## Examination of Resiliency of Substance-User and Non-User Undergraduate Students1

# Gülden GÖKÇEN<sup>2</sup> Defne YILMAZ<sup>3</sup>

#### Abstract

The aim of this study was to examine the psychological resilience levels of substance using and non-substance using university students. The findings showed that there was no significant difference between substance users and non-users in terms of psychological resilience scores. It was determined that the psychological resilience scores of the students did not differ according to gender and employment status. The resilience scores of substance-using students did not show a significant difference in terms of the reason for using the substance for the first time and the age of first substance use. A significant difference was found between the resilience of substance using students according to the place of substance use. A significant difference was also found between the resilience of substance using students in relation to the reasons for continuing substance use. It can be said that resilience is affected by the reasons for continuing substance use and substance use environments. At this point, it can be considered that there is a need for developmental programs to increase the effectiveness of internal and external protective factors and prevention programs that can prevent the formation of risk factors so that young people can develop effective decision-making skills and lifestyles.

Keywords: Substance Use, Resiliency, Undergraduate Students

# Introduction

It has been the focus of attention of many researchers to understand how individuals who grow up under challenging and risky living conditions can fulfill their developmental tasks, how they can cope with negative situations and how they can stay resilient. Especially in the last 15-20 years, there has been an increasing effort to identify factors related to helping individuals at risk, overcoming difficulties and resilience (Brooks, 2001; Muştucu, 2022).

Resilience is one of the key concepts of both positive and existential approaches. The development process of positive psychology is influenced by the evolution of science. Psychology focused on psychopathology have left its place to the positive-oriented view depending on positive aspects of human beings (Seligman & Csikszentmihalyi, 2000; Sheldon & King, 2001). Positive psychology is a scientific field of study that helps individuals to connect to life from birth to death, to provide sufficient motivation, to change and regulate behaviors, to internal power and to take life to a more positive point, and to reveal information and findings related to this (Akın-Little et al., 2004; Peterson, 2000).

<sup>&</sup>lt;sup>1</sup> This study is derived from the first author's master's thesis titled "Examination of resiliency of substance - user and non-user undergraduate students" with thesis number 394938.

<sup>&</sup>lt;sup>2</sup> Dr., Mevlana Primary School, Psychological Counseling, Antalya, Türkiye, guldengokcenpdr@gmail.com,ORCID 0000-0003-1783-9446

<sup>&</sup>lt;sup>3</sup> Dr., Canakkale Onsekiz Mart University, Faculty of Education, Department of Psychological Counseling and Guidance Türkiye, defneyilmazphd@gmail.com, ORCID 0000-0002-9403-9218

When the literature is examined, it is seen that numerous studies have been investigating positive psychology terms and its effects. Psychological resilience, protective factors, mental health well-being, school engagement, positive youth development, human personality-enhancing traits, optimism, self-esteem, perceived self-control, positive personality traits, solution-oriented approaches and strong approaches based on aspects are examples of these terms (Csikszentmihalyi, 1990; Diener, 2000).

In existential psychology, resilience is frequently expressed as psychological durability. Psychological resilience, which is among the positive personality traits, was defined by Kobasa (1979; 1982) as a source of resistance when faced with stressful life events, based on the basic concepts of the existential approach. According to Kosaka (1996), attachment, control and challenge dimensions that constitute psychological resilience are explained as follows: Attachment is defined as an individual's tendency to deal with various areas of life (Kobasa, 1979). According to resilience theory, attachment, which is the tendency to participate in ongoing life events, refers to a sense of purpose, meaningfulness, and self-understanding. It enables the individual to create a source of power that is necessary to cope with the purpose (social environment, work, family environment, interpersonal relations, beliefs and values, etc.) and stressful life situations in which he can live these goals (Kobasa et al., 1982). Control is expressed as an individual's belief that it can affect various situations in his life, and thoughts and actions that can be changed by the individual's situations in his life (Holt et al., 1987). Control, which is the belief of being able to influence the results of events instead of being helpless when faced with difficulties in life; it includes self-discipline, achievement orientation, autonomy, intrinsic motivation, decision-making skills, personal freedom and making choices (Kamya, 2000). Challenge includes belief in change rather than being static, seeing change as providing opportunities for development, enjoying trying new things, interacting with the environment, and active participation in life (Holt et al., 1987).

During the period of university entrance and adaptation, life can be challenging and it can be difficult to adapt to this new environment. Individuals in this period, on the one hand, try to complete the developmental processes specific to adolescence, try to adapt to the developmental tasks specific to adulthood, and they also face the physiological, emotional, academic and social challenges of the university environment. Therefore, university students are considered as individuals in risk groups (Hooper, 2003; Parrent, 2007; Yalım, 2007).

Although there are studies and practices that increase social awareness, it has been observed that the perception level of individuals on this issue is not at the desired level and the inadequacy of the right information and individual responsibility level prevents the solution of this problem. In particular, false thoughts such as that the substance is used only by those with individual or family problems, that it does not create a habit once tried, that it increases physical and mental strength, that it makes it easier for the individual to face unpleasant situations and cope with problems, play a facilitating role in the trial of stimulants or drugs (Fincancioğlu & Bulut, 2003).

Considering that protective factors can reduce the effect of risks in the prevention of substance use and addiction, it is believed that transforming risk factors into protective factors can be a useful approach. A consistent environment, increased motivation, social support, and anti-substance messages in the community are examples of protective factors (Deborah & Simkin, 2005). It is thought that the combination of protective factors together with such solutions can increase the effectiveness of psychological resilience.

Although there are many studies in Turkey that deal with risky living conditions regarding substance use (Turhan et al., 2011; Yalçın et al., 2009; Yılmaz & Türkkahraman, 2014), studies examining how substance use status differs from protective factors to psychological resilience level at university level could not be found. In this study, in the light of the information to be obtained from the literature, it is aimed to address the psychological resilience levels of university students who use and not to use substances, to examine them according to various variables, to reveal the findings, to discuss and to contribute to the relevant literature by presenting suggestions.

Substance use is one of the common risk factors among university students and causes serious harm both to the individual and to the environment (Çabuk, 2023). According to WHO (2012) one out of every two people who use tobacco products with serious harm will die because of this. There are one billion tobacco users worldwide, 800 million men and 200 million women, and about 80% of them live in low- and middle-income countries. Globally, 40% of men and 9% of women smoke. Prevalence of substance use and substance use disorders. When evaluated, it is seen that the Turkey Addiction Monitoring Center (TUBIM) report for 2019, the average alcohol, substance and the age at first smoking were 19.4, 19.00 and 17.85, respectively, 65% of those who have tried substances are between the ages of 15-34. This report According to the data, 86.8% of the substance users cigarettes, 44.4% stated that they used alcohol. Tobacco use causes the death of approximately six million people every year, of which five million are active smokers and more than six hundred thousand passive smokers, and it is estimated that the number of deaths from tobacco use will exceed eight million in 2030 unless urgent measures are taken (WHO, 2012). Alcohol and drug consumption rates are increasing in Turkey and in the world, and the age at which they start using drugs is rapidly decreasing. 68% of young people with substance addiction are under the age of 18, and 32% are under the age of 20 (Korkut, 2004).

In order to prevent substance-use and addiction, ways to increase the number of protective factors against risk factors should be sought. A consistent environment, increased motivation, social support, and antisubstance messages in society can be given as examples of protective factors (Deborah & Simkin, 2005). Thanks to these protective factors, it can be ensured that psychological resilience can increase its effectiveness.

It can be predicted that knowing the relationship between substance use and resilience will be beneficial, especially in reducing substance use among young individuals and making them more resistant and healthier. Therefore, in this study, it was aimed to examine the psychological resilience levels of university students who use and do not use substances. In this context, the frequency and rate of substance use among university students and the types of substances used were investigated. It was also examined whether substance use and psychological resilience differed according to demographic characteristics. Finally, the differences and similarities between the conditions that are risk factors for substance use and those that affect psychological resilience were also investigated.

### Method

## Research Design

This study was conducted on the resilience of substance-use and non-substance-use university students at Akdeniz University in the 2014-2015 academic year. This is a descriptive study carried out to examine

the psychological resilience levels of two groups of students: substance users and non-users. The correlational survey model is based on two or more variables, is a method that aims to determine whether there is a coexistence between them and, if so, to determine the degree of coexistence. is a research model. Convenience sampling, which is one of the non-random sampling methods, was used to form the study group. Convenience sampling is a sampling method in which researchers start with the most accessible respondents until they reach the size they need (Karasar, 1998). Data entry and analysis were made using the SPSS21 program, significance was tested at p<.05 level and the findings were analyzed in accordance with the objectives of the study presented in tables accordingly. The research group frequency and percentage distributions of the demographic characteristics of the students were obtained, Then, the total scores of the scale, *X*, ss were determined. Scale obtained from parametric analyses were performed for the normally distributed scores, and parametric analyses were performed for the normally distributed scores non-parametric analysis techniques were applied for those that did not show a distribution

# **Participants**

The participants of the research consist of 546 students who were chosen through easy sampling voluntarily to participate in the research. Information about the characteristics of the participants is shown in the following table.

According to Table 1, 56% of participants are female and 44% are male. The mean age of participants is 21.19. The ratio of participants from high and very socio-economic status are 24% and 2%, respectively.

**Table 1** *Participants' Demographics* 

Variable	Groups	f	%
Gender	Male	238	44
Gender	Female	308	56
	17-20	385	71
Age	21-24	138	25
	25 and over	23	4
	Employed	52	10
Working Status	Not employed	422	77
	Occasionally employed	72	13
	Very low	0	0
	Low	63	12
Socio-economic Status	Medium	343	63
	High	130	24
	Very High	10	2
	Total	546	100

# **Data Collection Tools**

This form consists of three different scales:

## **Personal Information Form**

The personal information form was generated by the researcher taking experts' opinions.

#### **Substance Use Scale**

It is developed by Yılmaz and Türkkahraman (2014). The scale consists of six questions in total, including whether the students use substances, the age of first attempt, which substance they use if they do, in which environments they use the substance most, with what need they tried it for the first time, and with what need they continue to use it now.

### Resilience Scale-III R

This scale is developed by Maddi and Khoshaba (1999) and adapted into Turkish by Durak (2002). The scale consists of 18 items expressing the individual's beliefs about himself and his life. The internal consistency coefficient of the remaining 12 items was found to be 0.71 and it is seen that the scale is quite reliable (Nakip & Yaraş, 2017). The high scores obtained from the scale indicate that psychological resilience increases, while low scores indicate that resilience decreases. internal consistency coefficient for this study 0.73, indicating that the scale is highly reliable.

# **Data Analysis**

Data analysis of the research was done using SPSS 21 program. Whether the scores obtained from the scale show normal distribution or not was tested using skewness and kurtosis values. If the skewness and kurtosis values were within ±2 criterion values, the data distribution was considered normal (George & Mallery, 2010).

### **Findings**

In this section, the findings obtained from the analysis of the research data are presented through tables, and explained.

 Table 2

 Results of Mann-Whitney U Test Conducted to Determine Resilience Levels of University Students According to Substance Use Status

Resilience Score						
		N	X	SD	U	P
	Yes	259	22,90	5,02		
Substance Use	No	287	23,18	4,69	36384,00	0.94
	Total	546	23,05	4,85		

\*p<.05

According to Table 2, nonparametric test was applied because the data were not normally distributed. there was no statistically significant difference between the resilience of students who use and do not use

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substances (p>0.05). In other words, even if the substance use status of students differs, their resilience levels do not differ.

**Table 3**Results of Two Way ANOVA to Determine Resilience Levels of Substance Users and Non-Substance-Use University Students by Gender

Resilience Score						
Substance Use	Gender	N	X	SD	F	P
	Male	134	23,35	5,13		
Yes	Female	125	22,42	4,86		
	Total	259	22,90	5,02		
	Male	104	23,73	5,31		<del>_</del>
No	Female	183	22,87	4,29	0.01	0.94
	Total	287	23,18	4,69		
	Male	238	23,52	5,20		_
Total	Female	308	22,69	4,53		
	Total	546	23,05	4,85		

<sup>\*</sup>p<.05

According to Table 3, parametric test was applied since the data were normally distributed. resilience of students who use and do not use substances did not show a significant difference depending on their gender (*p*>0.05). In other words, even if the genders of the students differ, their substance use status and resilience levels do not differ.

 Table 4

 Results of Two Way ANOVA to Determine Resilience Levels of Substance Users and Non-Substance-Use

Resilience Score						
Substance Use	Working Status	N	X	SD	F	Р
Yes	Yes	32	23,56	4,68		
	No	183	22,74	5,00		
	Sometime	44	23,09	5,36		
	Total	259	22,90	5,02		
	Yes	20	25,25	4,51		
No	No	239	22,94	4,75	0.55	0.58
NO	Sometime	28	23,75	4,01	0.55	0.36
	Total	287	23,18	4,69		
	Yes	52	24,21	4,65		
Total	No	422	22,86	4,86		
	Sometime	72	23,35	4,86		
	Total	546	23,05	4,85		

<sup>\*</sup>p<.05

According to Table 4, parametric test was applied since the data were normally distributed. Resilience of students who use and do not use substances did not show a significant difference depending on their working status (p>0.05). In other words, even if the working status of the students differ, their substance-use status and resilience levels do not differ.

**Table 5**The Results of Kruskal-Wallis Analysis to Determine Resilience Levels of Substance-Use University Students According to Their Substance Use Environment

Resilience Score						
		N	X	SD	X <sup>2</sup>	P
	School	29	26,14	3,78		
	Entertainment Places/Cafes	119	27,49	3,67		
In Which Environments Do	My House	54	26,96	3,56		
You Use the Substance	My Friends' House	31	28,26	3,90	13.30	
More?	In the House of Relatives	2	28,00	1,41		0.02*
	Others	24	27,83	4,08		0.02
	Total	259	27,36	3,73		

<sup>\*</sup>p<.05

According to Table 5, nonparametric test was applied because the data were not normally distributed. Resilience of students using substance showed a significant difference depending on their substance use environment (p<0.05). In other word, if students' substance use environment differs their levels of resilience differ as well. Table 6 below shows between which two environments there is a significant difference.

**Table 6**Mann-Whitney U Test Results to Determine the Psychological Resilience Levels of Substance-Use University Students According to the Place of Substance Use

Where do you use the substance more?		U	P
	Entertainment Places/Cafes	1694,00	0.88
	My House	567,00	0.04*
School	My Friends' House	302,50	0.03*
	In the House of Relatives	24,50	0.72
	Others	322,00	0.64
	My House	2375,00	0.01*
Entertainment Places/Cafes	My Friends' House	1284,50	0.01*
	In the House of Relatives	93,00	0.60
	Others	1289,00	0.45
-	My Friends' House	749,00	0.42
House	In the House of Relatives	41,00	0.56
	Others	521,50	0.17
My Friends' House	In the House of Relatives	23,50	0.57
	Others	283,00	0.13
In the House of Relatives	Others	21,50	0.81

<sup>\*</sup>p<.05

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According to Table 6, nonparametric test was applied because the data were not normally distributed. there is a significant difference between the resilience of students who use the substance at school and those who use it at home and at their friends' house. Therefore, it can be said that the resilience of the students who use the substance at school is significantly higher than the students who use the substance at home and at their friends' homes (p<0.05).

There is a significant difference between the resilience of students who use the substance in entertainment places/cafes and those who use it at home and at their friends' house. Therefore, it can be said that the resilience of the students who use the substance in entertainment places/cafes is significantly higher than the students who use the substance at home and at their friends' house (p<0.05).

**Table 7**The Results of the Kruskal-Wallis Analysis to Determine the Resilience Levels of the Substance-Use University Students According to the Reasons for Trying the Substance for the First Time

	Resilience Score					
		N	X	SD	$X^2$	Р
	Curiosity	135	27,39	3,40		
If You Are Using	To deal with my problems	35	27,70	4,21		
Substances, With What	To Show Myself	3	27,00	6,16		
Need Did You Try It	To enjoy	47	26,93	3,40	8,28	0.14
for The First Time?	I Can't Say No to My Friends	30	28,30	3,68		0.14
	For Forcing Others	8	28,50	2,12		
	Total	259	27,34	3,54		

<sup>\*</sup>p<.05

According to Table 7, nonparametric test was applied because the data were not normally distributed. Resilience of the students who used the substance did not show a significant difference according to the reasons for trying the substance for the first time (p>0.05). In other words, even if the reason why students used the substance for the first time differs, their resilience levels do not differ.

**Table 8**The Results of the Kruskal-Wallis Analysis Conducted to Determine Resilience Levels of the Substance-Use University Students University According to the Reasons for Continuing to Use the Substance

	Resilience Score					
		N	X	SD	X <sup>2</sup>	Р
	In order not to be					
	excluded among my	42	26,71	1,89		
	friends					
If You Are Using	To enjoy	121	27,34	3,76		
Substances, What Need	For Forcing Others	3	29,33	6,35	11,13	$0.049^{*}$
Are You Using Now?	To Forget My Problems	38	26,89	3,88		
	I can't quit	48	27,10	3,37		
	Other	7	28,05	3,98		
	Total	259	27,35	3,72		

<sup>\*</sup>p<.05

According to Table 8, nonparametric test was applied because the data were not normally distributed. Resilience of students who use substances showed a significant difference depending on the reasons for continuing to use substances. In other word, if students' reasons for continuing to use substances differs their levels of resilience differ as well. Table 9 below shows between which two reasons there is a significant difference.

**Table 9**Mann-Whitney U Test Results to Determine the Resilience Levels of Substance-Use University Students According to the Reasons for Continuing to Substances Use

If You Are Using Substances, What Nee	d Are You Using Now?	U	Р
	To Enjoy	262,50	0.09
	For Forcing Others	7,00	0.42
In order not to be excluded among my friends	To Forget My Problems	117,50	0.63
	I can't quit	91,500	0.05
	Other	89,50	0.10
	For Forcing Others	106,00	0.22
	To Forget My Problems	1742,00	0.02*
To enjoy	I can't quit	2732,00	0.55
	Other	2513,50	0.92
	To Forget My Problems	54,50	0.90
For Forcing Others	I can't quit	30,00	0.09
	Other	29,00	0.12
	I can't quit	634,00	0.02*
To Forget My Problems	Other	587,00	0.04*
I can't quit	Other	959,00	0.69

<sup>\*</sup>p<.05

According to Table 9, nonparametric test was applied because the data were not normally distributed. there is a significant difference between the resilience of students who use the substance for fun and students who use the substance use forget their problems (p<0.05). Therefore, it can be said that the resilience of the students who use the substance "to forget their problems" is significantly lower than the students who use the substance "to enjoy".

There is a significant difference between the resilience of students who use the substance to forget their problems and students who use the substance "I can't quit" or "for other reasons" (p<0.05). Therefore, it can be said that the resilience of the students who use the substance "to forget my problems" is significantly lower than the students who use the substance "I can't quit" and "for other reasons".

#### Discussion

In the research sample, it was observed that the mean resilience score of the students who use substances is lower than the students who do not use substances, but there is no significant difference between their resilience according to their substance use and non-use status. There are some earlier studies in which there is a negative significant relationship between substance use and resilience, and there are also some other earlier studies in which there is no significant relationship (Acar et al., 2019; Altay et al., 2014; Bahadır, 2009; Fadardi et al., 2010). However, it can be said that most of the studies point to the relationship between resilience and substance use. Kaya (2019) compared psychological resilience and coping skills in individuals with and without alcohol use disorder. Findings have showed that there is a negative relationship between resilience and alcohol use disorder level, and alcohol use disorder decreases as resilience increases. Güner (2020) examined the phenomenon of trauma and resilience in late adolescents with and without substance use. It was found that the psychological well-being levels of late adolescents who use substances are lower. Yavuz (2020) compared smokers and non-smokers in his study examining the relationship between nicotine addiction and psychological resilience. The findings showed that non-smokers had higher psychological resilience. However, no significant relationship was found between the level of smoking addiction and the level of psychological resilience. Ugur et al. (2021) aimed to examine the relationship between psychological pain, childhood psychological traumas, alexithymia, impulsivity, and psychological resilience and suicide attempt in individuals diagnosed with substance use disorder who applied to the Probation Outpatient Clinic. It has been determined that individuals with substance use disorder who attempt suicide have lower levels of psychological resilience. Yuncu and Akyel (2021) compared adolescents diagnosed with substance use disorder, their healthy siblings, and other healthy individuals in terms of psychological resilience. While there was no significant difference between healthy siblings and the control group in terms of psychological resilience, it was determined that the psychological resilience levels of adolescents diagnosed with substance use disorder were significantly lower than both their siblings and the control group. In this study, general substance use was handled as two different groups as users and non-users, a comparison by including more homogeneous groups in substance use (such as only cigarettes or alcohol) may provide more information about the effectiveness of psychological resilience.

In the research sample, it is seen that male students' resilience score averages are higher than female students whether they use substances or not, but the resilience of students who use and do not use substances did not show a significant difference according to gender. The findings are consistent with some studies in the literature. Although a limited number of studies indicate the difference in resilience between men and women, most of the studies report that there is no significant difference between men and women in terms of resilience. Aydın and Egemberdiyeva (2018) found that the psychological resilience of university students did not differ according to gender. Cavga (2019) determined that the psychological resilience of high school students did not differ according to gender. Kaya (2019) determined that there were differences in favor of men in some sub-dimensions of resilience and in favor of women in others, but the total score of resilience did not differ according to gender. Güner (2020) showed that gender did not have a significant effect on the interaction of substance addiction and resilience. The finding of this study is parallel to abovementioned studies. The source of this difference is different perspectives can be discussed from different perspectives. At this point, it can be argued that culture and upbringing influence gender may have different effects on their roles. In the society we live

in boys are taught from childhood to be strong, to stand firm and to be sad. to be invisible. For this reason, the Turkish culture the behavior of standing firm becomes a learned behavior in an experiential way may have taken it.

In the research sample, it was seen that the resilience score averages of the students who work in a job, whether they use substances or not, are higher than the students who do not work and who work from time to time. However, the resilience of students who use and do not use substances did not show a significant difference according to their working status. McCalister et al. (2006) concluded that there is a significant relationship between the protective feature of resilience and the job satisfaction of employees and job stress. It was found that the increase in resilience has a reducing effect on the effect of risk factors. In addition, attachment to work relationships enables the person to create the necessary strength to cope with stressful life situations (Kobasa et al., 1982). Although working in a job is an important protective factor that may affect resilience, the low proportion of working students among the participants may have caused no statistically significant difference between the scales.

In this very study, it is seen that the resilience of students who use substances at "school" is higher than students who use drugs in "entertainment places", "at home", "friends' house", relatives' house and "other environments". As a result, the resilience of students using substances showed a significant difference depending on their substance use environment. It has also been revealed in similar studies that there are binding situations such as auxiliary school, family, and society to protect and increase resilience (Blyth & Roelkepartin, 1993; Howard & Johnson, 2000; Obradović & Masten, 2007; Werner & Smith, 2001). In addition, depending on the result, it has been seen that preventive studies such as substance use prevention programs are very useful studies at educational levels (Cuijpers, 2009; Faggiano et al., 2010; Müderrisoğlu, 2008; Terakye et al., 2000; Zollinger et al., 2003). In various studies, supporting the individual's multi-faceted development, especially his personal and social development, with positive environments, models and resources; substance use, addiction and other addictions, and the tendency to engage in risky behaviors in general (Çokluk-Bökeoğlu & Yılmaz, 2007; Masten, 2007). Among the external protective factors faculties that provide education at the higher education level may help them develop safer and more controlled behaviors depending on their properties such as the existence of environments that support learning, participation and responsibility, the effectiveness of social, cultural and sportive activities and the availability of opportunities to gain general life skills.

There is a significant difference between the resilience of students who use the substance at school and those who use it at home and at their friends' house. As a result, it can be said that the resilience of the students who use the substance at school is significantly higher than the students who use the substance at home and at their friends' house. The home environment and the friend's home environment are important social support elements for the individual under the circumstances, as well as for a person or group at risk such as substance use, these environments may lose their protective feature. In the study of Toprak (2014), it was seen that the conditions of the family, the characteristics of the family members, have a protective effect on the resilience of the youth. However, in this study, the differentiation of the resilience of students using substance according to the substance use environment may be due to the inability of individuals to carry life skills that enable them to develop controlled behaviors to different areas. The main goal expected from individuals is to enable them to make their behaviors safe, sufficient and stable in their environment. Dearden (2004) stated that resilient individuals are individuals who have

the necessary coping skills and competencies to reach the opportunities and protective factors that will reduce the negative effects of difficult life events and help them overcome adversity.

There is a significant difference between the resilience of students who use the substance in entertainment places/cafes and those who use it at home and at their friends' house. As a result, it can be said that the resilience of the students who use the substance in entertainment places/cafes is significantly higher than the students who use the substance at home and at their friends' house. This can be explained by the resilience-enhancing effect of the individual's ability to control substance use and the protectiveness provided by social support (Kheirabadi et al., 2023). In the literature, there are findings that there is a significant relationship between external control and reducing problem behaviors such as alcohol and substance use (Guinn, 1998; Mariano et al., 1989). In addition, there are studies explaining that the perceived social support of individuals with a high level of resilience positively affects their physical and mental health, that the individual interacts with his/her environment, and that learning different experiences in life improves resilience (Dayloğlu, 2008; Kobasa et al., 1982; Oktan, 2008; Terzi, 2008). Aydın and Egemberdiyeva (2018) found that university students' resilience was strongly associated with happiness and friend support. Telim and Murat (2019) determined that when adolescents' self-efficacy for substance abuse protection increases, their psychological resilience also increases. In addition, it was concluded that there were positive and moderately significant relationships between family support, peer support, school support, adjustment, determination to struggle and empathy, and adolescents' selfefficacy for protection from substance addiction. Yuncu and Akyel (2021) showed that positive environmental features such as family, school, peer support and the individual's determination to struggle and adaptability can be protective in terms of substance use disorder. Kılınç and Uz Baş (2023), they explained that social relationships, school belonging and self-efficacy variables positively affect psychological resilience. Considering that peer groups with whom they feel safe and comfortable during the university period offer experiences that primarily affect them, increasing interaction with the social environment in learning to develop stable and safe behavior can increase the resilience of the individual.

In the research sample, the average resilience score of the students who use substances did not show a significant difference depending on the reasons for trying the substance for the first time. In the study, the resilience of the students who continued to use substances "in order not to be excluded" among their friends; it is seen that it is lower than those who use substances for "to enjoy", "forcing others", "forgetting their problems", "not being able to quit" and "other reasons". Resilience of students who use substances showed a significant difference depending on the reasons for continuing to use substances. In similar studies, Ögel (1996, 2001) stated that in every prevention program, social reinforcement techniques should be applied in order to gain the ability to say "no" and to resist insistence, so that the results will improve the self-efficacy and self-confidence of the individual, which are among their own internal protective factors. Perişan (2018) examined the relationship between resilience and anxiety and ways of coping, and found that there was a negative relationship between resilience and anxiety, and a positive relationship with coping on the contrary. Cavga (2019) found a positive and significant relationship between the psychological resilience of high school students and their life satisfaction. Gün (2021) examined the relationships between university students' levels of resilience, life skills, and perceived social support, and found that life skills and perceived social support are two important determinants of resilience. In the study conducted by Toraman et al. (2023) positive significant relationships were found between adolescents' psychological resilience, self-efficacy and social emotional learning skills. In addition, it was

determined that having a working mother was a factor that increased self-efficacy, psychological resilience and social emotional skills of adolescents. In addition, emotional self-efficacy and the status of close friends were found to be very important factors affecting psychological resilience. Among the reasons for the differences in the research results, the fact that young people are in a period when they are very vulnerable to being affected by the behaviors of their peers in the university environment may cause them not to be aware of their personal skills and individual abilities, and this may have a decreasing effect on their psychological resilience.

The findings from this very study have indicated that there is a significant difference between the resilience of students who use substance for fun and students who use substance to forget their problems. As a result, it can be said that the resilience of students who use substance to forget their problems is significantly lower than students who substance use for fun. Temporary positive emotions that provide fun may create a non-permanent protective feeling in the person. Consistent with this study, Cooper et al. (1995) developed a model that explains the reasons for alcohol use with four categories. In this model, the reasons for drinking were handled in four categories as "socialization, coping, fun and adaptation" and internal and external positive reinforcement (drinking to increase positive emotions / drinking to gain a positive social reward) and internal and external negative reinforcement (drinking to reduce negative moods / drinking to avoid social rejection). In this model, it was stated that the reason for drinking was to create positive emotions in a fun environment. Studies have shown that there is a positive relationship between psychological resilience and positive affect, and that individuals who are psychologically resilient have high emotional characteristics such as high self-efficacy, high self-esteem, high self-esteem, self-acceptance, self-control and awareness, easy adaptation to new situations, anxiety and frustration (Haynes, 2005; Karaırmak 2007; Karaırmak & Çetinkaya 2011, Kaya, 2019; Onwukwe, 2010; Tugade, Fredrickson & Barrett, 2004). In a similar study, the reasons for starting smoking were, in proportional order, for fun, friends, curiosity, stress and, at the lowest rate, family situations (Aydın et al., 2022). At this point, substance use may also have a short-term increasing effect on psychological resilience by playing a mediating role in increasing positive emotions.

The findings from this very study have shown that there is a significant difference between the resilience of students who use substances to forget their problems and students who use substances for other reasons because they cannot quit. As a result, it can be said that the resilience of the students who use substances to forget their problems is significantly lower than the students who use substances because they cannot quit and for other reasons. In the study, although it is not known exactly what the problems of students using substance are, they may be providing substance orientations in order to provide temporary relief in solving the social and emotional problems that may be experienced during these periods. Köknel (1985) stated that smoking temporarily reduces anxiety caused by minor obstacles encountered in daily life, and can calm emotions such as tension and anger that may push the person to risky behaviors for the moment. In another study, Öztürk (2002) stated that some individuals use alcohol as a quick-acting sedative against stress sources, while the effect of alcohol taken in small amounts on the central nervous system is revealed in an anxiety-relieving and soothing way. A similar study, Köknel (1983), explained that when the alcohol level in the blood is between 10-20 mg%, protective emotions and behaviors such as optimism, cheerfulness, self-confidence and assertiveness increase. In addition, it has been observed that the increase in protective factors such as psychosocial adaptation, social competence, optimism, self-efficacy, and problem-solving-oriented coping strategy, which makes the person feel good

and strong in coping with problems, increases psychological resilience (Coşkun, Garipoğlu, & Tosun 2014; Gürgan, 2006; Terzi, 2008; Ersezgin & Sevi-Tok, 2019). Bahadır and Öz (2009) stated that it is important for individuals to be identified early on issues such as substance addiction, substance use, and substance abuse, and to be supported in the direction of positive mental development, and for this, providing these individuals with skills to effectively cope with problems will increase psychological resilience. Tobacco Use Disorder is one of these subclasses. According to the literature, it has been determined that individuals with Tobacco Use Disorder use tobacco to reduce distress in moments such as depressed mood and intense stress. In this context, while addiction can be defined as an attachment disorder, the substance used is considered as a means by which the individual regulates the problems related to attachment in order to adapt to life (Gül, 2023). The past experiences of substance users and the issues they have difficulty in coping with are considered to be issues that should be emphasized in the help process. The common point in the studies is that the instantaneous changes caused by the substance are not continuous and serious health problems are experienced as a result of use. The aim is not to turn to the substance and not to start it, no matter what situation and environment one is in. In a different study, it was observed that as the alcohol consumption level increases, behavioral control weakens, and when it approaches 300 mg%, it causes symptoms such as extreme anger, high anxiety, confusion, severe exuberance and aggression, and as a result, it weakens the ability to cope with the problems of daily life (Koknel, 1983). As can be understood from the studies, the change in the level of substance use and the reasons for substance use change the effect of protective factors explaining the psychological resilience of the person in the process.

The findings in this research are limited to the data obtained from 546 university students who continued their education in 10 faculties in the Akdeniz University Central Campus in the 2014-2015 academic year. In addition, since substance use is a delicate subject, it would be beneficial to conduct qualitative research, in which closer communication with the participants and in-depth data is possible, together with quantitative research. It is thought that it would be beneficial to support studies on this subject with a larger number of participants, and with follow-up studies that focus on psychological resilience not only with immediate interventions, but also with changes in the process. Life skills training programs that support the development of psychological resilience can be planned at regular intervals in universities. Psychological resilience psychoeducations can be organized by university psychological counseling units.

#### References

Acar, S., Şaşman Kaylı, D., & Yararbaş, G. (2019). Sigara kullanan, sigara bırakma tedavisi alan ve sigara kullanmayan bireylerin psikolojik dayanıklılık ve stresle başa çıkma tutumları bakımından karşılaştırılması. *Addicta: The Turkish Journal on Addictions*, 6, 539–566 . <a href="https://doi.org/10.15805/addicta.2019.6.3.0029">https://doi.org/10.15805/addicta.2019.6.3.0029</a>

Akin-Little, K. A., Little, S. G., & Delligatti, N. (2004). A preventative model of school consultation: Incorporating perspectives from positive psychology. *Psychology in the Schools*, 41(1), 155-162. <a href="https://doi.org/10.1002/pits.10147">https://doi.org/10.1002/pits.10147</a>

- Aydın, G. Ş., Eryiğit, T., & Nurdan, S. (2022). Üniversite Öğrencilerinin Sigaraya Başlama Nedenleri ve Kullanma Oranları. *Lapseki Meslek Yüksekokulu Uygulamalı Araştırmalar Dergisi*, 3(6), 1-14. https://dergipark.org.tr/tr/pub/ljar/issue/74915/1142547
- Aydın, M., & Egemberdiyeva, A. (2018). Üniversite öğrencilerinin psikolojik sağlamlık düzeylerinin incelenmesi. *Türkiye Eğitim Dergisi*, 3(1), 37-53. https://dergipark.org.tr/tr/pub/turkegitimdergisi/issue/37897/33333
- Benard, B. (2004). Resiliency: What we have learned. WestEd.
- Blyth, D. A., & Roelkepartian, E. C. (1993). Healthy communities, healty youth. Mineapolis: Search institude.
- Brooks, R. B. (2001). Fostering motivation, hope, and resilience in children with learning disorders. Annals of Dyslexia, 51(1), 9-20. <a href="https://doi.org/10.1007/s11881-001-0003-4">https://doi.org/10.1007/s11881-001-0003-4</a>
- Cavga, Z. (2019). Lise öğrencilerinde aile yaşam doyumu ile psikolojik dayanıklılık ve sosyal medya kullanım bozukluğu arasındaki ilişkinin incelenmesi. Master Thesis, Istanbul Sabahattin Zaim University, Institute of Social Sciences.
- Çokluk Bökeoğlu, O., & Yılmaz, K. (2007). Üniversite öğrencilerinin fakülte yaşamının niteliğine ilişkin görüşlerinin çeşitli değişkenler açısından incelenmesi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 40(2), 179-204. https://avesis.ankara.edu.tr/yayin/03a2d42f-64db-4888-8adc-21aa0678401e
- Coşkun, D. Y., Garipağaoğlu, Ç., & Tosun, Ü. (2014). Analysis of the relationship between the resiliency level and problem-solving skills of university students. Procedia Social and Behavioral Sciences 114, 673 680. https://doi.org/10.1016/j.sbspro.2013.12.766
- Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper & Row.
- Cuijpers, P. (2009). Effective ingredients of school-based drug prevention programs: A systematic review. *Addictive Behaviors*, 27(6), 1009-1023. <a href="https://doi.org/10.1016/S0306-4603(02)00295-2">https://doi.org/10.1016/S0306-4603(02)00295-2</a>
- Dayıoğlu, B. (2008). Resilience in university entrance examination applicants: The role of learned resourcefulness, perceived social support and gender. Unpublished Master's Thesis, Middle East Technical University Institute of Social Sciences, Ankara.
- Deborah, R., & Simkin, M.D. (2005). Substance Abuse. B.J. Sadock ve V.A. Sadock (Eds.) Kaplan ve Sadock's Comprehensive Textbook of Psychiatry (3471-3473). New York: Lippincott Williams ve Wilkins.
- Deniz, M. E., & Özer, E. (2014). An investigation of university students' resilience level on the view of trait emotional EQ. Elementary Education Online, 13(4), 1240-1248. https://dergipark.org.tr/en/pub/ilkonline/issue/8616/107372
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index (Vol. 55, No. 1, p. 34). American Psychological Association. <a href="https://doi.org/10.1037/0003-066X.55.1.34">https://doi.org/10.1037/0003-066X.55.1.34</a>
- Durak, M. (2002). Deprem yaşamış üniversite öğrencilerinin psikolojik belirtilerini yordamada psikolojik dayanıklılığın rolü. Unpublished Master Thesis, Middle East Technical University, Ankara.

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- Eminağaoğlu, N. (2006). *Güç koşullarda yaşayan sokak çocuklarında dayanıklılık (sağlamlık)*. Unpublished PhD Thesis, Ege University Institute of Social Sciences, İzmir.
- Ersezgin, R., & Sevi-Tok, E. S. (2019). Algılanan iş stresi, psikolojik dayanıklılık, başa çıkma stilleri ve özduyarlılığın tükenmişlik düzeyini yordayıcı etkisi. *Uludağ Üniversitesi Fen-Edebiyat Fakültesi Sosyal Bilimler Dergisi*, 20(36), 1-36. <a href="https://doi.org/10.21550/sosbilder.457245">https://doi.org/10.21550/sosbilder.457245</a>
- Fadardi, J. S., Azad, H. & Nemati, A. (2010). The relationship between resilience, motivational structure, and substance use. *Procedia-Social and Behavioral Sciences*, 5, 1956-1960. <a href="https://doi.org/10.1016/j.sbspro.2010.07.395">https://doi.org/10.1016/j.sbspro.2010.07.395</a>
- Faggiano, F., Vigna-Taglianti, F. D., Versino, E., Zambon, A., Borraccino, A., & Lemma, P. (2008). School-based prevention for illicit drugs use: A systematic review. Preventive medicine, 46(5), 385-396. https://doi.org/10.1016/j.ypmed.2007.11.012
- Fincancıoğlu, N., & Bulut, A. (2003). Öğretmen ve öğretmen adayları için cinsel sağlık eğitimi. İstanbul: Ceren Yayın Dağatım.
- George, D., & Mallery, P. (2010). SPSS for Windows step by step. A simple study guide and reference (10. Baskı). GEN, Boston, MA: Pearson Education, Inc.
- Görgün, S. (2009). Karadeniz Teknik Üniversitesi öğrencilerinde madde kullanımı ve anne babaya bağlanma biçimleri ile ilişkisi. Karadeniz Technical University Institute of Health Sciences Unpublished Master Thesis, Trabzon.
- Guinn, B. (1998). Acculturation and health locus of control among Mexican American adolescents. Hispanic Journal of Behavioral Sciences, 20(4), 492-499. https://doi.org/10.1177/07399863980204006
- Gül, K. N. (2023). Bağımlılık, Bağlanma ve Öfke Kapsamında Bir Olgu Sunumu. *Pearson Journal*, 8(24), 237-246. https://www.pearsonjournal.com/index.php/pub/article/view/419
- Gün, S. (2021). Üniversite öğrencilerinin psikolojik dayanıklılık, yaşam becerileri ve algılanan sosyal destek düzeyleri arasındaki ilişkinin incelenmesi. Unpublished Master's Thesis, Necmettin Erbakan University, Institute of Educational Sciences, Department of Educational Sciences, Konya.
- Haynes, N. M. (2005). Personalized Leadership for Effective Schooling. Retrieved from www.atdp.berkeley.edu/haynes\_keynote\_04.ppt
- Holt, P., Fine, M., & Tollefson, N. (1987). Mediating stress: Survival of the hardy. Psychology in the Schools, 24 (1), 51-58. <a href="https://doi.org/10.1002/1520-6807(198701)24:1<51::AID-PITS2310240110>3.0.CO;2-8">https://doi.org/10.1002/1520-6807(198701)24:1<51::AID-PITS2310240110>3.0.CO;2-8</a>
- Hooper, L. M. (2003). Parentification, resiliency, secure adult attachment style and differentiation of self as predictors of growth among college students. Unpublished PhD Thesis, The George Washington University, Washington.
- Howard, S., & Johnson, B. (2008). What makes the difference? Children and teachers talk about resilient outcomes for children 'at risk'. Educational studies, 26(3), 321-337. <a href="https://doi.org/10.1080/03055690050137132">https://doi.org/10.1080/03055690050137132</a>

- Kamya, H. (2000). Hardiness and spiritual wellbeing among social work students. Journal of Social Work Education, 36 (2), 231-241. <a href="https://doi.org/10.1080/10437797.2000.10779004">https://doi.org/10.1080/10437797.2000.10779004</a>
- Karaırmak, Ö., & Siviş, R. (2010). Üniversite öğrencilerinde maddi kaynakların psikolojik sağlamlık ve olumlu kişilik özellikleri üzerindeki rolü. *Eurasion Journal of Educational Research*, 54. https://ejer.com.tr/wp-content/uploads/2021/01/ejer.2011.43.9.pdf
- Karaırmak, Ö. (2007a). Investigation of personal qualities contributing to psychological resilience among earthquake survivors: A model testing study. Unpublished Doctoral Thesis. Middle East Technical University.
- Karaırmak, Ö. (2007b). Connor-Davidson psikolojik sağlamlık ölçeğinin Türkçe versiyonunun geçerlik ve güvenirliği: Travma örnekleminde doğrulayıcı faktör analizi. IX. Ulusal Psikolojik Danışma ve Rehberlik Kongresi Kitapçığı.
- Karasar, N. (1998). Bilimsel araştırma yöntemi. Ankara: Nobel Yayın Dağatım
- Kaya, S. A. (2019). Alkol kullanım bozukluğu olan ve olmayan bireylerde psikolojik dayanıklılık ve baş etme becerilerinin karşılaştırmalı incelenmesi. Master's Thesis, Istanbul Gelisim University Institute of Social Sciences, Department of Psychology, Department of Clinical Psychology.
- Kheirabadi, G., Asadi, M., Niroumand Sarvandani, M., Jamshidi, A., & Mahdavi, F. (2023). Risk and Protective Factors Affecting Drug Craving among Patients with Substance Use Disorders Undergoing Opioid Agonists Maintenance Therapy. Substance Use & Misuse, 58(13), 1742-1750. https://doi.org/10.1080/10826084.2023.2247068
- Kobasa, S. (1979). Stressful life events, personality and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37, 1-11. <a href="https://doi.org/10.1037/0022-3514.37.1.1">https://doi.org/10.1037/0022-3514.37.1.1</a>
- Kobasa, S., Maddi, S. R., & Kahn, S. (1982). Hardiness and health: A prospective study. *Journal of Personality and Social Psychology*, 42, 168-177. https://doi.org/10.1037/0022-3514.42.1.168
- Köknel, Ö. (1983). Alkolden eroine kişilikten kaçış. İstanbul: Altın Kitaplar Yayınevi.
- Köknel, Ö. (1985). Kaygıdan mutluluğa kişilik. Istanbul: Altın Kitaplar Yayınevi.
- Korkut, F. (2004). Okul temelli önleyici rehberlik. Ankara: Anı Yayıncılık.
- Kosaka, M. (1996). Relations between hardinessand psychological stress response. *Journal of Performance Studies*, 3, 35-40.
- Mariano, A. J., Donovan, D. M., Walker, P. S., Mariano, P. J., & Walker, R. D. (1989). Drinking related locus of control and drinking status of urban native *Americans. Journal of Studies on Alcohol*, 50(4), 331-338. https://doi.org/10.15288/jsa.1989.50.331
- Masten, A., S. (2007). Resilience in developing systems: Progress and promise as the fourth Wave rises. Development and Psychopathology, 19, 921-930. https://doi.org/10.1017/S0954579407000442
- McCalister, K. T., Dolbier, C. L., Webster, J. A., Mallon, M. W., & Steinhardt, M. A. (2006). Hardiness and support at work as predictors of work stress and job satisfaction. American Journal of Health Promotion, 20(3), 183-191. https://doi.org/10.4278/0890-1171-20.3.183

- Muştucu, A. (2022). Covid-19 pandemisinin primer immün yetmezlikli hastalarda yaşam kalitesi, depresyon, anksiyete ve psikolojik dayanıklılık üzerindeki etkisi. https://acikerisim.uludag.edu.tr/items/d1cb54cf-8a90-49c8-818f-95375fc4c85b
- Müderrisoğlu, S. (2008). *Madde kullanımını önleme stratejileri ve üniversite öğrencilerine yönelik önleme program.* Istanbul University, PhD Thesis, Istanbul
- Nakip, M., & Yaraş, E. (2017). Pazarlamada araştırma teknikleri. Ankara: Seçkin Yayınevi
- Obradović, J., & Masten, A. S. (2007). Developmental antecedents of young adult civic engagement. Applied *Developmental Science*, 11(1), 2-19. https://doi.org/10.1207/s1532480xads1101\_1
- Ögel, K. (1996). Alkol ve madde kullanımında önleme çalışmaları. Kriz Dergisi, 4(2), 77-79.
- Ögel, K. (2001). İnsan, yaşam ve bağımlılık tartışmalar ve gerekçeler. İstanbul: IQ Kültür Sanat Yayıncılık.
- Oktan, V. (2008). Üniversite sınavına hazırlanan ergenlerin psikolojik sağlamlıklarının çeşitli değişkenlere göre incelenmesi. PhD Thesis, Karadeniz Technical University, Institute of Social Sciences, Trabzon.
- Onwukwe, Y. U. (2010). The relationship between positive emotions and psychological resilience in persons experiencing traumatic crisis: A quantitative approach, PhD Thesis,, Capella Universitesi.
- Öztürk, M. O. (2002). Ruh sağlığı ve bozuklukları. Ankara: Nobel Tıp Kitapevleri.
- Parrent, C. M. (2007). Resilience and the successful first-generation community college student: Identifying effective student support services Unpublished PhD Thesis., University of North Texas, Texas.
- Peterson, C. (2000). The future of optimism. *American Psychologist*, 55, 44-55. <a href="https://doi.org/10.1037/0003-066X.55.1.44">https://doi.org/10.1037/0003-066X.55.1.44</a>
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5-14. https://doi.org/10.1037/0003-066X.55.1.5
- Sheldon, K. M., & King, L. (2001). Why positive psychology is necessary. *American Psychologist*, 56, 216 217.

# https://doi.org/10.1037/0003-066X.56.3.216

- T.C. İçişleri Bakanlığı Emniyet Genel Müdürlüğü Narkotik Suçlarla Mücadele Daire Başkanlığı, Türkiye Uyuşturucu Raporu 2019. Ankara, TUBİM, 2019: 91-96.
- Terakye, G., Öz, F., & Üstün, B. (2000). Madde bağımlılığını önleme projesi. Ankara: Yayınlanmamış Araştırma Raporu.
- Terzi, Ş. (2008). Üniversite öğrencilerinde kendini toparlama gücünün içsel koruyucu faktörlerle ilişkisi., Hacettepe Üniversitesi Eğitim Fakültesi Dergisi, 35, 297-306. http://www.efdergi.hacettepe.edu.tr/yonetim/icerik/makaleler/562-published.pdf
- Tilim, E., & Murat, M. (2019). Ergenlerde madde bağımlılığından korunmaya ilişkin özyeterlik ile akran baskısı, kendini ifade edebilme becerisi ve psikolojik sağlamlık arasındaki ilişki. *OPUS International Journal of Society Researches*, 14(20), 929-955. <a href="https://doi.org/10.26466/opus.608229">https://doi.org/10.26466/opus.608229</a>

- Toprak, H. (2014). Ergenlerde mutluluk ve yaşam doyumunun yordalayıcısı olarak psikolojik sağlamlık ve psikolojik ihtiyaç doyumu. Master Thesis, Sakarya University, Sakarya
- Toraman, Ç., Sarıgedik, E., Toraman, M. Ç., & Noyan, C. O. (2023). Kurum Bakımında Kalan Ergenlerin, Psikolojik Dayanıklılık, Öz Yeterlilik ve Sosyal Duygusal Öğrenme Becerilerinin Değerlendirilmesi. *Toplum ve Sosyal Hizmet*, 34(1), 169-184. https://doi.org/10.33417/tsh.1062003
- Tugade, M. M., Fredrickson, L. B., & Barrett, L. F. (2004). Psychological resilience and positive emotional granularity: Examining the benefits of positive emotions on coping and health. *Boston College Journal of Personality*, 72 (2). <a href="https://doi.org/10.1111/j.1467-6494.2004.00294.x">https://doi.org/10.1111/j.1467-6494.2004.00294.x</a>
- Turhan, E., İnandı, T., Özer, C., & Akoğlu, S. (2011). Üniversite öğrencilerinde madde kullanımı, şiddet ve bazı psikolojik özellikler. *Türkiye Halk Sağlığı Dergisi*, 9(1), 33-44. <a href="https://doi.org/10.20518/tjph.173053">https://doi.org/10.20518/tjph.173053</a>
- Uğur, K., Tamam, L., Demirkol, M. E., Yıldız, S., Kartal, F., Kazğan A., & Polat H. (2021). Denetimli serbestlik polikliniğine başvuran madde kullanım bozukluğu tanılı bireylerde intihar davranışı. *Bağımlılık Dergisi*, 22(4), 403-412. https://doi.org/10.51982/bagimli.928360
- Weiner, I. B. (2001). Child and adolescent psychopathology. NY: Willey
- WHO (2008). Report on the Global Tobacco Epidemic. Retrieved from http://www.who.int/tobacco/mpower/2008/en/index.html.
- Yalçın, M., Eşsizoğlu, A., Akkoç, H., Yaşan, A., & Gürgen, F. (2009). Dicle Üniversitesi öğrencilerinde madde kullanımını belirleyen risk faktörleri. Klinik Psikiyatri, 12, 125-133.
- Yalım, D. (2007). First year collage adjustment: The role of coping, ego-resiliency, optimism, and gender. Unpublished Master's Thesis, Middle East Technical University, Institute of Social Sciences Ankara.
- Yavuz, M., (2020). Nikotin bağımlılığında psikolojik dayanıklılık ve duygu düzenleme güçlüklerinin rolü. Unpublished Master's Thesis, Maltepe University, Graduate School of Education, Istanbul.
- Yılmaz, D., & Türkkahraman, M. (2014). Önleme çalışmalarında Antalya ili lise ve üniversite öğrencilerinde madde kullanımının ve risk etkenlerinin incelenmesi. *Journal of Educational Sciences*, 3(4), 1-18. https://dergipark.org.tr/tr/pub/jedus/issue/16126/168712
- Yüncü, Z., & Akyel, B. (2021). Madde kullanım bozukluğu olan ergenler ve sağlıklı kardeşlerinin; çocukluk çağı travması, psikolojik dayanıklılık ve yürütücü işlevler açısından değerlendirilmesi. Ege University, Institute of Health Sciences
- Zollinger, T. W., Saywell, R. M., Muegge, C. M., Wooldridge, J. S., Cummings, S. F., & Caine, V. A. (2003). Impact of the life skills training curriculum on middle school students' tobacco use in Marion County, Indiana, 1997-2000. *Journal of School Health*, 73(9), 338-346. <a href="https://doi.org/10.1111/j.1746-1561.2003.tb04190.x">https://doi.org/10.1111/j.1746-1561.2003.tb04190.x</a>