23.94$, $p = 0.000$). Accordingly, a 1-unit increase in people's reasons for life results in a 0.138-unit decrease in their depression level ($t = -4.89$, $p = 0.000$). In other words, reasons for life were found to explain depression (at a significance level of 0.01) by 12% (Table 4).

Discussion

In this study, the relationship between anxiety level and reasons for living was examined. In addition, it was also examined whether the anxiety level of the students and the reasons for living differed according to their socio-demographic characteristics. According to the research data, the depression levels of paramedic students differ according to gender. It has been determined that the depression level of male students is higher. When the literature is examined, it has been reported that the depression level of women is higher than men in most studies (Aklan & Kutay, 2021; Anlayışlı & Serin, 2019; Bozkurt, 2004; Çisem, 2009). However, 65-70% of depression patients

in Turkey are women and 30-35% are men (Çisem, 2009). In addition, it is known that completed suicide cases are more common in male adolescents in many countries of the world, whereas suicide attempts are more common in females (Boeninger et al., 2010). There are also studies showing that there is no relationship between gender and depression score (Durmuş, 2021; Kaçan & Kaya, 2013; Türkleş, Hacıhasanoğlu & Çapar, 2008). It is possible to say that men are more depressed due to factors such as the presence of the COVID-19 pandemic during the study period, travel restrictions, anxiety about the future, assignment problems, and the fact that men belong to the household because we are a patriarchal society.

According to the research data, the life reasons of paramedic students differ according to gender. When the literature is examined, it has been reported in many studies that women's reasons for living are higher than men (Batıgün, 2005; Durmuş, 2020; Gürkan & Girik, 2009; Şahin, Batıgün & Şahin, 1998). Indeed, our findings support the literature. Studies have found that women attempt suicide more, but men commit more lethal suicide (Bakhiyi et al., 2017; Boeninger et al., 2010). However, it is possible to say that women use communication channels better than men, express their feelings and thoughts clearly and are more social than men, increasing their reasons for life and reducing the level of depression. According to the research data, no significant relationship was found between the depression levels of paramedic students and age, marital status and working in a job that provides additional income. Similarly, no significant relationship was found between life reasons, age, marital status, and working in a job that provides additional income.

Table 3. Beck's depression inventory-reasons of life correlation analysis

Scales	n	Mean	SD	1	2
1. Beck Depression	178	17.21	15.57	-	-0.346*
2. Reasons of Life	178	108.14	39.18		-

*p<0.01

A significant negative correlation was found between students' depression level and their reasons for living. In other words, as the reasons for life increase, the level of depression decreases. In another study conducted in parallel with our findings, a significant relationship was found between depression and the reasons that connect it to life.

Table 4. Beck's depression inventory-reasons of life regression analysis

Scales	B	Beta	t	p	R	R ²	F	p
Constant	32.093	-	9.93	0.000	0.346	.12	23.94	0.000
Reasons of Life	-.138	-0.346	-4.89	0.000				

It has been determined that as the causes of life increase, the level of depression decreases (Başçılar & Karataş, 2020; Ikin, Creamer, Sim & McKenzie, 2010). In the studies conducted, suicidal ideation was found to be significantly higher in individuals with high levels of depression compared to individuals with low levels of depression (Bakhiyi et al., 2017; Hocaoglu & Babuc; 2009). In the study of Britton et al., it was determined that suicidal ideation is more common in patients with high depression levels. Similarly, 3 students studying at Bingöl University committed suicide in the 2021-2022 academic year (NetHaber, 2021). Although they committed suicide for different reasons, it is thought that the main reason for this situation is related to the high level of depression. It has been found that individuals with suicidal ideation are associated with negative life events rather than positive life events (Bakhiyi et al., 2017). As a matter of fact, it is possible to see this in the notes left behind by our students who committed suicide (NetHaber, 2021).

It was determined that the depression level of the students had a significant effect on the causes of life. In other words, reasons for life can be interpreted as explaining depression (at a significance level of 0.01) at a rate of 12%. When the literature is examined, the level of depression decreases as the reasons for living increase. It becomes a protective factor for suicidal behavior (Bakhiyi et al., 2017; Flowers, Walker, Thompson & Kaslow, 2014; Tillman et al., 2017). When the reasons for living are evaluated as life goals and expectations, it can play a role as a protective factor against suicidal ideation (Luo, Wang, Cai & Wang, 2016). Studies have reported that individuals who receive support from family or friends have fewer suicide attempts (Garlow, Purselle & Heninger, 2005; Neeleman, 2002). In order to reduce the level of depression and survive, it is of great importance for the individual to develop coping skills in situations of stress and psychological crisis

Conclusion and Recommendations

This is a descriptive study that measures the relationship between paramedic students' depression levels and their reasons for living. Since the data are delivered to the participants via Google Forms over the internet, excluding methods such as observation and interview from the scope of the study constitutes the limitation of the research.

As a result of this study, it was concluded that the depression level of paramedic students affects the reasons for life. In other words, as the level of depression decreases, the reasons for life increase. When examined in terms of socio-demographic characteristics; Men had higher depression levels than women. The reasons for life of female students were found to be significantly higher than male students. In both scales, no significant difference was found between age, marital status and working in a job that generates additional income.

Depression is a physical, social and psychological problem that affects the individual, the individual's environment and society. While a high level of depression affects only the individual and his/her environment in the short term, it creates permanent problems in the long term and poses a risk for the welfare of the society. For this reason, educational programs, conferences, seminars, etc. can be organized for students, families and the community to reduce the level of depression. It is thought that more comprehensive studies with different samples and methods will contribute to

the literature in addition to our study on this subject in the future.

Conflict of Interest

The authors declare that there are no conflict of interests.

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Ethics Committee Approval

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Informed Consent

Written informed consent was obtained from the students included in the study.

Peer-review

Externally peer-reviewed.

Author Contributions

M.K.: Literature Search, Design, Supervision, Critical Review, Writing Manuscript.

M.K.: Concept, Materials, Data Collection and/or Processing, Writing Manuscript

T.Ç.: Concept, Materials, Data Collection and/or Processing.

References

- Adıgüzel, O., Tanrıverdi, H., & Özkan, D. S. (2011). Occupational professionalism and the case of nurses as members of a profession. *Journal of Management Sciences*, 9(2), 237-257.
- Akkan, A. K., & Kutlay, Ö. (2021). The relationship between smartphone addiction, depression, and anxiety in medical students. *Acıbadem Üniversitesi Sağlık Bilimleri Dergisi*, 12(2), 176-182.
- Amit, N., Ibrahim, N., Aga Mohd Jaladin, R., & Che Din, N. (2017). The predicting roles of reasons for living and social support on depression, anxiety and stress among young people in Malaysia. *Medical Journal of Malaysia*, 72(5), 291-297.
- Anlayışlı, C., & Serin, N. B. (2019). A study on internet addiction and depression among high school students due to gender, academic success and internet usage duration. *Folklor/edebiyat*, 25(97-1), 753-767.
- Başçılar, M., & Karataş, K. (2020). Military Social Work: Evaluation of depression and satisfaction of life among terror veterans. *Toplum ve Sosyal Hizmet*, 32(1), 23-40.
- Batıgün, A. D. (2005). Suicide probability: an assessment terms of reasons for living, hopelessness and loneliness. *Türk Psikiyatri Dergisi*, 16(1), 29-39.

- Beck, A. T., Ward, C. H., & Mendelson, M. (1961). An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Boğan, M. (2019). Knowledge and skills of the senior students of paramedical, nursing and medical faculties on cardiopulmonary arrest recognition, maintenance of chest compression and ventilation. *Eurasian Journal of Emergency Medicine*, 18(3), 142–149. <https://doi.org/10.4274/eajem.galenos.2019.26818>
- Boeninger, D. K., Masyn, K. E., Feldman, B. J., & Conger, R. D. (2010). Sex differences in developmental trends of suicide ideation, plans, and attempts among European American adolescents. *Suicide and Life-Threatening Behavior*, 40, 451-464
- Bozkurt, N. (2004). The relationship between the levels of depression and anxiety in a group of university students and various variables. *Eğitim ve Bilim Dergisi*, 29(133), 52-59.
- Ciarma, J. L., & Mathew, J. M. (2017). Social anxiety and disordered eating: The influence of stress reactivity and self-esteem. *Eating Behaviors*, 26, 177-81. <https://doi.org/10.1016/j.eatbeh.2017.03.011>
- Çişem, İ. (2009). *Ev kadınlarında sosyokültürel özelliklere bağlı olarak depresyon düzeyi ve kişilik özellikleri arası ilişkilerin incelenmesi*. (Unpublished master thesis). Maltepe University, İstanbul.
- Durmuş, H. (2021). Investigation of the relationship between childhood trauma and depression in delinquent children. (Unpublished master thesis). İstanbul Gelişim University, İstanbul.
- Durmuş, Y. (2020). *Prediction of suicidal tendency in adolescents: the role of reasons for living, psychological well-being and alexitimia*. (Unpublished master thesis). Muğla Sıtkı Koçman University, Muğla.
- Flowers, K., Walker, R., Thompson, M., & Kaslow, N. (2014). Associations between reasons for living and diminished suicide intent among African-American female suicide attempters. *Journal of Nervous and Mental Disease*, 202(8), 569-575. <https://doi.org/10.1097/NMD.0000000000000170>.
- Fraenza, C. B. (2016). The role of social influence in anxiety and the imposter phenomenon. *Online Learning*, 20(2), 230-243.
- Garlow, S. J., Purselle, D., & Heninger, M. (2005). Ethnic differences in patterns of suicide across the life cycle. *American Journal of Psychiatry*, 162, 319-323. <https://doi.org/10.1176/appi.ajp.162.2.319>.
- Giannopoulou, I., Efsthathiou, V., Triantafyllou, G., Korkoliakou, P., & Douzenis, A. (2021). Adding stress to the stressed: Senior high school students' mental health amidst the COVID-19 nationwide lockdown in Greece. *Psychiatry Research*, 295, 113560. <https://doi.org/10.1016/J.PSYCHRES.2020.113560>
- Gürkan, B., & Dirik, G. (2009). Predictors of suicide behavior and ideation in university students: reasons for living and ways of coping. *Türk Psikoloji Yazıları*, 12(24), 58-69.
- Hegg-deloey, S., Brassard, P., Jauvin, N., Prairie, J., Larouche, D., Poirier, P., Tremblay A., & Corbeil, P. (2014). Current state of knowledge of post-traumatic stress, sleeping problems, obesity and cardiovascular disease in paramedics. *BMJ Journal*, 31(3), 242–247. <https://doi.org/10.1136/emermed-2012-201672>
- Hisli, N. (1988). Beck Depresyon Envanterinin Üniversite öğrencileri için geçerliği, güvenilirliği. *Türk Psikoloji Dergisi*, 7(23), 3-13.
- Hocaoglu, C., & Babuc, Z. T. (2009). Suicidal ideation in patients with schizophrenia. *Israel Journal of Psychiatry and Related Sciences*, 46(3), 195-203.
- Huang, Y., & Zhao, N. (2020). Generalized anxiety disorder, depressive symptoms and sleep quality during COVID-19 outbreak in China: a web-based cross-sectional survey. *Psychiatry Research*, 288, 112954. <https://doi.org/10.1016/J.PSYCHRES.2020.112954>
- Ikin, J. F., Creamer, M. C., Sim, M. R., & McKenzie, D. P. (2010). Comorbidity of PTSD and depression in Korean War veterans: Prevalence, predictors, and impairment. *Journal of Affective Disorders*, 125, 279-286.
- Kirazcı, F., & Öztemel, K. (2021). An examination of university students career decision ambiguity tolerance with several variables. *Mehmet Akif Ersoy Üniversitesi Eğitim Fakültesi Dergisi*, 58, 442-477.
- Kaçan, H., & Kaya, S. (2013). Sağlık yüksekokulu öğrencilerinin depresyon düzeylerini etkileyen faktörlerin incelenmesi. *Gümüşhane University Journal of Health Sciences*, 2(2), 214 - 229
- Landes, S. D., Turk, M. A., & Bisesti, E. (2021). Uncertainty and the reporting of intellectual disability on death certificates: a cross-sectional study of US mortality data from 2005 to 2017. *BMJ Open*, 11(1), e045360. <https://doi.org/10.1136/bmjopen-2020-045360>.
- Li, P., Fu, J.-B., Li, K.-F., Liu, J.-N., Wang, H.-L., Liu, L.-J., Tang A., Tong Z. D., & Yan, J.-B. (2020). Transmission of COVID-19 in the terminal stages of the incubation period: A familial cluster. *International Journal of Infectious Diseases*, 96, 452-453. <https://doi.org/10.1016/j.ijid.2020.03.027>
- Loprinzi, P. D., & Codey, K. (2014). Influence of visual acuity on anxiety, panic and depression disorders among young and middle age adults in the United States. *Journal of Affective Disorders*, 167, 8-11. <https://doi.org/10.1016/j.jad.2014.05.052>.
- Luo, X., Wang, X., Cai, T., & Wang, Q. (2016). Reasons for living and hope as the protective factors against suicidality in Chinese patients with depression: A cross sectional study. *BMC Psychiatry*, 16(1), 252. <https://doi.org/10.1186/s12888-016-0960-0>.
- Neeleman, J. (2002). Beyond risk theory: Suicidal behavior in its social and epidemiological context. *Crisis*, 23, 114-120. <https://doi.org/10.1027//0227-5910.23.3.114>.
- Nethaber.com. (2021). Bingöl'de 21 yaşındaki üniversite öğrencisi intihar etti. Erişim Tarihi: 31.12.2021. <https://www.bingolnethaber.com/haber/bingolde-21-yasindaki-universite-ogrencisi-intihar-etti-772.html>
- Osman, A., Downs, W. R., Kopper, B. A., Barrios, F. X., Baker, M. T., Osman, J. R., Besett, T. M., & Linehan, M. M. (1998). The reasons for living inventory for adolescents (RFL-A): Development and psychometric properties. *Journal of Clinical Psychology*, 54(8), 1063-1078. [https://doi.org/10.1002/\(SICI\)1097-4679\(199812\)54:8<1063::CO;2-Z](https://doi.org/10.1002/(SICI)1097-4679(199812)54:8<1063::CO;2-Z).
- Ramón-Arбуés, E., Gea-Caballero, V., Manuel Granada-López, J., Juárez-Vela, R., Pellicer-García, B., & Antón-Solanas, I. (2020). The prevalence of depression, anxiety and stress and their associated factors in college students. *International Journal of Environmental Research and Public Health*, 17(19), 7001. <https://doi.org/10.3390/ijerph17197001>.
- Şahin, N. H., Batgün, A. D., & Şahin, N. (1998). Reasons for living and their protective value: A Turkish sample. *Archives of Suicide Research*, 4(2), 157-168.
- Tillman, J. G., Clemence, A. J., Cree, R., Lewis, K. C., Stevens, J. L., & Reiss, D. (2017). The persistent shadow of suicide ideation and attempts in a high-risk group of psychiatric patients: A focus for intervention. *Comprehensive Psychiatry*, 77, 20-26. <https://doi.org/10.1016/j.comppsy.2017.05.005>.
- Türkay, İ. K. (2020). Investigation of The relationship between self-esteem and healthy lifestyle behaviors of physical education and sports teaching department students. *Akdeniz Spor Bilimleri Dergisi*, 3(1), 1-10. <https://doi.org/10.38021/asbid.741277>.
- Türkleş, S., Hacıhasanoğlu, R., & Çapar, S. (2008). Depression among, high school students and the factors which affect it. *Atatürk Üniversitesi Hemşirelik Yüksekokulu Dergisi*, 11, 18-28.
- Zhang, W.-R., Wang, K., Yin, L., Zhao, W.-F., Xue, Q., Peng, M., ... & Wang, H.-X. (2020). Clinical note mental health and psychosocial problems of medical health workers during the COVID-19 epidemic in China. *Psychotherapy and Psychosomatics*, 89, 242-250. <https://doi.org/10.1159/000507639>.