

Investigation of the levels of feeding feelings, emotional eating and perfectionism of university students who do sports and do not do sports

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Abstract. *Aim:* The aim of the study is to examine the emotional eating, nutritional feelings and perfectionism levels of university students who do sports and those who do not. *Material and Method:* 260 people selected by simple random sampling from university students participated in the study. The research is designed according to the relational screening model. In data collection; personal information form, Nutrition Emotions: Emotional Eating and (APS) Perfectionism Scale were used. The analysis of the data was made with the SPSS program and the normal distribution values for the test types to be used were analyzed. Skewness and Kurtosis values showed normal distribution. Independent sample t test was used for paired comparisons and Anova test was used for more than two comparisons. Pearson Correlation test was used for correlation analysis. The level of significance for all tests is $\alpha = 0.05$. *Results:* In the findings obtained from the study, it is observed that the mean scores of the scale scores of the participants according to gender, nutritional feelings, emotional eating scale and perfectionism scale do not differ significantly according to gender ($p < 0.05$). Those who do sports have higher perfectionism standards than those who do not. Negative perfectionism scores of those who do not do sports are higher than those who do sports ($p < 0.05$). The mean scores of emotional eating and perfectionism did not differ significantly ($p < 0.05$) according to where the participants spent most of their lives. When the relationship between feeding feelings, emotional eating and perfectionism mean scores were evaluated; It was observed that there was a statistically significant and low level relationship between the nutritional emotions, emotional eating scale and perfectionism scale, positive perfectionism, order and standards sub-dimensions. As positive perfectionism and related order and standards increase, feeding emotions increases emotional eating ($p < 0.05$). *Conclusion:* The more perfectionism, the more emotional eating increases. Exercising is a determining factor in emotional eating and perfectionism.

Key Words: Sport, Emotional eating, Feeding feelings, Perfectionism

Introduction

In recent years, there is a strong link between individuals' eating habits, feelings, emotional state and perfectionism.

Emotions have a say in every aspect of our lives as much as our thoughts. Daily living habits, physical activity level, age, perfectionist thinking, emotional reactions directly affect behavior.

Emotional eating is the way that individuals try to relax by turning to the foods they love to get rid of tension and stress. People perceive their eating impulses as physiological hunger depending on unwanted emotions and cannot distinguish between real hunger and emotional hunger. They suppress the tension of negative emotions by eating something (1). Individuals who encounter negative and sometimes positive situations may experience excessive appetite or lack of appetite.

Individuals who experience this condition can overcome emotional eating behavior thanks to emotional control and tend to eat only when they feel hungry like normal people. Many studies have revealed that eating behaviors and emotions are in a relationship. These feelings may be perfectionism, anger, violence, loneliness or feelings related to happiness (2, 3) Reported that uncontrolled eating habits can also be triggered by the feeling of perfectionism in their study.

The concept of perfectionism can be explained as individuals setting extremely high standards for themselves. (4), explained perfectionism as a multifactorial structure and defined it as an individual's tendency to self-criticize at an advanced level. Many studies emphasize that perfectionism has negative effects on people and that increasing psychological problems are reflected in their relationships. People who constantly expect perfection and excellent performance from them may experience stress, frustration and negative reactions when the result is not what they want. In a study conducted by (5) on this subject, it was found that stress and emotional eating are inversely correlated with positive perfectionism. In addition, in this study, they concluded that the relationship between negative perfectionism, emotional eating and stress was directly proportional. While people with more positive perfectionism have controlled and normal nutrition, negative perfectionism increases eating disorders.

The relationship between mood and eating behavior is complex and should be evaluated carefully (2). Emotional eating and eating disorder; It is the interest and love that people cannot get from the immediate environment, feeling good by eating, turning to delicious foods with high calorie and sugar, trying to cope with negative emotions with the pleasure they get from eating (6). After people with emotional eating habits reach the foods they like, serotonin hormone is secreted in the organism. Stress and tension are reduced, food feeds the senses, and emotional state improves, albeit temporarily (7). Emotional eating is the consumption of food that develops to respond to various emotional situations in order to feed the emotions (8). It is possible to see the same well-being in individuals who are engaged in sports activities.

It is known that sports increase happiness hormones in individuals. Exercising has a preventive effect against depression (9). Exercise gives individuals self-confidence. It gives a good posture and allows the body to stand firmly in a straight line (10). In a study, it is observed that as the level of physical activity increases, the psychological well-being of individuals increases (11). People have a social, emotional, psychological and biological life in which they interact (12). Life-long learning behaviors constitute the life cycle of individuals (13). The processes in the mind are the permanent organization of emotional states (14). There is an important link between physical development and mental, social and emotional development (15). Today, sports clubs are the most important part of the sports industry (16). The benefits of sports activities for human health cannot be counted. Muscle endurance also positively affects physical and mental stamina. Muscle endurance is the ability of a muscle (17). Due to sports, it is important for people to respect themselves, to be content with their bodies, and for physical and mental health. Physical respect is an important part of self-esteem. Physical respect is the picture of our body in our mind. (18).

The purpose of nutrition of individuals doing sports; To ensure adequate nutrition according to the age, gender, physical activity level, nutritional habits and energy needs of the athlete (19). College students doing sports tend to increase their performance. While this tendency is sometimes a driving force in achieving success, it sometimes causes them to experience psychological problems. From this point of view, it is possible to see positive and negative reflections in the behaviors of students with a perfectionist nature. However, it is possible to say that perfectionism, which is thought to have a destructive feature, is a healthy part of human development.

In this study, which investigates the relationship between emotion feeding, emotional eating and perfection in university students who do sports and do not do it, it is important to prevent possible eating problems and emotional eating behaviors related to emotions. In addition, it is thought that this research will contribute to the individuals who will work on this subject and to the literature.

Material and Method

Research Model: The research was designed according to the relational screening model (20, 21).

Research Group: The sample of the research; It consists of 260 students selected by simple random sampling method among university students studying at Gazi University in the 2019-2020 academic year.

Research Recruitment Criteria; University students who do and do not do sports were included in the study. Those who do sports should exercise regularly at least 3-4 days a week.

Data Collection Tools

Personal information form: The independent variables (gender, exercising or not, the place where he spent most of his life) were created by the researcher to gather information about the students. **Feeding the Emotions: The Emotional Eating Scale (22), Nutritional Emotions:** the scale has 14 items. It is in 5-point Likert form. Cronbach's Alpha internal consistency of the scale is 0.94. In this study, the Cronbach's Alpha internal consistency of the scale was found to be 0.84. The findings revealed that the Emotional Eating Scale is a reliable and valid scale for determining emotional eating levels. **APS Perfectionism Scale;** The perfectionism scale developed and revised by (23) To determine whether individuals have perfectionist attitudes and to distinguish between positive and negative characteristics of perfectionism is 23 items. (23). The Cronbach's Alpha values for each sub-dimension of the scale, which was adapted into Turkish by (24); For standards. 72, For the layout. 83, For Unsatisfaction. 81 is determined as .72 for Contradiction. The test half reliability coefficient is for the positive perfectionism subscale. 74 for negative perfectionism and .80 for negative perfectionism. Reliability coefficients in subscales. It ranges from 69 to .79. In this study, the Cronbach's Alpha coefficient was calculated as 0.665 for positive perfectionism (Standards + Order) and 0.744 for negative perfectionism (Contradiction + Dissatisfaction).

Results

In this section, the findings obtained from the research are given in tables, respectively.

Considering the socio-demographic characteristics of the participants, 57.3% of them are men and 42.7% are women. More than half of the participants (57.3%) are doing sports. Almost half of them (39.2%) spent most of their life in the city.

When the scale mean scores of the participants are examined, Feeding Feelings, Emotional Eating 27,13, the sub-dimensions of the perfectionism scale are Dissatisfaction 23,42, Order 19,21, Contradiction

Table 1. Socio-demographic characteristics of the participants

	n	%
Gender		
Female	111	42,7
Male	149	57,3
Sport status		
Yes	138	53,1
No	122	46,9
Place of Life		
Big City	80	30,8
City	102	39,2
Village/District	78	30
Total	260	100

Table 2. Participants Feeding Feelings Emotional Eating and Perfectionism Score Averages

	\bar{X}	ss	min	max
Feeding Emotions Emotional Eating	27,13	8,70	14	70
Dissatisfaction	23,42	4,44	14	39
Order	19,21	3,67	9	28
Contradiction	26,35	3,89	15	35
High Standards	35,65	9,96	17	115
Positive Perfectionism	54,86	12,01	31	134
Negative Perfectionism	49,78	5,85	36	69

Table 3. Feeding Feelings by Gender Emotional Eating and Perfectionism Scores

	Gender	n	\bar{X}	ss	t	p
Feeding Emotions Emotional Eating	Female	111	26,39	8,00	-1,175	,241
	Male	149	27,67	9,17		
Dissatisfaction	Female	111	23,87	4,50	1,418	,158
	Male	149	23,08	4,36		
Order	Female	111	18,96	3,58	-,967	,335
	Male	149	19,40	3,74		
Contradiction	Female	111	26,50	3,89	,524	,601
	Male	149	26,24	3,90		
Standards	Female	111	34,54	8,45	-1,554	,121
	Male	149	36,47	10,91		
Positive Perfectionism	Female	111	53,50	10,84	-1,585	,114
	Male	149	55,88	12,76		
Negative Perfectionism	Female	111	50,37	6,07	1,413	,1159
	Male	149	49,34	5,67		

*p<0,05

26,35, and High Standards are 35,65. Positive Perfectionism average is 54.86 Negative Perfectionism average is 49.78.

According to gender, there was no significant difference in mean scale scores.

When examined according to whether to do sports or not; There was no significant difference between scales. But, in terms of Perfectionism; There is a significant difference in standards and negative perfectionism sub-dimensions. Those who do sports have

Table 4. Feeding the Feelings According to Sport or Not, Emotional Eating and Perfectionism Scores

	Sport Status	n	\bar{X}	ss	t	p
Feeding Emotions Emotional Eating	Yes	138	26,71	8,26	-,828	,408
	No	122	27,60	9,18		
Dissatisfaction	Yes	138	23,02	4,24	-1,556	,121
	No	122	23,87	4,62		
Order	Yes	138	19,33	3,77	,532	,595
	No	122	19,09	3,56		
Contradiction	Yes	138	25,96	4,00	-1,741	,083
	No	122	26,80	3,73		
Standards	Yes	138	36,84	10,69	2,085	0,38*
	No	122	34,30	8,22		
Positive Perfectionism	Yes	138	56,17	12,68	1,871	0,63
	No	122	53,39	11,08		
Negative Perfectionism	Yes	138	48,97	5,72	-2,403	,017*
	No	122	50,70	5,89		

*p<0,05

Table 5. Feeding Emotions According to Where Participants Spend Most of Their Life: Emotional Eating and Perfectionism Scores

		By Place of Life	n	\bar{X}	ss	F	p
Feeding Emotions Emotional Eating	A	Big City	80	26,52	9,38	2,488	,085
	B	City	102	26,21	7,84		
	C	Village/District	78	28,94	8,88		
Dissatisfaction	A	Big City	80	23,91	5,00	,749	,474
	B	City	102	23,11	4,16		
	C	Village/District	78	23,32	4,16		
Order	A	Big City	80	18,72	3,37	2,396	,093
	B	City	102	19,04	3,96		
	C	Village/District	78	19,94	3,50		
Contradiction	A	Big City	80	26,43	3,95	1,890	,153
	B	City	102	25,83	3,83		
	C	Village/District	78	26,96	3,87		
Standards	A	Big City	80	35,87	12,08	2,003	,137
	B	City	102	34,26	8,70		
	C	Village/District	78	37,23	8,92		
Positive Perfectionism	A	Big City	80	54,60	13,64	2,340	,098
	B	City	102	53,31	11,25		
	C	Village/District	78	57,17	10,94		
Negative Perfectionism	A	Big City	80	50,38	6,27	1,797	,168
	B	City	102	48,93	5,69		
	C	Village/District	78	50,28	5,56		

*p<0,05

higher perfectionism standards than those who do not. The perfectionism score averages of those who do not do sports are higher than those who do sports.

According to where they spend most of their lives; There was no significant difference in nutritional feelings, emotional eating and perfectionism mean scores.

Nutritional Feelings: Emotional Eating Scale and Perfectionism Scale; There is a statistically significant and low level relationship between positive perfectionism, order and standards sub-dimensions. As positive perfectionism and related order and standards increase, emotional nutrition and emotional eating increase.

Discussion and Conclusion

In this section, the findings obtained in the examination of the levels of emotional eating and

Table 6. Nurturing Participants' Feelings: Examining the Relationship between Emotional Eating and Perfectionism Scores

		Feeding the Emotions: The Emotional Eating Scale
Dissatisfaction	r	-,111
	p	,073
Order	r	,161
	p	,009*
Contradiction	r	,044
	p	,482
Standards	r	,252
	p	,000*
Positive Perfectionism	r	,258
	p	000*
Negative Perfectionism	r	-,054
	p	,383

*p<0,05

perfectionism of university students who do sports and those who do not are discussed by comparing them with the literature.

Considering the socio-demographic characteristics of the participants in Table 1; 57.3% of them are men and 42.7% are women. It is observed that more than half of the participants (57.3%) did sports and almost half (39.2%) spent most of their lives in the city.

When we look at the mean scale scores of the participants in Table 2, Feeding Feelings Emotional Eating 27,13, Dissatisfaction 23,42 Order 19,21, Contradiction 26,35, High Standards 35,65 from the sub-dimensions of the perfectionism scale. Positive Perfectionism average is 54.86 and Negative Perfectionism average is 49.78.

Table 3. When the participants were examined by gender, there was no significant difference in their emotional eating and perfectionism mean scores. When the literature is examined, we encounter similar and different results. In a study, it was observed that women and men were more prone to emotional eating in the face of adverse situations and similar behaviors were exhibited in both genders (25). In a different study, women's emotional intensity was higher than men's. Problems in daily life, more workload of women than men, and women's thinking in more detail bring perfectionism with it. For this reason, he concluded that women have more perfectionism and emotional eating tendency than men (9). In a study conducted with university students with and without perfectionism; findings revealed an increase in perfectionism scores of students with some obsessive disorders, sleep, appetite and eating problems (24).

Table 4. When the participants are analyzed according to whether they do sports or not; There was no difference in feeding feelings and emotional nutrition. But; Significant differences were found in standards and negative perfectionism sub-dimension of perfectionism. Those who do sports have higher standards of perfectionism than those who do not. The perfectionism of those who do not do sports is higher than those who do sports. A study examining the effect of sports on negative emotions and the results obtained support the findings of this study. It is difficult for individuals who do sports to stay in negative thoughts. Because exercise provides the secretion

of happiness hormones in humans (26). In the other study, when compared with the control group who do sports and those who do not; While it is observed that the sports group exhibits emotional eating behavior (27); In a different study, those who do sports and those who do not have been compared, and those who do not do sports have been found to have eating disorders (28).

Table 5. Emotional eating and perfectionism scores did not differ significantly according to the place of life of the participants. The fact that the place of residence is a village town and a big city is not a factor that will make a difference in terms of perfectionism and emotional eating. In the literature, it has been concluded that the social environment in which people live and the state of anxiety they live in affect their eating behaviors. This study reached different results from our study (29).

Table 6. There is a statistically significant and low level correlation between feeding emotions, emotional eating and perfectionism scale. As positive perfectionism and associated order and standards increase, nurturing emotions increases emotional eating.

(30) investigated whether there is a relationship between perfectionism and eating disorders and other psychological disorders, and the results of the study showed that perfectionism and eating disorders are associated with other psychiatric disorders, but not with each other. (31), in a study conducted on 322 people, concluded that there is a significant relationship between perfectionism and eating disorder and that perfectionism is an important distinguishing feature of eating disorder. As a result; Looking at the relationship between nutritional feelings, emotional eating, and perfectionism, there was no difference in results between genders. When evaluated according to whether they do sports or not, there was no difference in eating behaviors of the participants, while the positive perfectionism levels of those who do sports were found to be significantly higher than those who do not. Depending on the environment in which life was experienced, the place where students living in a large city, city, village or town lived did not affect their eating behaviors and perfectionism levels.

Especially recent studies emphasize that many psychological factors play a role in eating behavior.

This study was conducted on a university student doing sports. More studies are needed on the subject.

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