Iğdır Üniversitesi Fen Bilimleri Enstitüsü Dergisi, 12(3): 1322 - 1330, 2022
Journal of the Institute of Science and Technology, 12(3): 1322 - 1330, 2022

ISSN: 2146-0574, eISSN: 2536-4618

Biology **DOI: 10.21597/jist.1066339**

Research Article

Received: 01.02.2022 **Accepted: 11.05.2022**

To Cite: Oruç E, Parmaksız A, Açıkgöz A, 2022. Analysis Of Emotional Eating Status In University Students. Journal of the Institute of Science and Technology, 12(3): 1322 - 1330

Analysis of Emotional Eating Status in University Students

Esmanur ORUÇ[1*], Arif PARMAKSIZ[2], Abuzer AÇIKGÖZ[1]

ABSTRACT: Emotional eating is independent of the individual's hunger; It is an eating disorder that occurs as a result of mood changes such as anxiety, stress and sadness. Adolescence is a period of rapid physical and social growth and development, and the right or wrong habits gained during this period affect the individual's quality of life in the long run. This study was carried out on 204 individuals to examine the emotional eating status of university students. Harran University was chosen as the sample. In addition to the Turkish Emotional Meal scale, a personal information form was used as a data collection tool. SPSS 22 package program was used for statistical analysis. The sub-dimensions of the scale were evaluated according to the parameters of the participant's body mass index, gender, disease status, dieting status of the person, and the number of meals they ate. The results were successful in giving the expected hypotheses. It has been concluded that emotional eating scores are high in female students, individuals on a diet, people with any disease, people who eat more meals during the day, and individuals with a BMI (Body Mass Index) value above normal. As a result of this research, it was thought that university students should be regularly trained by dietitians and psychologists. It was thought that giving training would increase awareness of healthy nutrition and this would increase the quality of life of young people.

Keywords: Emotional eating, nutrition, eating disorder

[1] Esmanur ORUÇ (**Orcid ID:** 0000-0002-7913-4604), Abuzer AÇIKGÖZ (**Orcid ID:** 0000-0002-2648-3560), Harran University, Faculty of Engineering, Department of Mechanical Engineering, Şanlıurfa, Turkey

[2] Arif PARMAKSIZ (**Orcid ID:** 0000-0003-0321-8198), Harran University, Faculty of Arts and Sciences, Department of Biology, Şanlıurfa, Turkey

***Corresponding Author:** Esmanur ORUÇ, e-mail: esmanuroruc@harran.edu.tr

This study was produced from Esmanur Oruç's Master's thesis.

Ethics Committee Approval: Ethics Committee Approval was obtained for the survey study included in this article with the decision No: HRU/20.16.15 in the session held at 13.30 on the date: 14.09.2020 of the Ethics Committee of Clinical Research of Harran University.

INTRODUCTION

Nutrition is the state of using nutrients in the body so that the individual can grow, develop, maintain his life in a healthy way and maintain this health status (Baysal, 2009). According to the World Health Organization, health defines the individual's being in a state of complete physical, mental and social well-being (Arslantaş et al., 2021). Within the scope of these definitions, one of the conditions for being qualified as a healthy individual is to have an adequate and balanced diet. In recent studies, it has been observed that emotions affect our behaviors as well as our eating habits. Emotional eating is defined as an eating behavior tendency that occurs only in response to various emotional states, independent of the person's hunger or fullness and mealtime (Dinçer, 2019).

Many different theories have been proposed on emotional hunger. While some studies have shown that obese individuals cannot distinguish between hunger and anxiety, and accordingly they tend to eat to relieve their distress, some studies have stated that a long-term restrictive eating style can suddenly evolve into overeating behavior (Kaplan and Kaplan, 1957; Braet et al., 2008). According to yet another theory, it has been suggested that overeating is a compensatory mechanism that occurs to increase the decreased dopamine level of the brain, especially in obese individuals (Davis and Fox, 2008). Nutrition is the basis of health for all age groups. However, nutrition during the university period is of greater importance as it is the first step to enter adulthood (Mazıcıoğlu and Öztürk, 2003). Right and wrong habits gained during youth can affect the lifelong health of the individual (Baysal, 1993). Çakaroğlu et al., (2020), observed that eating disorders such as anorexia nervosa, bulimia nervosa, and obesity occur during youth. Because young people can't maintain their eating habits at home during this period, when they live partly independently from their families, and tend to prefer ready-to-eat foods, gain the habit of eating at night, and are fed fast food.

In this investigation, it was aimed to examine emotional eating, which is an eating disorder, in university students. Within the framework of this determined plan, answers to the following questions are sought: Accordingly, it was aimed to determine the effects of university students' emotional eating status on gender, BMI, disease status, number of meals fed a day and dieting.

MATERIALS AND METHODS

In this part of the research; There is information about the population/sample group of the research, the used data collection tools, the collection and analysis of the data. In the study, the random sampling method, which is one of the general survey models, was used. The sample group in which the application was made consists of 204 students, 150 female and 54 male, studying at different faculties at Harran University in the fall semester of the 2020-2021 academic year. In Table 1, descriptive statistics regarding the demographic information of the sample group are given. In order to apply the research to the students, first of all, necessary permissions were obtained from the authors regarding the use of the scales. The population of the research is Harran University students. Ethics committee approval was obtained from Harran University (HRU/20.16.15). After obtaining ethical permission, institutional permission was obtained for the application. During the implementation process, the principle of voluntary participation was followed. The research data were obtained by applying the Turkish emotional eating scale and personal information form to 204 students studying at different faculties at Harran University in the fall semester of the 2020-2021 academic year. In the study, the personal information form of the individuals and The "Turkish Emotional Eating Scale" developed by Ş. Sinem Bilgen (2018) was used. Since the answers given to 8 questionnaires were incorrect or incomplete, these data were excluded from the data set of the research. Thus, 204 survey data were taken into account during the data analysis process. This scale consists of 30 statements and 4 sub-

dimensions. These factors determined for the Turkish Emotional Eating Scale; Eating in Situations of Tension, Eating to Cope with Negative Emotions, Self-Control and Control in the Face of Stimulus, and statements 26, 28 and 29 are scored inversely. The scale is a five-item Likert evaluation ranging from "(5) Almost always", "(4) Often", "(3) Sometimes", "(2) Rarely", "(1) Never".

The data obtained in this study were evaluated with the help of SPSS 22 package program. In order to determine the necessary statistical method in the analysis of the data, the normality distribution of the data was examined. Kolmogorov-Smirnov test values were used for normality distribution. As a result of the test, it was seen that the data of the scales were not normally distributed ($p<.05$). Non-parametric tests were used because the data did not show normal distribution. Mann-Whitney U Test was used in paired groups and Kruskall-Wallis H test was used in groups of three or more.

RESULTS AND DISCUSSION

This study was conducted to examine the emotional eating status of university students. It was aimed to examine whether emotional eating status changes according to gender, BMI, dieting status, disease status and the number of meals fed per day.

According to the Table 1. 73.5 % (n=150) of the students participating in the study were female and 26.5% (n=54) were male. 84.3% (n=172) of the students stated that they did not have a chronic illness. While 19.6% (n=40) of the students are on a diet, 80.4% (n=164) of them do not. 48.0% (n=98) of the students participating in the study eat less than three meals, 37.7% (n=77) three meals and 14.2% (n=29) more than three meals. Considering the BMI values, 67.2% (n=137) of the students were normal, while 2.9% (n=6) were obese. The students participating in the study are 167 cm tall on average and weigh 61.37 kg on average.

Table 1. Frequency and percentage distribution of demographic characteristics of the students participating in the study

		n	%
Gender	Female	150	73.5
	Male	54	26.5
Do you have any chronic diseases?	Yes	32	15.7
	No	172	84.3
Are you dieting?	No	164	80.4
	Yes	40	19.6
How many meals a day do you eat?	Less than 3 meals	98	48.0
	3 Meals	77	37.7
	More than 3 meals	29	14.2
BMI	Weak	33	16.2
	Normal	137	67.2
	Slightly fat	28	13.7
	Obese	6	2.9
Height: Ort=167 cm SD= .080 **Weight:** Ort= 61.37 kg SD= 12.264			

As a result of the analysis, it is seen that the total mean score of the Turkish Emotional Eating Scale (59.54 ± 20.474) is low (Table 2.). Looking at the sub-dimensions, it was seen that the highest average was in the "Eating Under Tension" sub-dimension (19.69 ± 8.609), and the lowest average was in the "Control Against Stimulus" sub-dimension (7.12± 2.2709).

Table 2. Minimum, maximum, average and standard deviation values obtained from the emotional eating scale and its sub-dimensions

	Minimum	Maximum	Average	Std. Deviation
Eating in Situations of Tension	11.00	54.00	19.69	8.609
Eating to Cope with Negative Emotions	10.00	50.00	17.33	8.653
Self-Control	6.00	30.00	15.39	4.426
Control Against Stimulus	3.00	15.00	7.12	2.709
Total	33.00	145.00	59.54	20.474

According to the results of the Mann Whitney-U test, which was conducted to determine the differentiation status of the mean scores of the emotional eating scale and its sub-dimensions according

to the gender of the students participating in the study, in the sub-dimension "Eating for Coping with Negative Emotions" (U=3303.5, p<.05) and " In the sub-dimension “Control Against Stimulus” (U=3310.5, p<.05), a significant difference was found according to the gender of the students (Table 3.). It was seen that the significant difference in both sub-dimensions was in favor of male students (Mean Rank Male < Rank Average Female). Arslantas et al. (2021) found that there was a significant difference between the emotional eating scale and gender in their study with university students, and it was observed that this difference was in favor of male students. It was found that the emotional eating scale score of female students was higher than that of male students. In a similar study conducted by Tanrıverdi (2020) on university students, significant differences were found according to gender in all 4 sub-titles and it was determined that this difference was in favor of male students, similar to the results of Harran University students (Tanrıverdi, 2020). Dinçer (2019) evaluated the Dutch Eating Behavior Questionnaire (DEBQ) on university students by associating it with food addiction, and when DEBQ scores were examined, it was determined that women's DEBQ scores were higher than men's. In the study conducted by Cansız (2019) on university students, significant differences were found when the emotional eating scale scores were compared between the genders. Emotional eating scale scores of women were found to be significantly higher than men. Snoek et al. (2007) conducted a study on adolescents and this result was also similar to other results in the literature. It has been observed that girls' emotional eating scores are higher than boys. When we look at the literature data, it has been concluded that there are statistically significant differences in terms of gender in studies conducted on university students and/or adults, and emotional eating is more common in women than in men. There are many reasons why emotional eating is more common in women. Tamres et al. (2002) stated that women use emotion-focused coping strategies more frequently than men.

According to the results of the Mann Whitney-U test we have done, which was conducted to determine the differentiation status of the mean score of the emotional eating scale and its sub-dimensions according to the dieting status of the students participating in the study, the total score of the emotional eating scale (U=2133.5, p<.05), "Eating in Tension States" sub-dimension (U=2434.5, p<.05), “Self-Control” sub-dimension (U=2624.5, p<.05), “Eating to Cope with Negative Emotions” sub-dimension (U=2013.0, p<.05) and in the sub-dimension of “Control Against Stimulus” (U=2447.0, p<.05) a significant difference was obtained according to the dieting status of the students (Table 4.). It was observed that the significant difference in all dimensions was in favor of the students who did not diet (Rank Mean No<Rank Mean Yes). Konttinen et al. (2009) in their study on 5024 people, concluded that the emotional eating scores of individuals who are currently on a diet and who have dieted in the past are significantly higher than those who have never dieted before. Dinçer (2019) concluded in his study that there is a significant linear relationship between the number of diets applied by students and emotional eating. As the number of diets applied by the students increased, their emotional eating scores tended to increase.

Table 3. Mann-Whitney-U test results regarding the difference between the mean scores of the emotional eating scale and its sub-dimensions according to the gender of the students participating in the study

	Gender	n	Rank Average	Rank Sum	U	P
Eating in Situations of Tension	Female	150	105.49	15823.50	3601.5	.227
	Male	54	94.19	5086.50		
Eating to Cope with Negative Emotions	Female	150	107.48	16121.50	3303.5	**.044***
	Male	54	88.68	4788.50		
Self-Control	Female	150	100.22	15033.00	3708.0	.356
	Male	54	108.83	5877.00		
Control Against Stimulus	Female	150	107.43	16114.50	3310.5	**.045***
	Male	54	88.81	4795.50		
Scale sum	Female	150	106.6	15954.00	3471.0	.119
	Male	4	91.78	46.00		

The results of our study showed parallelism with the data in the literature. Compared to those who do not diet; It was concluded that those who diet more than once have higher emotional eating scores than those who follow less diets. Forgetting the fact that dieting in this situation is a healthy diet; It can be interpreted that the perception that diet is a restrictive nutrition model causes an increase in the stress factor in the body and an increase in the tendency to emotional eating in dieters.

Table 4. The Mann-Whitney-U test results regarding the difference between the mean scores of the emotional eating scale and its sub-dimensions according to the dieting status of the students participating in the study

	Go on a diet	n	Rank Average	Rank Sum	U	p
Eating in Situations of Tension	No	164	97.34	15964.50	2434.5	**.011***
	Yes	40	123.64	4945.50		
Eating to Cope with Negative Emotions	No	164	94.77	15543.00	2013.0	**.000***
	Yes	40	134.18	5367.00		
Self-Control	No	164	98.50	16154.50	2624.5	**.049***
	Yes	40	118.89	4755.50		
Control Against Stimulus	No	164	97.42	15977.00	2447.0	**.012***
	Yes	40	123.33	4933.00		
Scale sum	No	164	95.51	15663.50	2133.5	**.001***
	Yes	40	131.16	5246.50		

*=p<.05

According to the results of the Mann Whitney-U test we have done, which was conducted to determine the differentiation status of the mean scores of the emotional eating scale and its sub-dimensions according to the chronic disease status of the students participating in the study, only the sub-dimension "Eating for Coping with Negative Emotions" (U=2115.0, p<.05) a significant difference was obtained (Table 5.). It was seen that the resulting significant difference was in favor of the students without chronic disease (Rank Mean No<Rank Mean Yes). Hacıabdurrahmanoğlu's study (2019) compared the Turkish Emotional Eating Scale with the "health problem" variable and obtained statistically significant results. Accordingly, while there is a significant difference in terms of health problems in the sub-dimensions of "Self-Control" and "Control Against Stimulus" of the individuals with health problems; No significant difference was found in the sub-dimensions of "Eating Under Tension" and "Eating to Cope With Negative Emotions". It was determined that the significance in the sub-dimensions of "Self-Control" and "Control in the Face of Stimulus" was in favor of the students who did not have any health problems.

Table 5. Mann-Whitney-U test results regarding the difference between the mean scores of the emotional eating scale and its sub-dimensions according to the chronic disease status of the students participating in the study

	Chronic Disease Status	n	Rank Average	Rank Sum	U	p
Eating in Situations of Tension	Yes	32	120.78	3865.00	2167.0	.056
	No	172	99.10	17045.00		
Eating to Cope with Negative Emotions	Yes	32	122.41	3917.00	2115.0	**.037***
	No	172	98.80	16993.00		
Self-Control	Yes	32	116.39	3724.50	2307.5	.146
	No	172	99.92	17185.50		
Control Against Stimulus	Yes	32	111.06	3554.00	2478.0	.368
	No	172	100.91	17356.00		
Scale sum	Yes	32	118.70	3798.50	2233.5	.091
	No	172	99.49	17111.50		

*=p<.05

Konttinen (2012) associated the presence of chronic disease with emotional eating in his study. He concluded that with the increase in emotional eating behavior, chronic diseases will also increase. The limited number of studies we found in the literature show parallelism with the data of our study. It is possible to say that the presence of a chronic disease will trigger emotional eating due to the increase of the stress factor, and on the contrary, emotional eating may cause chronic diseases such as

diabetes and hypertension. Because Taylor et al. (1995) also wanted to examine the psychological reactions of people when they got sick.

According to the results of the Kruskal Wallis H test we have done, which was conducted to determine the differentiation status of the mean scores of the emotional eating scale and its sub-dimensions according to the BMI values of the students participating in the study, and the Mann Whitney-U test, which was conducted to determine between which groups there were significant differences, the total score of the scale and the "Coping with Negative Emotions" In the sub-dimension of "Eating to Get Out", it was determined that there was a significant difference between thin students and slightly overweight and obese students in favor of thin students. In addition, it was determined that there was a significant difference between normal students and slightly overweight and obese students in favor of normal students. It has been determined that there is a significant difference between weak students and other students in the sub-dimension of "Eating in Tension States" and in favor of weak students. In addition, in this sub-dimension, there was a significant difference between normal students and slightly obese students in favor of normal students. In the sub-dimension of "Self-Control", a significant difference was found between thin students and slightly overweight and obese students in favor of thin students (Table 6).

Cansız (2019) also concluded in his study that there is a positive and significant relationship when he compared BMI and emotional eating scale scores. Geliebter and Aversa (2003) revealed that thin individuals ate less in response to negative emotions compared to normal and overweight individuals. However, the surprising result in this study was that thin individuals ate more in response to positive emotions compared to normal and slightly overweight individuals. In a similar view, Sevinçer and Konuk (2013) stated that while the eating tendency of overweight individuals increases in the face of negative emotions, the tendency to eat decreases in individuals with normal weight. Angle et al. (2009) conducted a study on 2943 women, and as a result of this study, it was revealed that high BMI value was positively associated with emotional eating. Konttinen et al. (2010) associated emotional eating score with high BMI value as a result of their study. Anschutz et al. (2008) stated that there is a significant and positive relationship between body mass index and emotional eating as a result of his study. The results of the studies carried out and the results of our study show similarities. It was concluded that the higher the BMI values of the individuals, the higher the emotional eating scores. While some studies say that emotional eating is a result, some studies argue that emotional eating is a cause.

Table 6. Kruskal Wallis H test results regarding the difference between the mean scores of the emotional eating scale and its sub-dimensions according to the BMI values of the students participating in the study

	BMI	n	Rank Average	sd	X^2	p	Significant Difference
Eating in Situations of Tension	(1) Weak	3	77.86	3	16.413	**,001***	1<2 1<3 1<4 2<3
	(2) Normal	137	100.33				
	(3) Slightly Fat	28	134.54				
	(4) Obese	6	138.00				
Eating to Cope with Negative Emotions	(1) Weak	3	78,33	33	17.884	**,000***	1<3 1<4 2<3 2<4
	(2) Normal	137	99.96				
	(3) Slightly Fat	28	131.86				
	(4) Obese	6	156.33				
Self-Control	(1) Weak	3	82.52	3 33	8.670	**,034***	1<3 1<4
	(2) Normal	137	101.94				
	(3) Slightly Fat	28	121.88				
	(4) Obese	6	134.75				
Control Against Stimulus	(1) Weak	3	104.79	33	4.881	,181	
	(2) Normal	137	98.49				
	(3) Slightly Fat	28	109.45				
	(4) Obese	6	149.08				

Table 6. continuation

Scale sum	(1) Weak	3	78.70	33 3	16.249	**,001***	1<3 1<4 2<3 2<4
	(2) Normal	137	100.28				
	(3) Slightly Fat	28	130.70				
	(4) Obese	6	152.42				

*=p<.05

According to the results of the Kruskal Wallis H test we have done, which was conducted to determine the differentiation of the mean scores of the emotional eating scale and its sub-dimensions according to how many meals the students ate, a significant difference was found in the "Control Against Stimulus" sub-dimension of the emotional eating scale according to the number of meals the students had (=11.183, sd=2, p<.05). As a result of the Mann Whitney-U test, which was conducted to determine between which groups there were significant differences, it was determined that there was a significant difference between the students who ate less than 3 meals and those who ate more than 3 meals, in favor of the students who ate less than 3 meals. Another result is that there is a significant difference in favor of the students who eat 3 meals a day and those who eat more than 3 meals (Table 7).

Table 7. Kruskal Wallis H test results regarding the difference between the mean scores of the emotional eating scale and its sub-dimensions according to how many meals participated in the study

	Number of meals in a day	**n**	**Rank Average**	***sd***	**X^2**	**p**	**Significant Difference**
Eating in Situations of Tension	(1) Less than 3 meals	98	101.88	2	3.304	,192	
	(2) 3 meals	77	96.71				
	(3) More than 3 meals	29	119.97				
Eating to Cope with Negative Emotions	(1) Less than 3 meals	98	101.51	2	2.130	,345	
	(2) 3 Meals	77	98.38				
	(3) More than 3 meals	29	116.81				
Self-Control	(1) Less than 3 mealas	98	93.95	2	5.381	,068	
	(2) 3 meals	77	106.26				
	(3) More than 3 meals	29	121.40				
Control Against Stimulus	(1) Less than 3 meals	98	99.37	2	11.183	**,004***	1<3 2<3
	(2) 3 Meals	77	94.00				
	(3) More than 3 meals	29	135.64				
Scale sum	(1) Less than 3 meals	98	99.80	2	5.603	,061	
	(2) 3 Meals	77	96.97				
	(3) More than 3 meals	29	126.31				

*=p<.05

This study is based on consuming only 3 main meals. Snacks were not included in our study and analyzes were made over 3 main meals. However, when the literature was reviewed, it was observed that snacks were also asked in detail. For example, Demir (2019) determined snacks as the main criterion in his study. While he expected that emotional eating would not be observed when snacks were made under normal conditions, as a result of his study, he determined that emotional eating behavior increased as the number of snacks increased. He attributed this to the possibility that students skipped the main meals and took the macronutrients they needed insufficiently, and the emotional eating situation might have increased during the snacks because of their high stress and anxiety levels. Kim et al. (2013) in a study they conducted at a university in Korea, observed that as the stress level of the students increased, the number of meals they consumed increased and they preferred foods with high sugar content.

CONCLUSION

As a result of our study, the following results were obtained;

- 73.5% of participants are female and 26.5% are male.

- BMI values of 67.2% of the participants were in the normal weight range, followed by underweight students with 16.2%. 16.6% of the participants are in the light weight and obese class.
- It is possible to say that the Turkish Emotional Eating Scale applied to the participants has a high reliability as a result of our analysis.
- In the results obtained from the sub-dimensions of "Eating to Cope with Negative Emotions" and "Control in the Face of Stimulus", the rate of emotional eating was higher in female students. (Rank sum female > Rank sum male)
- In the results obtained from the sub-dimensions of "Eating in Tension", "Eating to Cope with Negative Emotions" and "Self-Control", the rate of emotional eating is higher in students whose BMI values are above normal.
- Only the results of the "Control Against Stimulus" sub-dimension of the Turkish Emotional Eating Scale confirmed the hypothesis that "emotional eating will increase with the increase in the number of meals".
- In the sub-dimension of "Eating to Cope with Negative Emotions" of the scale, it was concluded that individuals with any disease had higher emotional eating scores. (Rank sum yes > Rank sum no)
- In all sub-headings of the scale, emotional eating scores of individuals who diet were higher. (Rank sum yes > Rank sum no)

The effect of changes in emotional states on nutrition is an undeniable fact. Nutrition and psychology have been discussed together in recent studies. It is possible to say that people's food choices are affected by their changing emotional states. In order to minimize emotional eating in university students, training should be given by dietitians and psychologists at regular intervals, and thus students should be made aware of this issue.

It is estimated that the psychologists and dietitians who work in the dormitory give training to university students staying at the Credit and Dormitories Institution on the effects of emotions on nutrition, which will contribute to the reduction of emotional eating

ACKNOWLEDGEMENTS

Esmanur ORUÇ is supported by the Council of Higher Education (CoHE) of Turkey with 100/2000 PhD Scholarship.

Conflict of Interest

This work was supported by Harran University Scientific Research Projects Commission (HÜBAP Project No. 21116). The article authors declare that there is no conflict of interest between them.

Author’s Contributions

The authors declare that they have contributed equally to the article.

REFERENCES

Angle S, Engblom J, Eriksson T, Kautiainen S, Saha MT, Lindfors P, Lehtinen M, Rimpela A, 2009. Three Factor Eating Questionnaire-R18 as a Measure of Cognitive Restraint, Uncontrolled Eating and Emotional Eating in a Sample of Young Finnish Females. International Journal of Behavioral Nutrition And Physical Activity, 6(1): 41.

Anschutz DJ, Engels RC, Van Strien T, 2008. Susceptibility for thin ideal media and eating styles. Body Image, 5(1): 70-79.

Arslantaş H, Dereboy İF, İnalkaç S, Yüksel R, 2021. Emotional Eating and Affecting Factors in University Students in Health Education. Journal of Izmir Katip Celebi University Faculty of Health Sciences, 6(1): 105-111.

Baysal A, 1993. Gençliğin Beslenme Sorunları. Aile ve Toplum, 1(3): 97-108.

Baysal A, 2009. Beslenme. Hatiboğlu Publications, pp. 9, Ankara-Turkey.

Bilgen Ş S, 2018. Türkçe Duygusal Yeme Ölçeğinin Geliştirilmesi, Geçerlilik ve Güvenirliği Çalışması. Üsküdar University Social Sciences Institute, Master Thesis (Printed).

Braet C, Claus L, Goossens L, Moens E, Vlierberghe LV, Soetens B, 2008. Differences in Eating Style Between Overweight and Normal-Weight Youngsters. Journal of Health Psychology, 13(6): 733-743.

Cansız S, 2019. The Realtionship Between Sns Addiction And Emotional Eating Among University Students. Üsküdar University Social Sciences Institute, Master Thesis (Printed).

Çakaroğlu D, Ömür EH, Arslan C, 2020. Examination of Eating Attitude Eating Awareness and Social Appearance Anxiety of University Students (Samples of Province of Siirt). Niğde Ömer Halisdemir University Spor Sciences Faculty Journal of Physical Education and Sports Sciences, 14(1): 1-12.

Davis C, Fox J, 2008. Sensitivity to Reward and Body Mass Index (BMI): Evidence for a Non –Linear Relationship. Appetite, 50(1): 43-9.

Demir H, 2019. Investigation of The Relationship Between University Students' Emotional Eating Behavior and Anthropometric Measurements. Hasan Kalyoncu University Institute of Health Science, Master Thesis (Printed).

Dinçer RS, 2019. Evaluation of Food Addiction and Emotional Eating Tendency in University Students. Başkent University Institute of Health Science, Master Thesis (Printed).

Geliebter A, Aversa A, 2003. Emotional Eating in Overweight, Normal Weight and Underweight Individuals. Eating Behaviors, 3(4): 341-7.

Hacıabdurrahmanoğlu M, 2019. Examining the Relationship Between Emotional Eating Behavior and Problem Solving Skills. Hasan Kalyoncu University Institute of Social Sciences, Master Thesis (Printed).

Kaplan HI, Kaplan HS, 1957. The Psychosomatic Concept of Obesity. Journal of Nervous and Mental Disease, 125: 181-201.

Kim Y, Med HYY, Kim AJ, Lim Y, 2013. Academic Stress Levels Were Positively Associated with Sweet Food Consumption Among Korean High School Students. Nutrition, 29(1): 213-218.

Konttinen H, Haukkala A, Sarlio-Lahteenkorva S, Silventoinen K, Jousilahti P, 2009. Eating Styles, Self-Control and Obesity Indicators. The Moderating Role of Obesity Status and Dieting History on Restrained Eating. Appetite, 53(1): 131-4.

Konttinen H, Mannisto S, Sarlio–Lahteenkorva S, Silventoinen K, Haukkala A, 2010. Emotional Eeating, Depressive Symptoms and Self-Reported Food Consumption. A Population Based Study. Appetite, 54(3): 473-9.

Konttinen H, 2012. Dietary Habits and Obesity: The Role of Emotional and Cognitive Factors. Universty of Helsinki Faculty of Social Sciences, Academic Dissertation (Printed).

Mazıcıoğlu, MM, Öztürk A, 2003. Dietary Habits And Influencing Factors In University Students at 3rd and 4th Grades. Journal of Erciyes Medicine, 25(4): 172-178.

Sevinçer GM, Konuk N, 2013. Emotional Eating. Journal of Mood Disorders, 3(4): 171-8.

Snoek HM, Engels RC, Janssens JM, Van Strien T, 2007 Parental Behaviour and Adolescents' Emotional Eating. Appettite, 49(1): 223-230.

Tamres, LK, Janicki D, Helgeson VS, 2002. Sex Differences in Coping Behavior: A Meta-Analytic Review and An Examination of Relative Coping. Society for Personality and Social Psychology, 6(1): 2-30.

Tanrıverdi E, 2020. Evaluation Of Emotional Eating Behaviors and Emotional Appetite Of College Students. Çağ University Institute of Social Sciences, Master Thesis (Printed).

Taylor SE, Neter E, Wayment HA, 1995. Self – evaluation processes. Personality and social psychology bulletin, 21(12): 1278-1287.