

Investigation of Nursing Students' Eating Attitudes and Affecting Factors: A Cross-Sectional Study

By Olcay Çam^{*}, Elif Deniz Kaçmaz[±] & Cansu Guler[°]

The aim of the study was to determine the eating attitudes of university students and the factors affecting these attitudes. The descriptive study was conducted with 711 nursing students studying at a public university nursing faculty. A Personal Information Form and Eating Attitude Test (EAT) were used as data collection tools. Descriptive statistics and chi-square analysis were used in the evaluation of the data. 59.6% of students had a normal range in Body Mass Index (BMI). The mean EAT score of the students was 16.64±9.12. As a result of the chi-square analysis, there was a statistically significant difference between the groups in the EAT scores of variables such as satisfaction with weight and body image; parental attitude; satisfaction with the department; self-worth; perceived general health status; presence of a chronic disease; professional psychological support; diet and physical exercise; and attention to diet ($p<0.05$). It was determined that 8.9% of the students participating in the study are at risk of developing an eating disorder. It was determined that the students' perceived parental attitudes, being satisfied with their body image and weight, self-worth, diet and physical exercise, and paying attention to their diet all affect their eating attitudes.

Keywords: student, nurse, eating attitudes

Introduction

Eating behaviour, which is one of the most basic biological activities and necessary for the continuation of life, is an action with social, cultural and psychological dimensions (Ağaçdiken Alkan et al. 2016, Atlı Özbaş 2016). Psychologically, it is stated that eating behaviour is closely related to emotions such as stress, tension, boredom, happiness and excitement felt as a result of events (Özkan and Bilici 2018). An eating attitude, on the other hand, is the tendency of an individual to create feelings, thoughts and behaviours about eating and nutrition (Yılmaz 2017). Eating attitudes and behaviours are affected by many factors such as age, gender, genetic structure, hormones, mood, environment, cultural and religious beliefs, media and body image. Negative changes in eating attitudes can cause health problems such as eating disorders (Özkan and Bilici 2018, Kadioğlu and Ergün 2015).

Eating disorders are psychiatric disorders that include deterioration in eating attitudes and behaviours, which can lead to problems such as malnutrition and over-nutrition in an individual (Özyazıcıoğlu and Aydın 2019). In eating disorders, the individual's eating attitude and body image are impaired (Ünalın et al. 2009). According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), eating disorders are classified as anorexia nervosa; bulimia nervosa; binge

^{*}Professor, Ege University, Turkey.

[±]Research Assistant, İzmir Bakırçay University, Turkey.

[°]Research Assistant, Ege University, Turkey.

eating disorder; other specified feeding and eating disorder; pica; rumination disorder; avoidant/restricted food intake disorder; and others (muscle dysmorphia, orthorexia nervosa) (American Psychiatric Association 2013). Although a specific cause for eating disorders is not known, its emergence has tried to be explained by biological factors, developmental problems, psychodynamics, cognitive and sociocultural factors that are also effective in eating attitudes and behaviours (Atlı Özbaş 2016, Ulaş et al. 2013).

Literature Review

In terms of eating disorders, it is stated that university students are among the high-risk groups due to their developmental period and possible psychosocial and economic difficulties (Çelik et al. 2016, Vardar and Erzençin 2011, Ünalın et al. 2009). Studies have shown that the probability of having an eating disorder in university students is between 6.3% and 14% (Çelik et al. 2016, Kadıođlu and Ergün 2015, Ünalın et al. 2009). In studies examining eating disorders in university students, it is stated that the rate of eating disorders is high in those who are above normal weight according to BMI, stay in a dormitory, live in a town, are not satisfied with their body weight, go on a diet, are female students and have mental health problems such as depression (Çelik et al. 2016, Kadıođlu and Ergün 2015, Ünalın et al. 2009, Oruçlular and Bariskin 2015, Pengpid and Peltzer 2018).

It is stated that it is useful for health professionals to make a general assessment in order to ensure that individuals make changes in the diet they are used to (Serin and Şanlıer 2018). Undergraduate nursing students, who are in the high-risk group and who are expected to be role models in society, are expected to have healthy behaviours first (Usta et al. 2015). Considering the increase in the incidence of eating disorders day by day, it is thought that it is important to include eating attitudes and disorders in preventive mental health practices and to conduct screening studies in order to identify at-risk individuals.

It is thought that determining the eating attitudes and affecting factors of student nurses will be effective in their professional and personal development. Considering that today's undergraduate students will be role models for tomorrow's professional nurses with their positive life behaviours, it is important to take protective measures by determining the risk of eating disorders and affecting factors in the study. In this study, it was aimed to determine the eating attitudes of student nurses and the factors affecting their eating attitudes.

For this purpose, the research questions are:

1. What is the rate of eating disorders in nursing students?
2. What are the factors affecting the eating attitudes of nursing students?

Materials and Methods

Population and Sample of the Research

This cross-sectional study was conducted with students studying at a public university nursing faculty between 01.02.2020-30.06.2020. The universe of this research consists of nursing students studying at one Faculty of Nursing in the 2019-2020 academic year (N=1203). A methodological method was not used to determine the sample of the research, and it was aimed to include individuals who were at school during the institutional leave and who met the inclusion criteria of the research. Volunteering to participate in the research, being a nursing student and completing the questionnaires were criteria for inclusion in the research (n=711) (Reach rate 59%).

Data Collection Tools

The data of the study were obtained by using the Personal Information Form and the Eating Attitude Test.

Personal Information Form: The form, which was developed by the researchers and includes the sociodemographic, academic and general characteristics of the students, consists of 25 open and closed-ended questions.

Eating Attitudes Test (EAT-40): The Eating Attitudes Test was developed by Garner and Garfinkel (1979) and is used to assess the risk of eating disorders. The validity and reliability study of EAT-40 in Turkey was conducted by Savaşır and Erol (1989). The EAT consists of 40 items and the answers are evaluated in a six-step Likert form as “always-never”. In the evaluation of scale items, “sometimes” is 1 point, “rarely” is 2 points, and “never” is 3 points. For items 1, 18, 19, 23, 27 and 39, other options are evaluated as “0” points. For the other items of the scale, always is 3 points; very often is 2 points; and often is 1 point; and other options are calculated as 0 points. As a result, the scores obtained from each item of the scale are summed to obtain the total score of the scale. The cut-off value for EAT-40 is 30 points. People whose score of 30 and above are considered be at high risk of having an eating disorder. The Cronbach Alpha reliability coefficient of the scale was found to be 0.70 in the study of Savaşır and Erol (1989). The Cronbach Alpha reliability coefficient of the scale was found to be 0.725 for this study.

Data Collection

The data of the study were obtained between February and March 2020. In order to reach the whole universe, the questionnaires were distributed by the researchers between the courses and collected at the end of the break.

Ethics-Approval Statement

Ethics committee permission (Date and Number: 30.01.2020-01/07-512) from one University Scientific Research and Publication Ethics Committee to

carry out the research and institutional permission from Faculty of Nursing and verbal permissions from the participants for the application of the questionnaires.

Evaluation of Data

While evaluating the findings of the study, SPSS (Static Package for Social Sciences) for Windows 21.00 program was used for data coding and statistical analysis. In the study, Cronbach's Alpha coefficient was used to test the reliability of the EAT scale. Chi-square analysis was used to compare categorical data. Results were expressed as mean, standard deviation, min-max, number and percentage. The results were accepted as 95% confidence interval and significance value as $p < 0.05$.

Results

The mean age of the students participating in the research is 21.28 ± 1.66 (min-max: 18-32); 85.9 of the students are female; 33.3% are 1st grade; 32.3% of them have spouses/lovers. The mean body mass index (BMI) of the students is 22.01 ± 3.07 (min-max: 14.53-35.06). BMI of 59.6% was in the normal range. 42.9% of the students were satisfied with their weight and 50.6% were satisfied with their body image. 94% of the students are in the nuclear family structure and 58.2% find their parents' child-rearing attitude egalitarian and democratic. 55.3% of students live in student dormitories. 45.6% of the students stated that they had taken a nutrition lesson at least once in their education life. 81% of the students find themselves valuable (Table 1).

Table 1. *Introductory Characteristics of Students*

Features	n	%
Gender		
Woman	611	85.9
Man	100	14.1
Class		
1st Class	237	33.3
2nd Class	133	18.7
3rd Class	191	26.9
4th Class	150	21.1
Spouse-Beloved		
Yes	230	32.3
No	481	67.7
Body Mass Index		
Slim ($\leq 19.99 \text{ kg}\% \text{m}^2$)	181	25.5
Normal ($20.00-24.99 \text{ kg}\% \text{m}^2$)	424	59.6
Slightly obese ($25.00-29.99 \text{ kg}\% \text{m}^2$)	89	12.5
Obese ($>30 \text{ kg}\% \text{m}^2$)	17	2.4
Weight Satisfaction		
Yes	305	42.9
No	294	41.4
Not sure	112	15.8
Body Image Satisfaction		

Yes	360	50.6
No	214	30.1
Not sure	137	19.3
Family Members		
Nuclear family	668	94.0
Other (Fragmented,Wide)	43	6.0
Parent's Childrearing Attitude		
Repressive and Authoritarian	81	11.4
Overprotective	132	18.6
Egalitarian and Democratic	414	58.2
Rejective/Inconsistent	84	11.8
Living place		
Family	178	25.0
Student dormitory	393	55.3
Student house	120	16.9
Alone	20	2.8
Taking a Nutrition Lesson		
Yes	324	45.6
No	387	54.4
Self-Value		
Yes	576	81.0
No	26	3.7
Not sure	109	15.3

When the general life habits of the students are examined, 80.7% of them report that they do not smoke and 68.1% do not consume alcohol. 16.7% of the students report that they do diet, 34.3% do physical exercise, and 48.9% pay attention to their diet at a normal level (Table 2).

Table 2. *General Life Habits of Students*

Features	n	%
Smoking Status		
Yes	137	19.3
No	574	80.7
Alcohol Use Status		
Yes	227	31.9
No	484	68.1
Dieting Status		
Yes	119	16.7
No	592	83.3
Doing Physical Exercise Status		
Yes	244	34.3
No	467	65.7
Attention to Diet		
A lot	46	6.5
Normal	348	48.9
A little	244	34.3
None	73	10.3

The mean EAT score of the students was found to be 16.64 ± 9.12 (min-max: 0.00-59.00). In the chi-square analysis performed to compare the categorical data, there was a statistically significant difference between the groups in terms of

satisfaction with weight, satisfaction with body image, parental attitude, self-esteem variables and EAT scores ($p \leq 0.05$); There was no statistically significant difference between the groups in the EAT scores of variables such as gender, class, having a spouse/lover, body mass index, family structure, place of residence, and taking nutrition lessons ($p > 0.05$) (Table 3).

Table 3. Comparison of Students' Personal Characteristics and EAT Scores

Features	EAT scores				Statistical Analysis X^2 ; p
	<30 n	%	≥ 30 n	%	
Gender					
Woman	556	91.0	55	9.0	0.107;0.744
Man	92	92.0	8	8.0	
Class					
1st Class	207	87.3	30	12.7	6.714;0.082
2nd Class	124	93.2	9	6.8	
3rd Class	176	92.1	15	7.9	
4th Class	141	94.0	9	6.0	
Spouse-Beloved					
Yes	209	90.9	21	9.1	0.31;0.861
No	439	91.3	42	8.7	
Body Mass Index					
Slim (≤ 19.99 kg/m ²)	167	92.3	14	7.7	3.451;0.327
Normal (20.00-24.99 kg/m ²)	389	91.7	35	8.3	
Slightly obese (25.00-29.99 kg/m ²)	78	87.6	11	12.4	
Obese (> 30 kg/m ²)	14	82.4	3	17.6	
Weight Satisfaction					
Yes	287	94.1	18	5.9	12.072;0.002**
No	255	86.7	39	13.3	
Not sure	106	94.6	6	5.4	
Body Image Satisfaction					
Yes	339	94.2	21	5.8	16.379;0.000**
No	181	84.6	33	15.4	
Not sure	128	93.4	9	6.6	
Family Members					
Nuclear family	610	91.3	58	8.7	0.434;0.510
Other (Fragmented,Wide)	38	88.4	5	11.6	
Parent's Childrearing Attitude					
Repressive and Authoritarian	71	87.7	10	12.3	8.235;0.041*
Over protective	116	87.9	16	12.1	
Egalitarian and Democratic	388	93.7	26	6.3	
Rejective/Inconsistent	73	86.9	11	13.1	
Living place					
Family	162	91.0	16	9.0	3.470;0.325
Student dormitory	355	90.3	38	9.7	
Student house	114	95.0	6	5.0	
Alone	17	85.0	3	15.0	
Taking a Nutrition Lesson					
Yes	302	93.2	22	6.8	3.160;0.075
No	346	89.4	41	10.6	
Self-Value					
Yes	536	93.1	40	6.9	17.692;0.000**
No	19	73.1	7	26.9	
Not sure	93	85.3	16	14.7	

* $p < 0.05$, ** $p < 0.01$, X^2 : Chi square, EAT: Eating Attitude Test.

When the general living habits were examined, there was a statistically significant difference between the groups in terms of diet and physical exercise, attention to nutrition patterns and EAT scores ($p \leq 0.05$). It was determined that there was no statistically significant difference between the groups in the EAT scores of smoking and alcohol use variables ($p > 0.05$) (Table 4).

Table 4. Comparison of Students' General Life Habits and EAT Scores

Features	EAT scores				Statistical Analysis χ^2 ; p
	<30 n	%	≥ 30 n	%	
Smoking Status					
Yes	120	87.6	17	12.4	2.645;0.104
No	528	92.0	46	8.0	
Alcohol Use Status					
Yes	202	89.0	25	11.0	1.913;0.167
No	446	92.1	38	7.9	
Dieting Status					
Yes	87	73.1	32	26.9	57.532;0.000**
No	561	94.8	31	5.2	
Doing Physical Exercise Status					
Yes	213	87.3	31	12.7	6.798;0.009**
No	435	93.1	32	6.9	
Attention to Diet					
A lot	32	69.6	14	30.4	31.390;0.000**
Normal	327	94.0	21	6.0	
A little	225	92.2	19	7.8	
None	64	87.7	9	12.3	

* $p < 0.05$, ** $p < 0.01$, χ^2 : Chi-square, EAT: Eating Attitude Test.

Discussion

In this study, which was conducted to examine the eating attitudes of nursing students who are trained to be health professionals and the factors affecting them, the eating attitudes of the students were determined and some factors affecting their eating attitudes were determined.

It was determined that the mean YTT-40 score of the nursing students participating in the study was 16.64 ± 9.12 . In studies conducted with university students in our country, the mean score was 15.66 ± 8.50 ; 17.76 ± 12.34 (Arslantaş et al. 2017); 18.43 ± 10.56 (Duran et al. 2016). It was determined as 20.9 ± 9.3 (Ünalın et al. 2009), 27.98 ± 12.98 (Özvurmaz et al. 2018). It was determined that 8.9% of the students participating in the study were at risk of having or developing an eating disorder. Similar to the high incidence of eating disorders in university students in international studies (Uri et al. 2021, Trindale et al. 2018, Pengpig and Peltzer 2018, Hasan et al. 2018, Yu et al. 2015), it has been reported that the risk of eating disorders in university students varies between 4.2% and 84.5% in national studies (Hacıhasanoğlu Aşılal et al. 2020, Uzun et al. 2018, Usta et al. 2015, Akdevelioğlu and Yörüsün 2019, Arslantaş et al. 2017, Duran et al. 2016, Özvurmaz et al. 2018, Ulaş et al. 2013). It can be thought that this variability seen in the results of the

research is due to the sample sizes and sociocultural differences of the individuals forming the sample.

When the relationship between students' eating attitudes and their personal characteristics is examined, in our study, it was determined that factors such as gender, age, presence of spouse/lover, BMI, number of individuals in the family, family structure, place of residence, academic achievement, taking nutrition courses and transferring them to practice did not affect the EAT score averages. As a result of our research, it can be said that some of these factors, which were not found to affect students' eating attitudes, are different from the literature. In the literature, there are studies showing that the mean EAT score is affected by the gender factor originating from female students (Ağaçdiken Alkan et al. 2016, Özvurmaz et al. 2018) and the BMI factor originating from obese individuals (Usta et al. 2015, Çelik et al. 2015, Balhara et al. 2012, Pengpid and Peltzer 2018). Contrary to the literature, the lack of a relationship between BMI and eating disorders may be due to the fact that most of the individuals participating in the study were of normal weight. In addition, it is thought that this variability arises due to the sociocultural differences of the individuals who constitute the sample of the research.

From the students participating in this research, a significant relationship was found between being satisfied with weight and body image and EAT. It was noted that 41.4% of the students were not satisfied with their weight and 30.1% with their body image. Like this study's findings, a study which was worked out by Ağaçdiken Alkan et al. (2016) found that there was a significant relationship between being satisfied with their weight and body and their eating attitude, and 33.3% of the students were not satisfied with their weight. It is known that the desire for positive body image affects the eating attitudes and behaviours of individuals (Öngören 2015, Özbolet 2011).

In the literature, the results of studies on the relationship between family structure and eating disorders are inconsistent. While some studies have found a relationship between eating disorders and family structure (Sapmaz Yurtsever and Sütcü 2017), some studies have found no relationship (Ozenç et al. 2014). In the literature, it is suggested that the disrupted eating behaviours of individuals who are negatively evaluated in childhood and who have experienced an overprotective, authoritarian and punitive parenting style emerge as a way of controlling the environment. It has been found that individuals at risk of eating disorders perceive their parents' parenting negatively (Ozenç et al. 2014, Sapmaz Yurtsever and Sütcü 2017). It was determined that there was a significant relationship between students' perceived parental attitudes and EAT. Our research findings support this information.

It was determined that 81% of the students value themselves and there is a significant relationship between their self-worth and EAT. In the study of Ağaçdiken Alkan et al. (2016), while 89.7% of the students stated that they value themselves, no significant relationship was found between eating attitude and self-worth (Ağaçdiken Alkan et al. 2016). Also, in the multiple regression analysis of Çelik et al.'s (2015) study, it was concluded that low self-esteem did not predict the abnormal eating attitudes of nursing students (Çelik et al. 2015). It is thought that

low self-esteem causes a change in eating attitudes due to dissatisfaction with one's body, thus increasing the risk of developing an eating disorder (Ulaş et al. 2013). In our study, it is seen that half of the students are satisfied with their bodies, and this satisfaction is thought to be associated with a high level of self-worth.

When the relationship between students' eating attitudes and general life habits is examined, it was noted that features such as smoking, and alcohol use did not affect the EAT score averages. It was determined that there was a significant relationship between the dieting status of the students and the EAT. Similarly, in the study of Ulaş et al. (2013), it was found that the risk of possible eating disorders increased in students who were on diet. It is thought to be caused by individuals starving themselves by dieting in order to maintain weight control (Ulaş et al. 2013).

It was determined that there is a significant relationship between doing physical exercise and EAT. Similarly, in the study of Ünalın et al. (2009) and Rouzitalab et al. (2019) and it was determined that there is a positive relationship between doing physical exercise and eating disorders. It is thought that individuals who do physical exercise make changes in their diet in order to maintain or improve their physical form (Ünalın et al. 2009, Rouzitalab et al. 2019).

It was determined that there was a significant relationship between students' attention to their diet and EAT. Similar to our findings, there are studies in the literature showing that there is a significant relationship between paying attention to diet and eating attitude (Kadiođlu amd Ergün 2015, Ađaçdiken Alkan et al. 2016). Studies have found that the frequency of skipping meals is high in university students (Ulaş et al. 2013, Yılmaz amd Özkan 2007). Behaviours that occur in this age period affect the whole life. Considering the importance of adequate and balanced nutrition in every period of life, the importance of regular eating habits should not be overlooked.

Limitations of the Study

The results of this research are based on the self-reports of individuals. For this reason, it includes subjective evaluations as a limitation of the research. In addition, research findings cannot be generalized to the entire population as it covers only one faculty.

Conclusion

It was determined that 8.9% of the students participating in the study had an eating disorder risk. It was determined that the students' perceived parental attitudes, being satisfied with their body image and weight, self-worth, diet and physical exercise, and paying attention to their diet affect their eating attitudes.

It is thought that it is important to determine the eating attitudes of university students and to increase their awareness of eating attitudes in order to plan pre- and post-graduate education, to raise awareness of students about nutrition and to

screen risky groups, to take protective measures and to provide the necessary guidance and support. Determining the eating attitudes of student nurses, firstly establishing their own health care behaviours, and taking their place in the field as bio-psycho-socially healthy professionals after graduation is an important issue in terms of both the quality of care they will provide and individual satisfaction. Another issue that increases the importance of determining the eating attitudes of nursing students is that they set an example for the society as a role model for healthy living behaviours. It is thought that the healthy nurses of the future are in a crucial position in the increase of quality service areas and the development of our society.

References

- Ağaçdiken Alkan S, Özdelikara A, Mumcu Boğa N (2016) Eating behaviors of nursing students. *Journal of Education and Research in Nursing* 13(3): 250–257.
- Akdevelioğlu Y, Yörüsün TÖ (2019) Investigation of some factors related to eating attitudes and behaviours of university students. *Gazi Journal of Health Sciences* 4(1): 19–28.
- Arslantaş H, Adana F, Ögüt S, Ayakdaş D, Korkmaz A (2017) Relationship between eating behaviors of nursing students and orthorexia nervosa (obsession with healthy eating): a cross-sectional study. *Journal of Psychiatric Nursing* 8(3): 137–144.
- American Psychiatric Association (2013) *Diagnostic and statistical manual of mental disorders (DSM-5)*. 5th Edition. Edited by VA Arlington. American Psychiatric Publishing.
- Ath Özbaş A (2016) Beslenme ve yeme bozuklukları. (Nutrition and eating disorders). In N Gürhan (ed.), *Ruh Sağlığı ve Psikiyatri Hemşireliği*. Ankara: Ankara Nobel Medical Bookstores.
- Balhara YPS, Yadav T, Arya K, Mathur S, Kataria DK (2012) A cross-sectional study of body shape and eating attitude among Indian female healthcare students. *The International Journal of Psychiatry in Medicine* 43(4): 309–323.
- Çelik S, Ugur BA, Aykurt FA, Bektas M (2015) Eating attitudes and related factors in Turkish nursing students. *Nursing and midwifery studies* 4(2): 1–8.
- Çelik S, Yoldaşcan EB, Okyay RA, Özenli Y (2016) Prevalence of eating disorders in female university students and affecting factors. *Anatolian Journal of Psychiatry/ Anadolu Psikiyatri Dergisi* 17(1): 42–50.
- Duran S, Ergun S, Çalışkan T, Karadaş A (2016) The relationship between the eating behaviours and problem solving skills among nursing students. *STED* 25(1): 6–12.
- Hacıhasanoğlu Aşlar RH, Yıldırım A, Cebi K, Şahin H (2020) Investigation of the relationship between eating attitudes and sleep quality in university students. *Turkish Journal of Family Medicine and Primary Care* 14(1): 3–14.
- Hasan HA, Najm L, Zaurub S, Jami F, Javadi F, Deeb LA, et al. (2018) Eating disorders and body image concerns as influenced by family and media among university students in Sharjah, UAE. *Asia Pacific journal of clinical nutrition* 27(3): 695–700.
- Kadioğlu M, Ergün A (2015) The eating attitudes of the university students, self-efficacy and affecting factors. *Journal of Marmara University Institute of Health Sciences* 5(2): 96–104.
- Öngören B (2015) Sociological perspective of healthy body image. *Journal of Social Sciences and Humanities Researches* 16(34): 25–45.

- Oruçular Y, Barışkin E (2015) Autonomous-related self, eating attitude and body satisfaction in young females. *Eating and Weight Disorders-Studies on Anorexia, Bulimia and Obesity* 20(3): 337–343.
- Özbolet A (2011) Rebuilding of the body on the basis of consumption in postmodernism. *Electronic Journal of Social Sciences* 10(38): 317–334.
- Ozenc S, Yesilkaya S, Karaman D, Yildiran N, Pan E, Ince M, et al. (2014). The relationship between family structure and eating attitudes of people registered to the family medicine. *Balkan Military Medical Review* 17(1): 6–9.
- Özkan N, Bilici S (2018) New approaches in eating behaviour: intuitive eating and mindful eating. *Gazi Journal of Health Sciences* 3(2): 16–24.
- Özvurmaz S, Mandıracıoğlu A, Lüleci E (2018) The eating attitude and the factors affecting the eating attitude in university students. *Journal Of Health Sciences of Adiyaman University* 4(2): 841–849.
- Özyazıcıoğlu N, Aydın Aİ (2019) Eating disorders in adolescent and nursing approach. In A Çelebioğlu (ed.), *Adolescent Health and Nursing Approaches*, 31–37. Ankara: Türkiye Klinikleri Pediatric Nursing.
- Pengpid S, Peltzer K (2018) Risk of disordered eating attitudes and its relation to mental health among university students in ASEAN. *Eating and Weight Disorders* 23(3): 349–355.
- Rouzitab T, Gargari BP, Izadi A, Amirsasan R, Azarmanesh D, Jafarabadi MA (2019) The prevalence of disordered eating attitude and its relation to exercise participation in a sample of physical education students. *Progress in Nutrition* 21(May): 281–287.
- Sapmaz Yurtsever S, Sütcü ST (2017) Algılanan ebeveynlik biçimleri ile bozulmuş yeme tutumu arasındaki ilişkide erken dönem uyumsuz şemaların ve duygu düzenleme güçlüğü'nün aracı rolü. (The mediating role of early maladaptive schemas and difficulty in emotion regulation in the relationship between perceived parenting styles and impaired eating attitude). *Türk Psikoloji Dergisi* 32(80): 20–43.
- Savaşır I, Erol N (1989) Eating attitude test: anorexia nervosa symptoms index. *Journal of Psychology* 7(23): 19–25
- Serin Y, Şanlıer N (2018) Emotional eating, the factors that affect food intake, and basic approaches to nursing care of patients with eating disorders. *Journal of Psychiatric Nursing* 9(2): 135–146.
- Trindade AP, Appolinario JC, Mattos P, Treasure J, Nazar BP (2018) Eating disorder symptoms in Brazilian university students: a systematic review and meta-analysis. *Brazilian Journal of Psychiatry* 41(2): 179–187.
- Ulaş B, Uncu F, Üner S (2013) Prevalence and affecting factors of potential eating disorders among students of health higher education. *Inonu University Journal of Health Sciences* 2: 15–22.
- Ünalın D, Öztıp DB, Elmalı F, Öztürk A, Konak D, Pırlak B, et al. (2009) The relationship between the healthy lifestyle behaviors and eating behaviors of a group of health high school students. *Inonu University Journal of Health Sciences* 16(2): 75–81.
- Uri RC, Wu YK, Baker JH, Munn-Chernoff MA (2021) Eating disorder symptoms in asian american college students. *Eating Behaviors* 40(Jan): 101458.
- Usta E, Sağlam E, Şen S, Aygın D, Sert H (2015) Eating attitudes and obsessive-compulsive symptoms of nursing students. *Journal of Health Science and Profession* 2(2): 187–197.
- Uzun R, Balcı E, Günay O, Özdil K, Küçük Öztürk G (2018) Eating attitudes, body perception, self-esteem and related factors in nursing students. *Journal of Ankara Health Sciences* 7(2): 48–63.

- Vardar E, Erzengin M (2011) The prevalence of eating disorders (EDs) and comorbid psychiatric disorders in adolescents: a two-stage community-based study. *Turkish Journal of Psychiatry* 22(4): 205–211.
- Yılmaz B (2017) *Bir grup lise öğrencisinin internet kullanımlarının beden algıları ve yeme tutumları ile ilişkisi.* (The relationship of a group of high school students' internet use with their body perceptions and eating attitudes). Master Thesis. Istanbul: Işık Üniversitesi.
- Yılmaz E, Özkan S (2007) Investigation of nutritional habits in university students. *Firat Health Services Journal* 2(6): 87–104.
- Yu J, Lu M, Tian L, Lu W, Meng F, Chen C, et al. (2015) Prevalence of disordered eating attitudes among university students in Wuhu, China. *Nutricion Hospitalaria* 32(4): 1752–1757.