



RESEARCH ARTICLE

Assessment of Eating Attitude Behaviours and Obsessive-Compulsive Symptoms of a Group of University Students: A Pilot Study from Turkey

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Abstract

Objective: This study has been carried out in order to assess the eating attitude behaviours and obsessive-compulsive symptoms of a group of university students.

Method: This cross-sectional study was carried out on 70 students who studied at Akdeniz University Communication Faculty. The research data, socio-demographic features of the students were collected using the questionnaire form consisting of Eating Attitude Test (EAT-40) and Maudsley Obsessive Compulsive Inventory (MOCI). Body Mass Index (BMI) was calculated and classified according to the WHO. The data obtained were analysed using SPSS 22.0 Statistical Packaged Software.

Results: This study was conducted on 70 students. According to the eating attitude test, it was determined that 65.6% of women and 73.7% of men had low risk of eating behaviour disorder; according to the MOCI, it was found out that the incidence rate of Obsessive-Compulsive Disorder (OCD) symptoms was high in 53.1% of women, and 34.2% of men. No statistically significant relationship was found between the MOCI and EAT-40 scores and BMI classifications of the students ($p > 0.05$).

Conclusion: As a result of the study, it was concluded that there were differences between the body weight, height and BMI of the students by gender, but these differences could not be associated with the level of incidence of OCD symptoms and eating attitude habits.

Keywords

Eating attitude, Obsessive compulsive disorder, University student

Introduction

The acquisition of the habit of healthy nutrition and positive nutrition behaviour is a process that starts in childhood and continues throughout life. Especially adolescence and youth periods are risky in terms of the nutrition-related behaviours of an individual. Eating disorders are prevalent among young people since the eating attitude is affected by many factors, especially in this period [1]. Eating behaviour disorder is a state with both physical and psychosocial dimensions that show themselves with the disorder in one's opinion on his/her body weight and physical appearance and eating behaviours [2]. Eating disorders are prevalent among psychiatric problems and generally affect young adult women [3,4].

According to the Diagnostic and Statistical Manual of Mental Disorders-V criteria, eating disorders are classified as Anorexia Nervosa, Bulimia Nervosa, and Binge Eating Disorder. Many different aetiological factors are encountered when the aetiology of eating disorders is assessed. Approaches such as the presence of eating and psychiatric problems in the family, mood disorders, family problems, substance addiction, low self-esteem, obesity, struggles with weight and food, teenage problems, socio-cultural norms, sexual trauma, biological and genetic factors, and Obsessive-Compulsive Disorder (OCD) take place in the aetiology of eating disorders [5-7].

The relation between OCD and eating disorders has

been known for long years. In eating disorders, thoughts about distinct regular foods, and repeated and stubborn thoughts about the body image and weight losing desires are associated with obsession, while avoiding foods, excessive exercising, and ritualised eating attitudes are associated with compulsions [8,9].

Eating behaviour disorder is a state with both physical and psychosocial dimensions that show themselves with the disorder in one's opinion on his/her body weight and physical appearance and eating behaviours. Eating disorders are prevalent among psychiatric problems and generally affect young adult women. The relation between OCD and eating disorders has been known for long years. In eating disorders, thoughts about distinct regular foods, and repeated and stubborn thoughts about the body image and weight losing desires are associated with obsession, while avoiding foods, excessive exercising, and ritualised eating attitudes are associated with compulsions.

The fact that eating disorders in the society are widespread especially during young adulthood and that the relationship between OCD and eating disorders is revealed by the study, it is necessary to evaluate this situation in university students in young adulthood. This study has been carried out in order to assess the eating attitude behaviours and obsessive-compulsive symptoms of a group of university students.

Methods

Sample, procedure and data collection

This cross-sectional study was performed on journalism and radio television students studying at Akdeniz University, faculty of communication, who were able to follow the news on nutrition from media, between May and June 2016. The sample of the study consisted of 70 students from both departments at the age of 20 years and above, who had been not diagnosed with any eating disorder before, who accepted to participate in the study by giving written consent and answered the questions in the questionnaire form.

The research data, socio-demographic features of the students were collected using the questionnaire form consisting of Eating Attitude Test (EAT-40) and Maudsley Obsessive Compulsive Inventory (MOCI). The anthropometric measurements (weight and height) were taken; Body Mass Index (BMI) was calculated. According to the BMI classification published by the World Health Organization, their BMIs were classified as underweight for those with the BMI below 18.5 kg/m², normal for those with the BMI between 18.5 and 24.99 kg/m², overweight/pre-obese for those with the BMI between 25.0 and 29.99 kg/m², and obese for those with the BMI of 30 kg/m² and above [10].

The necessary permission was taken from the Faculty of Communication, and the ethics committee approval

was taken from Akdeniz University, Faculty of Medicine, Clinical Research Ethics Committee (No. 70904504/529 of 26/11/2015) to conduct the study. All procedures in the study were carried out in accordance with the Declaration of Helsinki.

Instruments

Eating Attitude Test (EAT-40): The eating attitude test is a self-report scale consisting of 40 items of 6-point Likert-type, which was developed by Garner and Garfinkel in 1979 to objectively assess the symptoms of anorexia nervosa and bulimia nervosa in order to measure the behaviours and attitudes of patients with eating disorders regarding eating and the symptoms of the possible disorders in the eating behaviours of normal individuals [11]. The validity and reliability studies of the scale in Turkey were performed by Savaşır and Erol and the Cronbach's alpha reliability coefficient was found to be 0.70 [12]. The cut-off score of the EAT-40 scale was determined to be 30. A score of thirty points and above is significant, and the total score level is directly related to the level of psychopathology. In the EAT-40 risk profiles, a total score of the EAT-40 below 21 means low risk, between 21 and 30 means moderate risk, and 30 and above was determined as high risk [11]. The test reliability for this study was evaluated with the Cronbach's Alpha, and the alpha value was 0.66.

Maudsley Obsessive Compulsive Inventory (MOCI): MOCI is a self-assessment tool used to measure the type and prevalence of obsessive-compulsive symptoms in healthy individuals and psychiatric patient groups, developed by Hodgson and Rachman. The original question list of the scale consists of 30 items in the form of "true" and "false" and 4 sub-scales being checking, cleanliness, slowness and doubt [13]. The validity and reliability studies were performed by Erol and Savaşır with the adaptation of the Turkish form of the scale, and the rumination sub-dimension was added to the scale. The scale consists of 37 questions to be answered as true or false. Each correct item marked in the evaluation is given 1 point. Only the 11th item is reversely scored. The highest values are 37 for the total obsession score, 9 for checking, and 11 for cleanliness, 7 for slowness, and 7 for doubt. The prevalence of obsessive-compulsive symptoms increases as the score taken from the scale increases [14]. The reliability of the scale for this study was evaluated using the Cronbach's Alpha, and the alpha value for all of the items of the scale was found to be 0.71.

Statistical analysis

Continuous variables are presented as mean±standard deviation, while categorical variables are given as percentages. The Kolmogorov-Smirnov test was used to verify the normality of the distribution of continuous variables. The One-Way ANOVA and Pearson Correlation analysis were used in the analysis of the data. Anal-

Table 1: Comparison of anthropometric measurements, MOCI and EAT-40 scores of females and males.

	Women	Men	Total	p
	$\bar{X} \pm SD$	$\bar{X} \pm SD$	$\bar{X} \pm SD$	
Age	21.6 ± 1.39	21.6 ± 1.34	21.61 ± 1.35	> 0.05
Weight	57.9 ± 8.30	73.0 ± 13.61	66.10 ± 13.71	< 0.001*
Height	164.8 ± 5.91	176.0 ± 7.57	170.86 ± 8.81	< 0.001*
BMI	21.3 ± 2.68	23.5 ± 3.38	22.47 ± 3.25	0.004*
MOCI score	17.8 ± 7.39	15.7 ± 6.49	16.64 ± 6.94	> 0.05
Checking	4.16 ± 4.06	3.21 ± 2.08	3.64 ± 3.16	> 0.05
Cleanliness	4.50 ± 1.78	4.68 ± 2.09	4.60 ± 1.94	> 0.05
Slowness	2.94 ± 1.76	2.66 ± 1.42	2.79 ± 1.58	> 0.05
Doubt	3.88 ± 1.64	3.42 ± 1.73	3.63 ± 1.769	> 0.05
Rumination	3.91 ± 2.02	3.18 ± 2.06	3.51 ± 2.06	> 0.05
EAT-40 score	17.5 ± 8.36	15.9 ± 9.24	16.67 ± 8.82	> 0.05

*p < 0.05.

Table 2: Distribution of MOCI and EAT-40 scores of females and males.

	Women %	Men %
EAT-40 scores		
Low risk (< 21 point)	65.6	73.7
Moderate risk (21-30 point)	28.1	15.8
High risk (> 30 point)	6.3	10.5
MOCI scores		
Low OCD possibility	15.6	28.9
OCD is likely to be diagnosed	31.3	36.8
High OCD possibility	53.1	34.2

yses were performed with IBM SPSS Statistics for Windows 22 (IBM Corp. Released 2013. Armonk, NY: IBM Corp.) software and two-tailed P value less than 0.05 was considered statistically significant.

Results

This study was conducted on 70 students (45.7% female and 54.3% male). The age, body weight, height and BMI means of females and males were, 21.6 ± 1.39 and 21.6 ± 1.34 years ($p > 0.05$); 57.9 ± 8.30 and 73.0 ± 13.61 kg ($p < 0.001$); 164.8 ± 5.91 and 176.0 ± 7.57 cm ($p < 0.001$); 21.3 ± 2.68 and 23.5 ± 3.38 kg/m² ($p = 0.004$), respectively (Table 1). According to the BMI classification, it was determined that the most of the females ($n = 24$, 79.9%) and males ($n = 27$, 71.1%) were normal weight; 12.5% ($n = 4$) of women and 5.3% of men ($n = 4$) were underweight; 12.5% ($n = 4$) of women and 15.8% ($n = 6$) of men were overweight and 7.9% of men were obese.

The mean of EAT-40 scores and MOCI scores of the females and males were 17.5 ± 8.36 and 15.9 ± 9.24 ($p > 0.05$); 17.8 ± 7.39 and 15.7 ± 6.49 ($p > 0.05$), respectively. Upon examining the sub-scales of MOCI, it was found out that the average of the checking sub-scale by gender was 4.16 ± 4.06 and 3.21 ± 2.08, of the cleanliness sub-scale was 4.50 ± 1.78 and 4.68 ± 2.09; of the slowness sub-scale was 2.94 ± 1.76 and 2.66 ± 1.42, and of the doubt and rumination sub-scales was 3.88 ± 1.64 and 3.42 ± 1.73, and 3.91 ± 2.02 and 3.18 ± 2.06 for females and males, respectively. No significant difference was detected between the sub-scale scores by gender ($p > 0.05$) (Table 1).

According to the assessment of the eating attitude score, it was determined that 65.6% of women and 73.7% of men had low risk of eating behaviour disorder; according to the MOCI score, it was found out that the incidence rate of obsessive-compulsive disorder symptoms was high in 53.1% of women, and 34.2% of men (Table 2).

No statistically significant difference was detected between the obsessive-compulsive disorder risk and eating behaviour disorder risk among individuals by gender ($p > 0.05$). No statistically significant relationship was found between the MOCI and EAT-40 scores and BMI classifications of the students ($p > 0.05$).

Discussion

As a result of the present study carried out in order to assess the eating attitudes and behaviours and obsessive-compulsive symptoms of a group of university students, it was determined that certain socio-demographic features of the students affect the eating attitudes and obsessive-compulsive symptoms, but there is no significant relation between the eating attitude and obsessive-compulsive symptoms.

According to the results of the eating attitude test, it was determined that the risk of eating disorders was high in 6.3% of female students and 10.5% of male patients. In studies carried out on the subject abroad, it was determined that the rate of incidence of eating disorders was above 10%, while the results of domestic studies varied between 3.8% and 4.9% [9,15-19]. While the results of our study are in parallel to the foreign literature, it is interesting that they are higher than the rates given in domestic studies.

While obsessive-compulsive disorder generally tends to be more prevalent among males in the childhood and pre-adolescence period, the fact that it can be slightly higher among females during adulthood has been shown in various studies [20,21]. According to the results of this study, it is observed that the rate of incidence of obsessive-compulsive disorder symptoms is higher among females than males.

There are studies in the literature showing that the rate of incidence of obsessive-compulsive symptoms increases as eating behaviour deteriorates [19,22-26]. Nevertheless, no statistically significant relation was found between the MOCI and EAT-40 scores of the students as a result of our study ($p > 0.05$). It was thought that the reason for this difference may have resulted from the differences between the properties of the sample groups in other studies and the sample group in our study. In addition, according to the MOCI score, the incidence of obsessive-compulsive disorder symptoms in individuals is found to be as high as that of women and men, as a result of our study. The results of our study suggest that there is a negative relationship between students' EAT-40 scores and MOCI scores, suggesting that as the deterioration in eating attitude decreases, the obsessive symptom level increases in the negative direction.

In the studies of Erol, et al. it was detected that the variables predicting the symptoms of eating disorders best are Obsessive-Compulsive symptoms and the Body Mass Index; however, no significant relation was found between the MOCI and EAT-40 scores and the BMI classifications of the students as a result of our study ($p > 0.05$). While there are studies supporting this result in the literature, there are also studies in which opposite findings are obtained [16,27-29].

Conclusion

As a result of the study, it was concluded that there were differences between the body weight, height and BMI of the students by gender, but these differences could not be associated with the level of incidence of OCD symptoms and eating attitude habits. That the level of incidence of obsessive-compulsive disorder symptoms was determined to be high in both genders was regarded as an interesting result. We believe that the findings obtained as a result of the study will constitute the basis for studies to be performed at the stage of detecting the risk groups, preventing the diseases and maintaining the treatment. The fact that the study was performed with the students of the faculty of communication representing university students and the low number of students limits its generalizability. Since a small sample group constitutes the limitation of this study, we think that similar studies should be carried out with a larger sample that assesses the eating attitudes and OCD symptoms of young people studying at a university.

Declaration of Interest

No conflict of interest related to this article.

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