

## Expression of Emotions by College Students According to Levels of the Tendency to Use Substances

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### ABSTRACT

In this study, which aims to examine the ways in which university students with different substance use tendencies express their feelings in terms of various variables, the negative affect score average of the participants with high substance use tendency is significantly higher than the negative affect point average of the participants with low substance use tendency. While the positive emotion scores of university students did not differ based on their possible previous psychiatric illness, a significant difference was found between negative emotion scores. According to the perceived parental attitudes, there was no significant difference between the positive emotion score averages of the university students; however, a significant difference was found between the mean scores of negative emotions. A significant difference was found between positive and negative emotion scores about the students' self-identification. While there was a significant difference between the positive emotion scores according to the perceived academic achievement level of the students, there was no significant difference between negative emotion scores. As to their smoking habits, there was no difference between the positive emotions of the participants; however, the joint effect of the level of substance use tendency and smoking on negative emotion scores is significant.

**Keywords:** Substance use tendency, positive emotion, negative emotion.

## Üniversite Öğrencilerinin Madde Kullanma Eğilimi Düzeylerine Göre Duygularını İfade Etmeleri

### ÖZ

Madde kullanma eğilimleri farklı üniversite öğrencilerinin duygularını ifade etme tarzlarını çeşitli değişkenler açısından incelemeyi amaçlayan bu çalışmada yüksek madde kullanım eğilimine sahip katılımcıların negatif duygu puan ortalaması, düşük madde kullanım eğilimine sahip katılımcıların negatif duygu puan ortalamasından anlamlı düzeyde yüksektir. Daha önce psikiyatrik hastalık geçirip-geçirmemeye göre katılımcıların pozitif duygu puanları farklılaşmazken; negatif duygu puanları arasında anlamlı farklılık bulunmuştur. Algılanan ebeveyn tutumuna göre katılımcıların pozitif duygu puan ortalamaları arasında anlamlı bir fark bulunmamış; negatif duygu puan ortalamaları arasında ise anlamlı farklılık bulunmuştur. Katılımcıların kendi kişiliklerini tanımlamaları açısından pozitif ve negatif duygu puanları arasında anlamlı farklılık saptanmıştır. Öğrencilerin algılanan akademik başarı düzeyine göre pozitif duygu puanlarında anlamlı farklılık bulunurken; negatif duygu puanlarında anlamlı farklılık bulunmamıştır. Sigara kullanıp-kullanmama durumuna göre katılımcıların pozitif duyguları arasında farklılık bulunamazken; madde kullanma eğilimi düzeyi ile sigara kullanımı değişkenlerinin negatif duygu puanları üzerindeki ortak etkisinin anlamlı olduğu saptanmıştır.

**Anahtar Kelimeler:** Madde kullanma eğilimi, pozitif duygu, negatif duygu.

### Introduction

Substance abuse continues to exist as an important public health problem in relation to humanity (Xia, Gong, Wang, Li and Mao, 2022). Substances can be defined as addictive and abusable chemicals that can make changes in people's spiritual, emotional functions and other biological functions (Ceyhun, Oğuztürk and Ceyhun, 2001). Substance addiction is defined as a disease affecting brain functions and showing up with repeatedly using a substance for seeking the pleasure-inducing

effect of it and eliminating withdrawal symptoms occurred when it is not used (Ögel, 2002; Uzbay, 2015). Substance addiction poses a great threat to people's mental and physical health and it imposes a serious burden on the society and economy (Xia et al., 2022). Development of a tolerance and withdrawal syndrome are usual issues faced by one within the substance addiction process. Withdrawal is defined as the syndrome occurring as changes in emotional, ideational and behavioural areas (Karakartal, 2020) as a result of quitting a medicine or substance or reducing the intake, while development of a tolerance is defined as the need for taking larger doses to produce the earlier effect of a substance decreasing gradually (Öztürk and Uluşahin, 2011). In time, one who uses substances grows unable to feel the earlier pleasure with the same dosage and thus tries to increase the intake and that is the development of tolerance. One starts to feel the symptoms of withdrawal when unable to take the substance or it is delayed. Withdrawal symptoms can be regarded as the epitome of substance addiction.

Substance use can affect the emotional processes of an individual (Özden, 1992). Emotion can be defined as the sense affecting behaviours of an individual against a situation or person as a result of his experiences (Doğan and Özdevecioğlu, 2009). Emotions are generally divided into two groups as positive and negative emotions. Negative emotions are defined as unpleasant feelings like stress, fear and anger while positive emotions are defined as pleasure and joy from life (Gençöz, 2000). As it is seen in the definitions, emotions can direct one's behaviours or be affected by the behaviours of an individual or environment. Within this scope, there can be some relations between one's expression of positive and negative emotions. An experimental study was carried out on a group of inpatients using substances and alcohol within a research conducted on emotions and substance use. The relation between the effect of emotion-focused therapy on the regulation and expression of emotions and craving for the substance was analysed. According to the results of the study, patients given emotion-focused therapy were determined to express their emotions at better levels than those who were not. Besides, the levels of craving for substance-alcohol of the group receiving the therapy were determined to be decreased compared to those who do not receive it (Coşkun, 2019). In a study conducted by Heggeness, Lechner and Ciesla (2019), a positive relationship was found between substance use and depressive mood, internal attribution bias, and daily sadness. A positive relationship was found between sadness and smoking in another study. It has also been found to provide support for a model of the effects of emotion, particularly on tobacco use and addictive behavior in general (Dorison, Wang, Rees, Kawachi, Ericson and Lerner, 2019). As is also seen in the results of the study, emotions can affect choices. When the fact that people tend to use substances as a result of their choices taken into account, this can be said that the role of emotions in starting to use substances is important. Additionally, expression of emotions can create a protective effect against using alcohol and substances.

Drug use has been reported to increase despite many precautions taken in the world, especially in developing countries. Besides, many of the researches conducted on substance use in both the world and Turkey are on children and adolescents in primary and high school ages (Bülbül and Odacı, 2018; Yıldız, Çiftçi and Yaçım, 2020). As Turkey is one of the developing countries, this can be said that substance addiction is an important problem. It is not only a personal but a social problem. In addition to being an individual problem, substance abuse is also a social and economic problem. For example, 2.340.421,544 TL was spent to fight drugs in Turkey in 2021. Considering the fact that this expense increased by 37.5% compared to 2019 (Ministry of Internal Affairs EGM, 2022), it can be seen how important studies on substance use, addiction and prevention are for our country and the world. As stated above, substance use is a public health problem. Despite its negative consequences, users continue to take substance obsessively. On the other hand, many substance users who receive rehabilitation support also face the risk of recurrence (Xia et al., 2022). For this reason, it can be said that substance use and tendency to use substances are a potential risk for individuals of all ages, the society and the whole world. There are studies in literature showing the relationship between the tendency to use substance and self-esteem (Riquelme, García and Serra, 2018), attachment style and hopelessness (Bülbül and Odacı, 2018), life satisfaction (Çolak and Ünal, 2020), self-harm and suicide (Bilgin, Böndü and Elsner, 2022). On the other hand, no research has been found on the tendency to use substance and emotion expression styles. It is thought that there is a relationship between an

individual's tendency to use substance and emotion expression styles. It is thought that when it is determined whether this relationship exists, this will contribute to literature on substance use tendency and the fight with substance addiction, and the results obtained from the study will be used in the rehabilitation process of addiction. In line with these views, the present study aims to examine the way university students express their emotions according to their substance use tendency levels.

In accordance with this purpose, answer was sought to the question “Is there a significant difference in the expression of positive or negative emotions in university students with different substance use tendencies in terms of gender, smoking status, psychiatric disease history, perceived parental attitude, self-definition according to personality structure, and perceived academic success?”

## **Method**

Information on the research model, study group, data collection tools, data collection process and analysis of data was given in this section.

### **Research Model**

The correlational survey method of quantitative research design was adopted for this study. This design is defined as a research model aiming at determining the existence and/ or degree of covariance between two or more variables by Büyüköztürk, Akgün, Karadeniz, Demirel and Çakmak (2014).

### **Study Group**

Convenient sampling, one of the non-random sampling methods, was used in this study to reach the participants. According to Şenol (2012), in cases where there are limitations in terms of time, money and labor, choosing the sample from easily accessible and applicable units is called convenient sampling. The sample size to be reached in the study was calculated in the G Power environment. While creating the relevant parameters; effect size  $f$  was determined as .25 and power as .95. The total sample size calculated in line with these parameters is 400. Data collection tools were applied online to students from different universities located in Marmara, Mediterranean, Aegean, Central and Eastern Anatolia regions of Turkey. 711 college students composed of 462 females and 249 males were participants in the study. 252 students are smokers and 459 are non-smokers. 549 students stated having no previous psychiatric disease and 162 of them stated they had. 175 students evaluated their perceived parental attitude as democratic, 160 of them as authoritarian, 253 of them as protective and 123 of them as permissive. 259 participants defined themselves as extrovert, 185 of them as introvert and 230 of them as indecisive. There are 140 unsuccessful, 203 less successful, 287 successful and 81 very successful students according to their self-definition in terms of perceived academic success level.

### **Data Collection and Ethical Considerations**

The study was carried out in line with the permission numbered 07 given at the 17.03.2021 dated and 2021-09 numbered meeting of the Ethics Committee of Istanbul Gelişim University Rectorate. In the study, data collection tools were administered through online processes due to Covid-19 Pandemic. Data collection tools were prepared with Google Forms and delivered to students studying in eight different universities as stated above, with convenience sampling. Before filling in the measurement tools, the participants were informed with an informed consent form. The participants who agreed to participate were included in the study.

## **Data Collection Tools**

Substance Abuse Proclivity Scale (SAP), Positive and Negative Affect Schedule (PANAS) and Personal Information Form (PIF) prepared by researchers were used to collect data for the study. Information on these measurement tools is below.

### **Substance Abuse Proclivity Scale (SAP)**

The scale was developed by Mac Andrew based on The Minnesota Multiphasic Personality Inventory (MMPI). In the study of adaptation to Turkish culture, 650 male participants were studied. Validity study of Substance Abuse Proclivity Scale was conducted based on The MacAndrew Alcoholism Scale were conducted. SAP was applied twice and 5 weeks apart to 60 participants to determine the test-retest reliability of the scale, and the correlation of the scale between the two applications was found to be .63 (Ceyhun et al., 2001). The internal consistency of the Substance Abuse Tendency Scale, the data of the current study, was examined. The Cronbach Alpha coefficient calculated in this context was found to be .76.

### **Positive and Negative Affect Schedule (PANAS)**

The original form of the Positive and Negative Affect Schedule was developed by Watson, Clark and Teliegen (1988). The study of adaptation of the scale to Turkish culture was conducted by Gençöz (2000). 199 college students were participants of the adaptation study. Factor validity of the scale was studied and internal consistency for positive and negative emotions were respectively found to be .83 and .86, and test-retest reliability for them were respectively found to be .40 and .54. Criterion-related validity of the scale was studied with Beck's Depression Inventory and Beck's Anxiety Inventory. Accordingly, Positive Emotion Scale correlation scores for these scales are respectively -.48 and -.22 and correlation scores of Negative Emotion Scale with these inventories are respectively found to be .51 and .47. (Gençöz, 2000). The reliability of the scale was analysed within internal consistency. Cronbach Alpha coefficients for positive and negative subdimensions calculated for that purpose were found to be .87 and .84 respectively.

### **Personal Information Form (PIF)**

There are questions regarding gender, psychiatric disease history, parental attitude, self-definition of personality, academic success perceptions and cigarette smoking status within PIF which was prepared by researchers.

## **Analysis of Data**

Data acquired from measurement tools were analysed with SPSS 25.0. Levels of the tendency of college students to use substances were determined as low and high according to the cut-off score of the scale. The level of the tendency to use substances was classified as low and high levels based on the fact that the tendency to use substances of individuals who got 16 or higher from SAP was considered as high level and that of those who got lower than 16 was considered as low level. It was analysed whether there is a significant difference between expression of positive and negative emotions by college students according to their demographic characteristics. Homogeneity of groups was determined using Levene's test within variance analysis assessments. Differences between groups were compared using two-way analysis of variance based on the questions whose answers were being sought. Differences between means of groups with regard to the variables with significant F values as a result of two-way analysis of variance were tested using Scheffe's Multiple Comparison Test. In the event that the joint effect of two factors on the dependent variable is significant, a new variable with pores coded inside was created and means of pores were compared with each other based on this factor in order to determine the subgroups of two with the average score differences on which the joint effect is based (Büyüköztürk, 2010). The margin of error of the study was determined as 0.05.

## Results

Results on expression of emotions by college students based on their tendency to use substances are depicted in this section. Descriptive statistics showing distributions of positive and negative emotions scores of college students with different tendencies to use substances according to gender are depicted in Table 1.

Table 1  
*Descriptive statistics showing positive and negative emotions scores of college students with different tendencies to use substances according to gender*

Substance Use Tendency	Gender	Positive Emotion			Negative Emotions		
		$\bar{X}$	S	N	$\bar{X}$	S	n
Low Tendency	Female	30.44	7.49	319	23.25	7.07	319
	Male	34.37	8.84	131	20.99	6.43	131
	Total	31.58	8.10	450	22.60	6.96	450
High Tendency	Female	32.58	9.60	143	31.00	8.81	143
	Male	33.41	8.59	118	27.45	8.33	118
	Total	32.95	9.15	261	29.39	8.76	261
Total	Female	31.10	8.25	462	25.65	8.44	462
	Male	33.92	8.72	249	24.05	8.05	249
	Total	32.09	8.52	711	25.09	8.34	711

As is seen in Table 1, positive emotions scores of male college students with low or high tendency to use substances are higher than those of female college students. Additionally, negative emotions scores of female college students with low or high tendency to use substances are higher than those of male college students. Two-way analysis of variance was conducted for independent variables in order to determine if the difference between positive and negative emotions scores of male and female students of each group is statistically significant and the results are depicted in Table 2.

Table 2  
*Results of Two-way Variance Analysis of positive and negative emotions scores of college students with different tendencies to use substances according to gender*

Source of Variance		KT	Sd	KO	F	P	$\eta^2$
Positive Emotion Scores	Substance Use Tendency	52.56	1	52.56	.75	.39	.00
	Gender	864.17	1	864.17	12.29	.00	.017
	Substance Use Tendency *Gender	368.38	1	368.38	5.24	.02	.01
	Error	49704.53	707	70.30			
	Total	51496.59	710				
Negative Emotion Scores	Substance Use Tendency	7688.74	1	7688.74	134.51	.00	.16
	Gender	1287.70	1	1287.70	22.53	.00	.03
	Substance Use Tendency*Gender	63.36	1	63.36	1.11	.29	.00
	Error	40412.62	707	57.16			
	Total	49339.06	710				

As is seen in Table 2, there is no significant difference between means of positive emotions scores of college students according to their tendency to use substances ( $F=.75$ ;  $p>.05$ ). Positive emotion score mean ( $\bar{X}= 33.92$ ) of male college students ( $n= 229$ ) is statistically significantly higher ( $F=12.29$ ;  $p<.05$ ) than that ( $\bar{X}= 31.10$ ) of female college students ( $n=462$ ). The joint effect of the tendency to use substances and gender variable on positive emotions scores of college students is significant ( $F=5.24$ ;  $p<.05$ ). As is also seen in Table 2, the mean of negative emotions scores ( $\bar{X}=29.39$ ) of college students ( $n=261$ ) with high tendency to use substances was found to be significantly higher ( $F=134.51$ ;  $p<.05$ ) than that ( $\bar{X}=22.60$ ) of those ( $n=450$ ) with low tendency to use substances. On the other hand, the mean of negative emotions scores ( $\bar{X}=25.65$ ) of female college students ( $n=462$ ) is significantly higher ( $F=22.53$ ;  $p<.05$ ) than that ( $\bar{X}=24.05$ ) of male college

students (n=249). The joint effect of the tendency to use substances and gender variable on negative emotions scores of college students was determined to be insignificant ( $F=1.11$ ;  $p>.05$ ). In order to determine the reason for the difference in the positive emotion scores of the participants according to their substance use tendency and gender, a new variable was created in which the pores were coded, and the average of the pores was calculated on the basis of this factor. In addition, the Scheffe Multiple Comparison results applied to determine the source of the difference between the individuals in the pores and the positive emotion score averages are presented in Table 3.

Table 3  
Descriptive statistics on pore definition and individuals in pores and results of Scheffe's Test for Multiple Comparison according to the average pore scores

Descriptive statistics				Results of Scheffe's Test for Multiple Comparison				
(I) Pore	Pore Expression	n	$\bar{X}$	(I) Pore	(J)Pore	Difference Between Average (I-J)	Standard Error	P
11.00	Low Substance Use Propensity- Female	319	30.44	11.00	12.00	-3.94*	.87	.00
					21.00	-2.14	.84	.09
					22.00	-2.97*	.90	.01
12.00	Low Substance Use Propensity- Male	131	34.37	12.00	11.00	3.94*	.87	.00
					21.00	1.79	1.0	.37
					22.00	.97	1.06	.84
21.00	High Substance Use Propensity- Female	143	32.58	21.00	11.00	2.14	.84	.09
					12.00	-1.79	1.01	.37
					22.00	-.83	1.04	.89
22.00	High Substance Use Propensity- Male	118	33.41	22.00	11.00	2.97*	.90	.01
					12.00	-.97	1.06	.84
					21.00	.83	1.04	.89

When Table 3 analysed, the mean of positive emotions scores ( $\bar{X}=30.44$ ) of women (n=319) with low tendency to use substances is seen to be statistically significantly lower ( $p<.05$ ) than that ( $\bar{X}=34.37$ ) of men (n=131) with low tendency to use substances. On the other hand, the mean of positive emotions scores ( $\bar{X}=30.44$ ) of women (n=319) with low tendency to use substances was determined to be statistically significantly lower than that ( $\bar{X}=33.41$ ) of men (n=118) with high tendency to use substances. Descriptive statistics showing the distribution of positive and negative emotions scores of college students with different tendencies to use substances based on Psychiatric Disease History are depicted in Table 4.

Table 4  
Descriptive statistics of the distribution of positive and negative emotions scores of college students with different tendencies to use substances based on Psychiatric Disease History

Substance Use Tendency	Past Psychiatric Disease	Positive Emotion			Negative Emotion		
		$\bar{X}$	S	n	$\bar{X}$	S	n
Low Tendency	Yes	31.53	8.04	377	21.97	6.72	377
	No	31.85	8.43	73	25.81	7.32	73
	Total	31.58	8.10	450	22.60	6.96	450
High Tendency	Yes	32.82	9.08	172	29.06	8.64	172
	No	33.21	9.33	89	30.04	8.99	89
	Total	32.95	9.15	261	29.39	8.76	261
Total	Yes	31.94	8.39	549	24.19	8.07	549
	No	32.60	8.93	162	28.14	8.52	162
	Total	32.09	8.52	711	25.09	8.34	711

When Table 4 analysed, the differences between positive and negative emotions scores of college students with different tendencies to use substances and different psychiatric disease histories are seen. Results of Two-way Variance Analysis for Independent Variables applied to determine if differences are statistically significant are depicted in Table 5.

Table 5

Results of two-way variance analysis of positive and negative emotions scores of college students with different tendencies to use substances based on psychiatric disease history

Source of Variance		KT	Sd	KO	F	P	$\eta^2$
Positive Emotion Scores	Substance Use Tendency	210.37	1	210.37	2.91	.09	.00
	Psychiatric Disease	15.09	1	15.09	.21	.65	.00
	Substance Use Tendency * Psychiatric Disease	.18	1	.18	.00	.96	.00
	Error	51171.54	707	72.38			
Total		51496.59	710				
Negative Emotion Scores	Substance Use Tendency	3837.42	1	3837.42	66.58	.00	.09
	Psychiatric Disease	696.00	1	696.01	12.08	.00	.02
	Substance Use Tendency * Psychiatric Disease	242.83	1	242.83	4.21	.04	.01
	Error	40746.29	707	57.63			
Total		49339.06	710				

According to Table 5, no significant difference was determined between positive and negative emotions scores of college students based on psychiatric disease history ( $F=.21$ ;  $p>.05$ ). The joint effect of the tendency to use substances and psychiatric disease history on positive emotions scores of college students is statistically insignificant ( $F=.00$ ;  $p>.05$ ). The mean ( $\bar{X}=28.14$ ) of negative emotions scores of college students ( $n=162$ ) with no psychiatric disease history is seen to be statistically significantly higher than that ( $\bar{X}=24.19$ ) of those ( $n=549$ ) who previously had a psychiatric disease ( $F=12.08$ ;  $p<.05$ ). The joint effect of the tendency to use substances and the variable of psychiatric disease history on negative emotions scores of college students is significant ( $F=4.21$ ;  $p<.05$ ). In order to determine the reason for the difference in negative emotion scores according to the substance use tendency of the participants and the state of having a psychiatric illness, a new variable in which the pores were coded, and the pore averages were calculated on the basis of this factor. In addition, the Scheffe Multiple Comparison results applied to determine the source of the difference between the individuals in the pores and the negative emotion score averages are presented in Table 6.

Table 6

Descriptive statistics on the pore definition and individuals within pores and results of Scheffe's Test for Multiple Comparison according to the mean of pore scores

Descriptive statistics				Results of Scheffe's Test for Multiple Comparison				
(I) Pore	Pore Expression	n	$\bar{X}$	(I) Pore	(J)Pore	Difference Between Avarage (I-J)	Standard Error	P
11.00	Low Substance Use Tendency-	377	21.97	11.00	12.00	-3.83*	.97	.00
	No Disease History				21.00	-7.08*	.70	.00
	Low Substance Use Tendency-				22.00	-8.07*	.89	.00
12.00	Has a History of Disease	73	25.81	12.00	11.00	3.83*	.97	.00
	High Substance Use Tendency -				22.00	-4.24*	1.06	.03
	Has a History of Disease				11.00	7.08*	.70	.00
21.00	No Disease History	172	29.06	21.00	12.00	3.25*	1.06	.03
	High Substance Use Tendency -				22.00	-.99	.99	.80
	Has a History of Disease				11.00	8.07*	.89	.00
22.00	High Substance Use Tendency -	89	30.04	22.00	12.00	4.24*	1.20	.01
	Has a History of Disease				21.00	.99	.99	.80

According to Table 6, the mean ( $\bar{X}=25.81$ ) of negative emotions scores of college students ( $n=73$ ) who previously had a psychiatric disease and with low tendency to use substances were determined to be significantly higher than that ( $\bar{X}=21.97$ ) of those ( $n=377$ ) with no psychiatric disease history and low tendency to use substances. Additionally, the mean ( $\bar{X}=30.04$ ) of negative emotions scores of college students ( $n=89$ ) who previously had a psychiatric disease and with high tendency to use substances turned out to be significantly lower than that ( $\bar{X}=29.06$ ) of those ( $n=172$ ) with no psychiatric disease history and with high tendency to use substances. Descriptive statistics, showing the distribution of means of positive and negative emotions scores of college students with different tendencies to use substances according to perceived parental attitude, are depicted in Table 7.

Table 7

*Descriptive statistics of positive and negative emotions scores of college students with different tendencies to use substances according to perceived parental attitude*

Substance Use Tendency	Perceived Parental Attitude	Positive Emotion			Negative Emotion		
		$\bar{X}$	S	n	$\bar{X}$	S	n
Low Tendency	Democratic	32.26	8.66	126	21.33	6.72	126
	Authoritarian	31.19	8.43	83	24.16	6.49	83
	Protective	30.91	7.67	177	23.21	6.92	177
	Permissive	32.63	7.61	64	21.34	7.60	64
	Total	31.58	8.10	450	22.60	6.96	450
High Tendency	Democratic	33.18	9.14	49	26.51	9.09	49
	Authoritarian	33.56	10.16	77	30.27	9.01	77
	Protective	32.16	8.34	76	30.96	8.68	76
	Permissive	33.00	8.92	59	28.63	7.75	59
	Total	32.95	9.15	261	29.39	8.76	261
Total	Democratic	32.52	8.78	175	22.78	7.79	175
	Authoritarian	32.33	9.35	160	27.10	8.36	160
	Protective	31.28	7.88	253	25.54	8.28	253
	permissive	32.80	8.23	123	24.84	8.47	123
	Total	32.09	8.52	711	25.09	8.34	711

According to Table 7, the means of positive emotions scores of college students with the perception of democratic, authoritarian, protective and permissive parental attitudes seem close to each other. The mean of negative emotions scores of college students with low and high tendencies to use substances and authoritarian parents is higher than that of college students with democratic, protective and permissive parents. The Two-way Analysis of Variance for Independent Variables was conducted to determine whether the difference between means of negative emotions scores of college students with different tendencies to use substances and perceived parental attitudes is statistically significant and the results are depicted in Table 8.

Table 8

*Results of two-way analysis of variance of positive and negative emotions scores of college students with different tendencies to use substances according to perceived parental attitude*

	Source of Variance	KT	Sd	KO	F	P	$\eta^2$
Positive Emotion Scores	Substance Use Tendency	230.19	1	230.19	3.18	.08	.01
	Perceived Parental Attitude (PPA)	182.01	3	60.67	.84	.47	.00
	Substance Use Tendency * PPA	76.80	3	25.60	.35	.79	.00
	Error	50887.27	703	72.39			
	Total	51496.59	710				
Negative Emotion Scores	Substance Use Tendency	6613.65	1	6613.65	114.96	.00	.14
	Perceived Parental Attitude	1223.13	3	407.71	7.09	.00	.03
	Substance Use Tendency* PPA	163.99	3	54.66	.95	.42	.00
	Error	40443.44	703	57.53			
	Total	49339.06	710				

According to Table 8, there is no significant difference between means of positive emotions scores of college students according to perceived parental attitude ( $F=.47$ ;  $p>.05$ ). Additionally, the mean of negative emotions scores ( $\bar{X}=27.10$ ) of college students defining the attitude of their parents as authoritarian ( $n=160$ ) is significantly higher ( $F=7.09$ ;  $p<.05$ ) than the means of negative emotions scores ( $\bar{X}=22.78$ ) of those defining the attitude of their parents as democratic ( $n=175$ ) and that ( $\bar{X}=24.84$ ) of those defining the attitude of their parents as permissive ( $n=123$ ). The joint effect of variables of the tendency to use substances and perceived parental attitude on the means of positive and negative emotions scores of college students is insignificant ( $F=.84$ ;  $p>.05$ ;  $F=.42$ ;  $p>.05$ ). Descriptive statistics, showing the distributions of the means of positive and negative emotions scores of college students with different tendencies to use substances according to their self-definition, are depicted in Table 9.



Table 9

*Descriptive statistics on positive and negative emotions scores of college students with different tendencies to use substances according to their self-definition*

Substance Use Tendency	How Do They Define Themselves	Positive Emotion			Negative Emotion		
		$\bar{X}$	S	n	$\bar{X}$	S	n
Low Tendency	Extrovert	33.46	8.26	193	21.39	6.65	193
	Introvert	29.85	7.49	107	23.93	7.11	107
	Indecisive	30.41	7.85	150	23.19	7.03	150
	Total	31.58	8.10	450	22.60	6.96	450
High Tendency	Extrovert	34.88	10.10	102	27.49	9.24	102
	Introvert	31.03	8.23	79	30.56	7.71	79
	Indecisive	32.40	8.33	80	30.68	8.78	80
	Total	32.95	9.15	261	29.39	8.76	261
Total	Extrovert	33.95	8.95	295	23.50	8.17	295
	Introvert	30.35	7.81	186	26.75	8.05	186
	Indecisive	31.10	8.06	230	25.80	8.46	230
	Total	32.09	8.52	711	25.09	8.34	711

When Table 9 analysed, the mean of positive emotions scores of college students defining themselves as extrovert, and with low and high tendencies to use substances is seen to be higher than that of those defining themselves as introvert and indecisive. The mean of negative emotions scores of college students defining themselves as introvert, and with low and high tendencies to use substances turned out to be higher than that of those defining themselves as extrovert and indecisive. The Two-way Analysis of Variance for Independent Variables was conducted to determine whether the difference between the means of positive and negative emotions scores of college students with different tendencies to use substances and different self-definitions is statistically significant and results are depicted in Table 10.

Table 10

*Results of two-way analysis of variance of positive and negative emotions scores of college students with different tendencies to use substances according to their self-definitions*

	Source of Variance	KT	Sd	KO	F	P	$\eta^2$
Positive Emotion Scores	Substance Use Tendency	375.07	1	375.07	5.37	.02	.01
	Self-Definition	1732.26	2	866.13	12.39	.00	.03
	Substance Use Tendency *Self- Definition	17.72	2	8.86	.13	.88	.00
	Error	49279.50	705	69.90			
	Total	51496.59	710				
Negative Emotion Scores	Substance Use Tendency	7270.25	1	7270.25	126.34	.00	.15
	Self-Definition	1114.31	2	557.15	9.68	.00	.03
	Substance Use Tendency * Self – Definition	56.01	2	28.00	.49	.62	.00
	Error	40568.32	705	57.54			
	Total	49339.06	710				

According to Table 10, the mean of positive emotions scores ( $\bar{X}$ =33.95) of college students defining themselves as extrovert (n=295) is seen to be significantly higher (F=12.39; p<.05) than that ( $\bar{X}$ =30.34) of those defining themselves as introvert (n=186). Additionally, the mean of negative emotions scores ( $\bar{X}$ =26.74) of college students defining themselves as introvert (n=186) was found to be significantly higher (F=9.68; p<.05) than that ( $\bar{X}$ =23.50) of those defining themselves as extrovert (n=295). The joint effect of variables of the level of the tendency to use substances and self-definition on means of positive and negative emotions scores is seen to be insignificant (F= .13; p>.05; F= .62; p>.05). Descriptive statistics, showing the distributions of the means of positive and negative emotions scores of college students with different tendencies to use substances according to their perceived academic success levels, are depicted in Table 11.

Table 11

*Descriptive statistics on positive and negative emotions scores of college students with different tendencies to use substances according to their perceived academic success levels*

Substance Use Tendency	Perceived Academic Success	Positive Emotion			Negative Emotion		
		$\bar{X}$	S	n	$\bar{X}$	S	n
Low Tendency	Unsuccessful	30.14	7.62	65	23.66	7.65	65
	Less successful	29.42	8.25	132	23.11	7.32	132
	Successful	32.67	7.22	211	22.08	6.41	211
	Very Successful	35.14	10.27	42	21.93	7.29	42
	Total	31.58	8.10	450	22.60	6.96	450
High Tendency	Unsuccessful	32.12	8.20	75	29.08	8.01	75
	Less successful	30.89	9.33	71	29.66	8.83	71
	Successful	34.84	8.28	76	29.64	8.49	76
	Very Successful	34.64	11.25	39	29.03	10.64	39
	Total	32.95	9.15	261	29.39	8.76	261
Total	Unsuccessful	31.20	7.97	140	26.56	8.28	140
	Less successful	29.94	8.65	203	25.40	8.46	203
	Successful	33.25	7.56	287	24.08	7.76	287
	Very Successful	34.90	10.69	81	25.35	9.69	81
	Total	32.09	8.52	711	25.09	8.37	711

According to Table 11, the means of positive emotions scores of college students with high tendency to use substances, and very successful and successful perceived academic success levels are higher than that of those with unsuccessful and less successful academic success levels. Two-way Analysis of Variance for Independent Variables was conducted to determine whether the difference between the means of positive and negative emotions scores of college students with different tendencies to use substances and different perceived academic success levels is statistically significant and the results are depicted in Table 12.

Table 12

*Results of two-way analysis of variance of positive and negative emotions scores of college students with different tendencies to use substances according to perceived academic success levels of them*

Source of Variance		KT	Sd	KO	F	P	$\eta^2$
Positive Emotion Scores	Substance Use Tendency	221.97	1	221.97	3.19	.08	.01
	Perceived Academic Success (PAS)	2057.31	3	685.77	9.86	.00	.04
	Substance Use Tendency * PAS	113.28	3	37.76	.54	.65	.00
	Error	48915.67	703	69.58			
	Total	51496.59	710				
Negative Emotion Scores	Substance Use Tendency	6026.33	1	6026.33	102.09	.00	.13
	Perceived Academic Success	68.80	3	22.93	.39	.76	.00
	Substance Use Tendency * PAS	102.90	3	34.30	.58	.63	.00
	Error	41497.28	703	59.03			
	Total	49339.06	710				

According to Table 12, the mean of positive emotions scores ( $\bar{X} = 34.910$ ) of college students with very successful perceived academic success level (n=81) is significantly higher (F=9.86; p<.05) than the mean of positive emotions scores ( $\bar{X} = 31.20$ ) of those with unsuccessful perceived academic success level (n=140) and that ( $\bar{X} = 29.94$ ) of those with less successful perceived academic success level (n=203). There is no significant difference between means of negative emotions scores of college students according to perceived academic success level (F=.39; p>.05). The joint effect of variables of the level of the tendency to use substances and perceived academic success level on means of positive and negative emotions scores was found to be insignificant (F= .54; p>.05; F= .58; p>.05). Descriptive statistics, showing the distributions of positive and negative emotions scores of college students with different tendencies to use substances according to smoking status, are depicted in Table 13.

Table 13

*Descriptive statistics on positive and negative emotions scores of college students who are smoking and with different tendencies to use substances*

Substance Use Trend	Smoking	Positive Emotion			Negative Emotion		
		$\bar{X}$	S	n	$\bar{X}$	S	n
Low Tendency	Yes	31.05	8.49	106	22.54	6.95	106
	No	31.75	7.98	344	22.61	6.97	344
	Total	31.58	8.10	450	22.60	6.96	450
High Tendency	Yes	32.64	9.41	146	31.51	9.72	146
	No	33.36	8.84	115	26.71	6.47	115
	Total	32.95	9.15	261	29.39	8.76	261
Total	Yes	31.97	9.05	252	27.73	9.72	252
	No	32.15	8.22	459	23.64	7.07	459
	Total	32.09	8.52	711	25.09	8.34	711

When Table 13 analysed, the mean of positive emotions scores of smoking college students with low and high tendency to use substances was found to be higher than that of those who are not smoking. The mean of negative emotions scores of smoking college students with low and high tendencies to use substances was determined to be higher than that of those who are not smoking. The Two-way Analysis of Variance for Independent Variables was conducted to determine whether the difference between positive and negative emotions scores of college students, who are smoking or not smoking, and with different tendencies to use substances, is statistically significant and the results are depicted in Table 14.

Table 14

*Results of two-way analysis of variance for independent variables of positive and negative emotions scores of college students with different tendencies to use substances according to smoking status*

	Source of Variance	KT	Sd	KO	F	P	$\eta^2$
Positive Emotion Scores	Substance Use Tendency	366.37	1	366.37	5.07	.03	.01
	Smoking Status (SS)	72.55	1	72.55	1.00	.32	.00
	Substance Use Tendency *SS	.01	1	.01	.00	.99	.00
	Error	51113.41	707	72.30			
	Total	51496.59	710				
Negative Emotion Scores	Substance Use Tendency	6124.71	1	6124.71	107.65	.00	.13
	Smoking Status	798.29	1	798.29	14.03	.00	.02
	Substance Use Tendency *SS	850.30	1	850.30	14.95	.00	.02
	Error	40223.95	707	56.89			
	Total	49339.06	710				

According to Table 14, there is no significant difference ( $F=1.00$ ;  $p>.05$ ) between the positive emotions scores of college students who are smoking and not smoking. The joint effect of variables of the level of the tendency to use substances and smoking status on the positive emotions scores was found to be insignificant ( $F=.00$ ;  $p>.05$ ). Additionally, the mean ( $\bar{X}=27.73$ ) of negative emotions scores of smoking college students ( $n=252$ ) turned out to be significantly higher ( $F=14.95$ ;  $p<.05$ ) than that ( $\bar{X}=23.64$ ) of those who are not smoking ( $n=459$ ). The joint effect of variables of the level of the tendency to use substances and smoking status on the negative emotions scores is statistically significant ( $F=14.95$ ;  $p<.05$ ). In order to determine the reason for the difference between the positive emotion scores of university students according to their substance use tendencies and their smoking status, a new variable in which the pores were coded was created and the pore averages based on this factor were calculated. In addition, Scheffe Multiple Comparison results and positive emotion score averages applied to determine the source of the difference between individuals in the pores are presented in Table 15.

Table 15

Pore expressions, number of groups and scores of positive and negative emotions and results of Scheffe's Test for Multiple Comparison according to the average pore scores

Descriptive statistics				Results of Scheffe's Test for Multiple Comparison				
(I) Pore	Pore Expression	n	$\bar{X}$	(I) Pore	(J)Pore	Difference Between Average (I-J)	Standard Error	P
11.00	Low Substance Use	106	22.54	11.00	12.00	-.08	.84	1.00
	Tendency- Smoking				21.00	-8.97*	.96	.00
12.00	Low Substance Use Tendency- Not Smokig	344	22.61	12.00	22.00	-4.18*	1.02	.00
					11.00	.08	.84	1.00
					21.00	-8.89*	.75	.00
21.00	High Substance Use Tendency- Smoking	146	31.51	21.00	22.00	-4.10*	.81	.00
					11.00	8.97*	.96	.00
22.00	High Substance Use Tendency -Not Smoking	115	26.71	22.00	12.00	8.89*	.75	.00
					22.00	4.79*	.94	.00
					21.00	4.18*	1.02	.00
					21.00	-4.79*	.94	.00

When Table 15 analysed, the mean of negative emotions scores ( $\bar{X}$ =31.51) of smoking college students with high tendency to use substances (n=146) was determined to be significantly higher ( $p<.05$ ) than that of college students of different groups.

### Conclusion, Discussion and Recommendations

The mean of negative emotions scores of college students with high tendency to use substances turned out to be significantly higher than that of those with low tendency to use substances. Additionally, the mean of negative emotions scores of female college students turned out to be significantly higher than that of male college students. Deaux (1995) states that women are more emotional and they experience emotions more intensely than men, and positive and negative emotions except anger are expressed more frequently by women. There are also some researches with no significant difference between expression of emotions according to the variable of gender (Tuzgöl-Dost, 2006; Yüceant, Ünlü and Balanlı, 2019). The mean of positive emotions scores of women with low tendency to use substances was found to be significantly lower than that of men with low tendency to use substances. In addition to this, the mean of positive emotions scores of women with low tendency to use substances was found to be significantly lower than that of men with high tendency to use substances. This can be said that the female college students with low tendency to use substances express their positive emotions like “interested, excited, proud, decisive” less compared to the male college students with low tendency to use substances. Additionally, the students with high tendency to use substances can be said to be expressing negative emotions like “unhappy, anxious, nervous” more than those with low tendency to use substances. In accordance with these results, as a result of their study conducted with college students, Çolak and Ünal (2020) determined despair increases the tendency to use substances. According to the study they conducted with college students, Öztürk and Çetinkaya (2015) state that the positive emotions scores of males turned out to be significantly higher than that of females. Similarly, it is also seen in the current study that the positive emotions scores of females with low tendency to use substances is significantly lower than that of males with low tendency to use substances.

No significant difference between the positive emotions scores of college students according to their psychiatric disease history was found in the study. The joint effect of variables of the level of the tendency to use substances and psychiatric disease history on the positive emotions scores is not significant. The mean of negative emotions scores of college students with no psychiatric disease history was determined to be significantly higher than that of those who previously had a psychiatric disease. The joint effect of the variables of the level of the tendency to use substances and the previous psychiatric disease on the negative emotions scores was found to be significant. Accordingly, these were seen that the mean of negative emotions scores of college students who previously had a

psychiatric disease was found to be significantly higher than that of those with no psychiatric disease history; and significantly lower than that of those who previously had a psychiatric disease and with high tendency to use substances, and that of those with no psychiatric disease history and with high tendency to use substances. Another study on this subject was conducted by Troisi, Delle Chiaie, Russo, Russo, Mosco and Pasini (1996) on a group with no symptoms of a psychiatric disease. Emotional blunting, nonverbal expression and behavioural patterns of self-control were determined to be the symptoms of having stress and anxiety for people who have difficulties in defining and expressing their emotions feel stressful and anxious. In other words, this can be said that the inability of expressing and identifying emotions as indications of anxiety are symptoms of having stress and anxiety for people. This is stated here that people who are not able to express and identify their emotions adequately have anxiety. This was also stated within the current study that the negative emotions scores of people with no psychiatric disease history turned out to be lower than that of those who previously had a psychiatric disease thus this can be said that these two studies are consistent.

According to the study, there is no significant difference between the means of positive emotions scores of college students based on the perceived parental attitude. Besides, the mean of negative emotions scores of college students defining their parents as authoritarian turned out to be significantly higher than that of those defining their parents as democratic and permissive. Children who were raised with an authoritarian parental attitude have difficulties in social relations, are deprived of senses of love and wonder, feel themselves incompetent, restrained, moreover, they are prone to feel guilty and involve in crime due to unacceptance and restraints (Mc Whirter and Voltan-Acar, 1991). In addition to negative experiences due to the authoritarian attitude, they can be said to have the negative emotions intensely. Acar (2015) found a significant relationship between perceived parental attitude and anger expression style. Positive correlation was found between the participants' anger management and parents' accepting and caring attitudes. In a study by Atalay and Özyürek (2021), it was found that as democratic attitude of parents increased, adolescents' internal and external functional emotion regulation increased, while adolescents' internal functional emotion regulation decreased as parents' authoritative attitude increased. Hall and Fincham (2005) determined in their study that the tendency to forgive themselves and the situation of the college students perceiving the attitude of their parents as democratic is higher and there is a positive relation between them. This can be said that people with high tendency to forgive themselves and the negative situations can have less negative affectivity against such situations. From this point of view, this is supporting the finding of the current study which is "the college students believing to have been raised with an authoritarian parental attitude express negative emotions less than those believing to have been raised with democratic and permissive parental attitudes". As a result, there is no significant relation between expression of positive emotions by college students and the parental attitude but there is a differentiation in terms of the negative emotions. The finding of the research is seen to be consistent with the findings, especially on the negative emotions, of the studies in the literature.

According to this study, the mean of positive emotions scores of college students defining themselves as extrovert was determined to be significantly higher than that of those defining themselves as introvert. On the other hand, the mean of negative emotions scores of college students defining themselves as introvert was seen to be significantly higher than that of those defining themselves as extrovert. The joint effect of the variables of the level of the tendency to use substances and how they define themselves on the means of negative and positive emotions scores is not significant. In a study by Wu, Lu, Chen, Xiang (2018), a significant and positive correlation was found between extroversion and emotional expression and self-esteem had a partial mediating role between extroversion and emotional expression. It is stated that individuals who are defined as extroverts experience positive emotions more intensely (Eryılmaz and Ercan, 2011). There are also studies stating that extroverts express positive emotions more than introverts while expressing emotions (Rusting, 1998). In their study, Tamir and Robinson (2002) stated that extroverts experienced positive emotions more, while introverts experienced negative emotions more. As a result, this study supports the findings of the present study. A study conducted by Tan, Foo, Chong and Ng (2003) reported that individuals with extrovert personality traits who were working in the service sector tended to show more positive emotions than introverts. In a study conducted by Asan (2019), a moderate and positive

correlation was found between personality and optimism. Optimism can affect how individuals view events and express their emotions. Optimism can enable individuals to feel positive and express their emotions positively. It can be said that the present study supports the finding that extroverts show more positive emotions than introverts.

The mean of positive emotions scores of college students with very successful perceived academic success levels turned out to be significantly higher than that of those with unsuccessful and less successful perceived academic success levels. No significant difference was found between the means of negative emotions scores of college students according to their perception on their academic success levels. The joint effect of the level of variables of the tendency to use substances and perceived academic success level on positive and negative emotions scores was found to be insignificant. The fact that happy people are more successful in various fields of life is also stated by many relevant researches. Lifting the good mood, reaching the featured specialties for people with the positive emotions and many of their successes related to happiness were determined to be connected with positive emotions. Researchers stress that the happiness-success relation leads to success along with the positive emotions as it makes people happy (Lyubomirsky, King and Diener, 2005). This relation between being happy and academic success can be said to be supporting the finding of the study.

In a study conducted by Yang, Tian, Huebner and Zhu (2018), positive and strong correlation was found between self-esteem and psychological well-being and academic achievement. Similarly, high correlation was found between positive emotions and success in a study conducted by Pekrun, Goetz, Titz and Perry (2002). It is said that positive emotions such as learning pleasure, academic pride and hope of success will affect success positively. In a study they conducted with university students, Çivitçi (2012) stated that students with high life satisfaction desired success more. Considering that high satisfaction with life is associated with positive emotions, it can be said that individuals with high life satisfaction are expected to desire success more. In a study conducted with university students, Yüceant et al. (2019) found that students who were academically successful and very successful had significantly higher mean positive emotion scores than students who were not successful. It was also found that students who were academically unsuccessful and those who were very successful had significantly higher mean negative emotion scores than students who were successful. In a study they conducted to examine the correlations between positive emotions and academic performance, Carmona-Halty, Salanova, Llorens and Schaufeli (2021) found positive and strong correlation between academic achievement and positive emotions. In the present study, while a positive significant correlation was found between perceived academic achievement, no significant difference was found regarding negative emotion.

No significant difference turned out to exist between the positive emotions scores of college students who are smoking and not smoking. The joint effect of variables of the level of the tendency to use substances and the smoking status on the positive emotions scores was insignificant. The mean of negative emotions scores of smoking college students was found to be significantly higher than that of those who are not smoking. The joint effect of variables of the level of the tendency to use substances and smoking status on the negative emotions scores was found to be significant. Besides, the mean of negative emotions scores of college students who are smoking and with high tendency to use substances was seen to be significantly higher than that of college students of other groups. Dorison et al. (2020) found that sadness rather than negative mood in general increases particularly addictive substance use. It was also found in the study that sadness increased smoking, impatience with cigarette smoke, and the volume of smoke inhaled from cigarettes. In another study, Öztürk and Çetinkaya (2015) stated that there were no differences between students in terms of positive emotions according to whether students smoked or not. This is supporting the findings of the current study. There are many researches in the literature which are showing that the negative emotions and the smoking status are closely connected (Gençtanırım-Kuru, 2010; Vinci, Copeland, and Carrigan, 2012). Schleicher, Harris, Catley and Nazir (2009) stated that the smoking college students increase the frequency of smoking with the expectation of reducing the negative emotions using cigarettes. According to Zhao (2006), people with positive emotions are tend to avoid risky behaviours while those with negative

emotions are tending more to have risky behaviours. According to the result of another study, negative emotions prevent quitting smoking. Additionally, smoking was stated to happen on the purpose of relieving the negative emotions (Gonzalez, Zvolensky, Vujanovic, Leyro and Marshall, 2008). The fact the mean of negative emotions scores of smoking college students is higher compared to those who are not smoking is supported by many researches conducted relevantly.

Considering the potential of affecting the whole society, effects on the young population, in particular, and the budget allocated for the treatment of substance use and addiction; emotion-based prevention projects for college students, that can be the basis for the preventive studies and strengthen the current strategies, can be conducted. It can be said that college students with high tendency to use substances are under risk of addiction. The competency of experts studying in this field can be improved through emotion-based substance use preventing courses for educators to be opened by Green Crescent Society, which is an essential institution for the fight against addiction, and the Ministry of National Education. Additionally, the number of municipal youth centres can be increased and experts, who may provide consultancy to college students, can be employed in them. Hobby and art courses can be opened within these centres as well to keep college students from bad habits.

The present study has some limitations. It can be said that collecting the data online due to Covid-19 Pandemic is a limitation. It can be recommended to collect data face-to-face in future studies. On the other hand, study results are limited to variables of gender, smoking status, psychiatric disease history, perceived parental attitude, self-definition according to personality structure, and perceived academic success. Future studies can examine substance use tendency with variables such as psychological resilience, social support perception, significance quest, relative deprivation, communication skills, and cognitive flexibility. Similarly, relationships between substance use tendency and behavioral addictions can also be discussed. Qualitative research can be conducted with emerging adults and adolescents regarding substance use tendency and styles of expressing emotions. It is thought that when the basic processes related to substance use tendency are determined, significant contributions will be made to literature and application processes on substance addiction and prevention of addiction.

### **Author Contribution Statement**

Both authors contributed 50% equally to this article.

### **Conflicts of Interest**

There is no conflict of interest situation in this study.

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## Genişletilmiş Özet

### Giriş

Madde kullanımı ve bağımlılığı günümüzün halk sağlığı problemlerinden biridir. Madde bağımlılığı, insanın ruhsal ve fiziksel sağlığına yönelik büyük bir tehdit oluşturmaktadır; topluma ve ekonomiye ciddi bir yük getirmektedir (Xia vd., 2022). Madde kullanımı ve buna bağlı olarak gelişen sorunların hem kullanıcıyı hem de onun yakın çevresindekileri olumsuz etkilediği söylenebilir. Madde kullanımı insanın duygusal süreçlerini de etkileyebilmektedir (Özden, 1992). Duygu, herhangi bir olay veya kişi karşısında mevcut deneyimler sonucu insanın davranışlarını etkileyen his olarak tanımlanabilir (Doğan ve Özdevecioğlu, 2009). Duygular temelde sıklıkla iki grup şeklinde tanımlanmıştır. Bunlardan birisi pozitif duygular diğeri ise negatif duygulardır. Olumsuz duygulardan bir kaçış yolu olarak görülebilen bağımlılık yapıcı bu maddeler, olumlu duyguları belli bir süre aktifleştirerek yapay bir mutluluk hissi oluşturabilir. Madde kullanımı ile duygular ve duyguların ifade ediliş tarzı arasında ilişkiler olabileceği düşünülmektedir. Bu düşünceden hareketle mevcut araştırmada üniversite öğrencilerinin madde kullanma eğilimi düzeylerine göre duygularını ifade etme tarzlarını incelemek amaçlanmıştır. Bu amaç doğrultusunda “madde kullanma eğilimleri farklı üniversite öğrencilerinin pozitif veya negatif duyguları ifade etmelerinde cinsiyete, sigara kullanma durumuna, psikiyatrik hastalık geçmişi, algılanan anne- baba tutumuna, kişilik özelliği açısından kendini tanımlama durumuna ve algılanan akademik başarıya göre anlamlı bir farklılık var mıdır?” sorusuna yanıt aranmıştır.

### Yöntem

Bu araştırmada nicel araştırma yöntemlerinden ilişkisel tarama deseni kullanılmıştır. Katılımcılara ulaşmada uygun örneklemeden yararlanılmıştır. Araştırmanın çalışma grubunu Türkiye'nin farklı bölgelerinde yer alan 8 farklı üniversitede öğrenim gören 462 kadın; 249 erkek toplam 711 üniversite öğrencisi oluşturmaktadır. Araştırma verilerini elde etmek amacıyla Madde Kullanma Eğilimi Ölçeği (MKEÖ), Pozitif ve Negatif Duygular Ölçeği (PNDÖ) ve araştırmacılar tarafından hazırlanan Kişisel Bilgi Formu (KBF) kullanılmıştır. Araştırmanın verileri çevrimiçi süreçlerle toplanmış, veri toplama sürecinde katılımcılara bilgilendirilmiş onam formu sunulmuştur. Ölçme araçlarından elde edilen veriler SPSS 25.0 ortamında analiz edilmiştir. Verilere uygulanan varyans analizi değerlendirmelerinde grupların homojenliği Levene Testi ile belirlenmiştir. Araştırma kapsamında yanıt aranan sorulara bağlı olarak gruplar arasındaki farklar iki yönlü varyans analizi ile karşılaştırılmıştır. İki yönlü varyans analizi sonucunda F değeri anlamlı bulunan değişkenlere ilişkin grupların ortalamaları arasındaki farklar Scheffe Çoklu Karşılaştırma Testi ile test edilmiştir. İki faktörün bağımlı değişken üzerindeki ortak etkisinin anlamlı olduğu durumda; söz konusu etkinin hangi ikili alt grupların ortalama puanları arasındaki farka bağlı olduğunu belirlemek amacıyla gözeneklerin kodlandığı yeni bir değişken oluşturularak bu faktör temelinde gözenek ortalamaları karşılaştırılmıştır (Büyüköztürk, 2010). Araştırmada hata payı .05 olarak belirlenmiştir.

### Bulgular

Madde kullanma eğilimleri farklı üniversite öğrencilerinin duygularını ifade etme tarzlarını çeşitli değişkenler açısından incelemeyi amaçlayan bu çalışmada yüksek madde kullanım eğilimine sahip katılımcıların negatif duygu puan ortalaması, düşük madde kullanım eğilimine sahip katılımcıların negatif duygu puan ortalamasından anlamlı düzeyde yüksektir. Ayrıca kadın üniversite öğrencilerinin negatif duygu puan ortalaması erkek üniversite öğrencilerinin negatif duygu puan ortalamasından anlamlı düzeyde yüksek çıkmıştır. Daha önce psikiyatrik hastalık geçirip-geçirmemeye göre katılımcıların pozitif duygu puanları farklılaşmazken; negatif duygu puanları arasında anlamlı farklılık bulunmuştur. Algılanan ebeveyn tutumuna göre katılımcıların pozitif duygu puan ortalamaları arasında anlamlı bir fark bulunmamış; negatif duygu puan ortalamaları arasında ise anlamlı farklılık bulunmuştur. Katılımcıların kendi kişiliklerini tanımlamaları açısından pozitif ve negatif duygu puanları arasında anlamlı farklılık saptanmıştır. Öğrencilerin algılanan akademik başarı düzeyine göre

pozitif duygu puanlarında anlamlı farklılık bulunurken; negatif duygu puanlarında anlamlı farklılık bulunmamıştır. Sigara kullanıp-kullanmama durumuna göre katılımcıların pozitif duyguları arasında farklılık bulunamazken; madde kullanma eğilimi düzeyi ile sigara kullanımı değişkenlerinin negatif duygu puanları üzerindeki ortak etkisinin anlamlı olduğu saptanmıştır.

### **Sonuç, Tartışma ve Öneriler**

Araştırmada madde kullanım eğilimine göre üniversite öğrencilerinin negatif duygu puan ortalamalarında anlamlı farklılık bulunması, madde kullanım eğilimi arttıkça negatif duygu ifade olasılığının artışı olarak değerlendirilebilir. Kadın üniversite öğrencilerinin negatif duygu puan ortalamalarının erkeklerin negatif duygu puan ortalamalarından yüksek çıkması alanyazında kadınların erkeklere göre daha duygusal olduklarını, duyguları daha yoğun yaşadıklarını (Deaux, 1985) ifade eden görüş ile uyusmaktadır. Kadınların negatif duyguları erkeklerden daha fazla yaşamaları, toplumsal süreçlerin ve sosyalizasyonun etkisi ile açıklanabilir. Daha önce psikiyatrik hastalık geçirmemiş üniversite öğrencilerinin psikiyatrik hastalık geçirmiş olanların negatif duygu puan ortalamasından anlamlı düzeyde yüksek olduğu belirlenen bu çalışmada madde kullanma eğilim düzeyi ile daha önce geçirilmiş psikiyatrik hastalık değişkenlerinin ortak etkisinin negatif duygu puanları üzerinde anlamlıdır. Alanyazında psikiyatrik hastalık göstermeyen bir grup üzerinde Troisi ve diğerleri (1996) tarafından yapılan araştırmada duygularını güçlükle tanımlayabilen ve açıklayanların duygularında kısıtlılık, sözel olmayan ifade ve kendini kontrol edici davranış kalıplarının gerilim ve anksiyete yaşadıklarının bir göstergesi olduğu saptanmıştır. Başka deyişle anksiyetenin belirtisi olarak duyguları ifade etmede ve tanımda yetersiz olmanın kişilerin gerilim ve anksiyete yaşadıklarını gösterdiği söylenebilir. Araştırmada anne-babasının otoriter tutumda olduğunu belirten üniversite öğrencilerinin negatif duyguları anne-babasının tutumunu demokratik olarak belirtenler ile anne-babasının aşırı serbest tutumda olduğunu belirtenlere göre negatif duyguları daha yoğun hissettikleri sonucu diğer araştırmalarla benzerlik göstermiştir. Başka bir araştırmada Yörükoğlu (1994) Otoriter bir tutumla yetiştirilen bireylerin duygularına önem verilmediğini düşündüklerini, duygularını dile getiremediklerini ve anne-babasına karşı kızgınlık ve öfke gibi negatif duygular içerisinde olduğunu belirtmiştir. Araştırmada kendilerini dışa dönük olarak tanımlayan üniversite öğrencilerinin pozitif duyguları kendilerini içe dönük olarak tanımlayanlara göre daha yoğun yaşadıkları, ayrıca kendilerini içe dönük olarak tanımlayan üniversite öğrencilerinin negatif duyguları kendilerini dışa dönük olarak tanımlayanlara göre daha yoğun yaşadığı sonucuna ulaşılmıştır. Bu sonuçların birçok araştırma sonucuyla tutarlı olduğu söylenebilir. Algılanan akademik başarı düzeyi çok başarılı olan üniversite öğrencilerinin pozitif duyguları algılanan akademik başarı düzeyleri başarısız olanların ve biraz başarılı olan üniversite öğrencilerine göre daha yoğun hissettikleri sonucu çıkmıştır. Yapılan pek çok çalışmada mutlu bireylerin yaşamın birçok alanında daha başarılı olduğunu ortaya koymuştur. Meta-analitik bir çalışmada pozitif duygulara sahip olan insanların iyi oluş hallerinin yükselmesi, istenilen özelliklere ulaşılması ve mutlulukla bağlantılı başarılarının çoğunun pozitif duygulara sahip olmakla ilişkili olduğu belirlenmiştir (Lyubomirsky vd., 2005). Sigara kullanan üniversite öğrencilerinin negatif duyguları sigara kullanmayanlara göre daha yoğun hissettikleri sonucu çıkmıştır. Ayrıca madde kullanma eğilim düzeyi ile sigara kullanımı değişkenlerinin ortak etkisi negatif duygu puanları üzerinde anlamlı bulunmuştur. Alan yazın incelendiğinde mevcut araştırma bulgularıyla tutarlı şekilde olumsuz duygular ve sigara kullanmanın güçlü bir şekilde bağlantılı olduğunu gösteren pek çok araştırma vardır. Bir madde olarak sigara kullananların negatif duyguları daha yoğun yaşamaları madde kullanımı ile duygular arasındaki ilişkiyi de ortaya çıkardığı söylenebilir. Bu araştırmada farklı madde kullanma eğilimlerine sahip üniversite öğrencilerinin pozitif ve negatif duyguları çeşitli değişkenler aracılığıyla incelenmiştir. Alan yazın incelendiğinde bu konuda yapılmış çalışma sayısının oldukça az olduğu görülür. Buna göre araştırmacılar farklı bölgelerdeki üniversite öğrencileri ile lise öğrencilerine yönelik madde kullanma eğilimi ve pozitif ile negatif duygu ifadesine ilişkin araştırmalar gerçekleştirebilirler.