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The Relationship between Obesity Awareness and Obesity Prejudice among University Students: A Cross-Sectional Study

Üniversite Öğrencilerinin Obezite Farkındalığı ve Obezite Önyargısı Arasındaki İlişki: Kesitsel Bir Çalışma

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ABSTRACT

Introduction: The global prevalence of individuals living with obesity continues to rise. Turkiye ranks among the countries in Europe with the highest number of individuals affected by obesity. People with obesity often experience weight-related stigma, which contributes to a range of physical and psychosocial challenges.

Aim: The purpose of this study was to determine obesity awareness and obesity-related prejudices among university students, and to examine the relationships between these variables.

Method: This study is a cross-sectional and correlational study. The study was carried out with 524 students from various faculties between May and July 2024. Data were collected online using the Participant Information Form, Obesity Awareness Scale, and Obesity Prejudice Scale.

Results: The mean score of the Obesity Awareness Scale was 57.30 ± 12.11, and the mean score of the Obesity Prejudice Scale was 91.10 ± 16.73. There was a weak, statistically significant negative relationship between the total and all sub-dimensions of the Obesity Awareness Scale and the Obesity Prejudice Scale ($r = -.369$; $p < 0.001$). 63.9% of the students were found to hold prejudices against individuals living with obesity.

Conclusion: Increasing obesity awareness may reduce prejudice against individuals living with obesity and make it easier for their physical and psychosocial recovery.

Keywords: Awareness; obesity; prejudice; stigma; students.

ÖZ

Giriş: Obezite ile yaşayan bireylerin küresel yaygınlığı giderek artmaktadır. Türkiye, Avrupa ülkeleri arasında obeziteden en fazla etkilenen ülkelerden biridir. Obezite ile yaşayan bireyler sıklıkla kilo ile ilişkili damgalanma deneyimlemekte, bu durum ise çeşitli fiziksel ve psikososyal sorunlara yol açmaktadır.

Amaç: Bu çalışmanın amacı, üniversite öğrencilerinin obezite farkındalığı ve obeziteye yönelik önyargılarını belirlemek ve bu değişkenler arasındaki ilişkiyi incelemektir.

Yöntem: Bu araştırma kesitsel ve ilişki arayıcı bir çalışmadır. Çalışma, Mayıs-Temmuz 2024 tarihleri arasında çeşitli fakültelerden 524 öğrenci ile yürütülmüştür. Veriler çevrim içi ortamda Katılımcı Bilgi Formu, Obezite Farkındalık Ölçeği ve Obezite Önyargı Ölçeği kullanılarak toplanmıştır.

Bulgular: Obezite Farkındalık Ölçeği toplam puan ortalaması 57,30 ± 12,11, Obezite Önyargı Ölçeği toplam puan ortalaması ise 91,10 ± 16,73 olarak bulunmuştur. Obezite Farkındalık Ölçeği ve Obezite Önyargı Ölçeği toplam puan ortalamaları ile alt boyutları arasında zayıf düzeyde, istatistiksel olarak anlamlı negatif bir ilişki saptanmıştır ($r = -,369$; $p < 0,001$). Öğrencilerin %63,9'unun obezite ile yaşayan bireylere karşı önyargılı olduğu belirlenmiştir.

Sonuç: Obezite farkındalığının artırılması, obezite ile yaşayan bireylere yönelik önyargının azaltılmasına ve bu bireylerin fiziksel ve psikososyal iyileşmelerinin kolaylaştırılmasına katkı sağlayabilir.

Anahtar Kelimeler: Damgalanma; farkındalık; obezite; öğrenciler; önyargı.

Introduction

Obesity is defined as an abnormal or excessive accumulation of fat that may impair health (WHO, 2016). Arising from a complex interplay of genetic, epigenetic, physiological, and behavioral factors, obesity significantly contributes to the pathogenesis of numerous chronic diseases, particularly cardiovascular disorders (Friedenreich, Ryder-Burbidge & McNeil, 2021; Koskinas et al., 2024). In recent years, the global prevalence of obesity has risen rapidly, especially among young people, due to the increasing adoption of unhealthy dietary habits such as fast food consumption and a sedentary lifestyle (The Society of Endocrinology and Metabolism of Turkey, 2020; WHO, 2023).

According to data from the World Health Organization (WHO) in 2016, 39% of the global adult population was overweight and 13% was with obesity (WHO, 2016). Türkiye reflects this global trend. Currently, the prevalence of individuals with obesity in Türkiye has increased tenfold compared to 50 years ago, and with a prevalence rate of 29.5%, the country now ranks as having the highest rate of individuals with obesity in Europe (The Society of Endocrinology and Metabolism of Turkey, 2020). Globally, populations are increasingly characterized by higher rates of overweight and obesity. This growing problem has compelled many countries to develop effective strategies to combat obesity. One such strategy is to improve obesity awareness (The Society of Endocrinology and Metabolism of Turkey, 2020). In this context, it is essential for individuals to be informed about chronic illnesses related to obesity and its potential consequences, including associated comorbidities, and mortality. Obesity awareness involves recognizing one's own weight status, understanding the health risks associated with excess weight, and taking action to manage those risks (Gerretsen et al., 2018). A lack of awareness poses a significant barrier to making necessary lifestyle changes. This deficiency may lead to ineffective weight management, reduced quality of life (Daly, Robinson & Sutin, 2017; Gerretsen et al., 2018), and can mask serious health problems related to obesity (Daly et al., 2017). Therefore, the assessment and improvement of obesity awareness has become increasingly significant for public health.

Obesity not only affects individuals physiopathologically but also has negative psychosocial effects. Individuals with obesity often face psychological challenges such as depression, social isolation, prejudice, and stigmatization (Blasco, García-Jiménez, Bodoano & Gutiérrez-Rojas, 2020; Westbury, Oyebode, van Rens & Barber, 2023). Prejudice is defined as a positive or negative judgment formed in advance about a person or thing, based on specific conditions, events, or appearances. Obesity prejudice is defined as negative attitudes and behaviors directed toward individuals with obesity due to their excess weight (Nutter et al., 2024). Individuals with obesity may face various forms of prejudice, such as being ridiculed, perceived as lacking willpower, or being seen as sluggish. Such prejudices are encountered in various settings, including educational institutions, workplaces, and even healthcare setting (Westbury et al., 2023; Nutter et al., 2024; Sohier, Ravet, Berger-Vergiat & Iceta, 2024). These behaviors lead to negative psychological consequences in individuals with obesity, discouraging them from seeking treatment, and potentially increasing the risk of complications associated with obesity (Mensinger, Tylka & Calamari, 2018).

Public health efforts are unlikely to succeed unless obesity is tackled comprehensively (Arora et al., 2019). Determining the obesity awareness levels of university students who represent the young, educated segment of society, could provide valuable insights for future obesity prevention strategies. It could also contribute to the development of educational programs aimed at reducing prejudice toward individuals with obesity. Although studies in the literature have assessed either obesity awareness or obesity-related prejudice, to date, only one study has simultaneously examined both constructs (Özkan, Adıbelli, İlaslan & Taylan, 2020; Terzi, Kaya, Terzi & Gündüz, 2021; Can Özdemir, Işık & Özgönül, 2025). This study, however, was conducted solely on health sciences students (Terzi et al., 2021).

Aim

This study was conducted to determine university students' obesity awareness and prejudices, and to explain the relationships between them.

Research questions

1. What is the level of obesity awareness among university students?

2. What is the level of obesity prejudice among university students?

3. Are there any relationships between university students' obesity awareness and obesity prejudice?

Methods

Study Design

This study is a descriptive, correlational, and cross-sectional study.

Study Population and Sample

The study involved 524 students from various faculties. To determine the sample size, G*Power (version 3.1.9.2., Düsseldorf, Germany) software was used. A priori power analysis was performed for a difference between two independent means, with the following parameters: two-tailed test, effect size of 0.3276513, α = 0.05, and power = 95% (Özkan et al., 2020). Based on the power analysis, the minimum required sample size was calculated as 488. The study was completed with a total of 524 participants.

Data Collection Tools

Data were collected using a questionnaire and Data were collected using a questionnaire and two scales: (1) the Participant Information Form, (2) Obesity Awareness Scale (OAS), and (3) Obesity Prejudice Scale (OPS). Both scales were previously validated and are appropriate for use among university student populations.

The Participant Information Form: This form, created by the researchers based on existing literature, consists of eight items designed to gather individual and health-related data. It includes questions on age, gender, income levels, education status, weight, height, the presence of family members with obesity, and exercise

status. (Ercan, Akcil, Kiziltan & Altun, 2021; Terzi et al., 2021)

The Obesity Awareness Scale: The Obesity Awareness Scale (OAS) was originally developed by Allen (2011) to measure individuals' awareness of obesity, focusing on eating habits, physical activity, and the role of obesity education. It was adapted into Turkish by Kafkas and Özen (2014). The Turkish version includes 20 items across three subscales: obesity awareness (9 items: 1, 3, 4, 6, 7, 9, 10, 19, and 20), nutrition (6 items: 2, 5, 8, 11, 12, and 14), and physical activity (5 items: 13, 15, 16, 17, and 18). Items are rated on a 4-point Likert scale ranging from "strongly disagree" to "strongly agree." Total scores are interpreted as follows: 0 - 20 = low awareness, 21 - 40 = moderate awareness, 41 - 60 = good awareness, and 61 - 80 = high awareness. In the present study, the Cronbach's alpha coefficient for the OAS was .952.

The Obesity Prejudice Scale: The Obesity Prejudice Scale (OPS), developed by Ercan et al. (2021) to evaluate individuals' prejudice against individuals with obesity, consists of 27 items rated on a 5-point Likert scale ranging from "strongly agree" to "strongly disagree." Positively worded items are scored from 1 to 5, while negatively worded items are reverse scored. The total score ranges from 27 to 135, with higher scores indicating greater levels of prejudice. Individuals with scores ≤ 68 are classified as "unprejudiced," those scoring between 68.01 and 84.99 as "prone to prejudice," and those with scores ≥ 85 as "prejudiced." In the original validation study, Cronbach's alpha was reported as .847, whereas it was calculated as .753 in the present study.

Data Collection

Data were collected online between May and July 2024 using the Participant Information Form, the OAS, and the OPS, all prepared by the researchers. An online data collection method was chosen due to the widespread and effective use of digital technologies among young people. Following institutional approval, the survey link was distributed to students via the university's official student platforms. The survey began with an information sheet explaining the purpose and content of the study, how to complete the questionnaire, and it included a consent form for participation. All participants began completing the questionnaires after checking informed consent. The questionnaires were designed to ensure that all items were answered by the participants. To prevent duplicate responses, only one entry per IP address was included in the study. Confidentiality and anonymity were maintained throughout the research process.

Data Analysis

All analyses were performed using SPSS version 26. Descriptive statistics were calculated for the study variables. Means and standard deviations (Mean ± SD) were used for quantitative variables, while frequencies and percentages were used for qualitative variables. The normality of the distribution of scale scores was assessed using skewness and kurtosis values, with values -1.5 to +1.5 considered acceptable for normal distribution (Tabachnick & Fidell, 2015). An independent samples t-test was used for comparisons between two groups, while a one-way ANOVA was applied for comparisons involving more than two groups. Correlation analysis was conducted to determine the relationships between the OAS, its sub-dimensions, and the OPS. Statistical analyses were conducted at a 95% confidence level, and a p-value of < 0.05 was considered statistically significant.

Body Mass Index (BMI) classifications were based on to the WHO criteria: underweight (< 18.5 kg/m²), normal weight (18.5 – 24.9 kg/m²), overweight (25.0 – 29.9 kg/m²), and obesity (> 30.0kg/m²) (WHO, 2016).

Ethical Considerations

This study conducted in accordance with the Declaration of Helsinki. This study was approved by the Ethics Committee of the Gaziantep Islam, Science, and Technology University (decision no: 413.37.14), and institutional permission (no: E-78244691-900-2400008590) was also obtained. Electronic informed consent was obtained from all participants prior to participation via a digital consent checkbox.

Results

Of the students who participated in the study, 71.8% were female, 47.9% had an income lower than their expenses, 72.9% had a normal body weight, and 81.1% were undergraduate students. Additionally, 84.5% had no family members with obesity, and 51.9% exercised several times per week. The mean age of the participants was calculated as 22.07 ± 3.76 years. Table 1 presents the students' mean scores on the total and subscales of the OAS and the OPS, as well as their distribution according to the classification thresholds. The students' mean total OAS score was 57.30 ± 12.11; their mean scores on the subscales were 25.65 ± 5.92 for obesity awareness, 17.45 ± 4.18 for nutrition, and 14.19 ± 2.66 for physical activity. The mean total OPS score was 91.10 ± 16.73. Of the students, 51.9% had a good level of obesity awareness, and 63.9% were classified as prejudiced toward individuals with obesity.

Table 1: Mean Scores of Students on the OAS Total and Subscales, the OPS Total Score, and Distribution Based on Scale Classification Thresholds (n=524)

Scales and their sub-dimensions	Mean ± SD	Min-Max
Obesity awareness	25.65 ± 5.92	9-36
Nutrition	17.45 ± 4.18	6-24
Physical activity	14.19 ± 2.66	7-20
Total score of OAS	57.30 ± 12.11	20-77
Total score of OPS	91.10 ± 16.73	33-135
Classification of OAS	***n***	***%***
21-40 is average	53	10.1
41-60 is good	272	51.9
61-80 is high	199	38.0
Classification of OPS	***n***	***%***
Unprejudiced	30	5.8
Prone to be prejudiced	159	30.3
Prejudiced	335	63.9

SD: Standard Deviation; **Min**: Minimum; **Max**: Maximum

Table 2 presents the comparison of students' mean scores on the OAS and OPS according to their individual characteristics. A statistically significant difference was found in OAS total scores according to gender, BMI, and exercise status, while no significant difference was found regarding economic status or the presence of a family member with obesity ($p > 0.05$). Female students had significantly higher OAS scores than male students ($p < 0.05$); likewise, students with normal weight had significantly higher scores than those who were underweight, overweight, or obese. Additionally, students who exercised several times a week had significantly higher scores than those who did not exercise at all. Although the differences were statistically significant, the effect sizes were small for gender (Cohen's d = 0.26), BMI ($n^2 = 0.02$), and exercise status (Cohen's d = 0.30).

When comparing the mean scores of the OPS with the individual characteristics of the students, it was found that males had significantly higher total OPS scores than females. Additionally,

Table 2: Comparison of Students' Mean Scores on the OAS and OPS According to Individual Characteristics (n=524)

Individual Characteristics (n)	The OAS				The OPS
	Obesity awareness Mean ± SD	Nutrition Mean ± SD	Physical activity Mean ± SD	Total Mean ± SD	Mean ± SD
Gender					
Male (148)	24.52 ± 6.70	16.81 ± 4.65	13.69 ± 2.90	55.04 ± 13.56	93.56 ± 18.57
Female (376)	26.09 ± 5.54	17.70 ± 3.95	14.39 ± 2.53	58.19 ± 11.38	90.13 ± 15.86
Statistical analysis*	t = 2.528, ***p*= 0.012,** *d* = 0.26	t =2.194, ***p*= 0.042,** *d* = 0.21	t = 2.571, ***p*= 0.011,** *d* = 0.27	t = -2.505, ***p* = 0.013,** *d* = 0.26	t =-2.124, ***p* = 0.034,** *d* = 0.21
Education status					
Health Sciences (357)	25.94 ± 5.74	17.61 ± 4.08	14.33 ± 2.61	57.89 ± 11.74	91.12 ± 15.51
Other deparment (engineering, social sciences, Islamic sciences etc.) (167)	25.01 ± 6.27	17.11 ± 4.36	13.91 ± 2.75	56.04 ± 12.80	91.05 ± 19.12
Statistical analysis*	t = 1.679, *p* = 0.094	t =1.253, *p* = 0.211	t =1.698, *p* = 0.090	t =1.628, *p* = 0.104	t = 0.039, *p* = 0.969
Economic status					
Poor (251)	25.23 ± 6.15	17.11 ± 4.22	13.73 ± 2.63	56.08 ± 12.40	92.03 ± 16.21
Middle (216)	26.16 ± 5.75	17.84 ± 4.10	14.68 ± 2.61	58.69 ± 11.78	90.91 ± 17.10
High (57)	25.54 ± 5.49	17.47 ± 4.20	14.38 ± 2.65	57.40 ± 11.66	87.70 ± 17.35
Statistical analysis**	F = 2.709, *p* = 0.068	F = 1.447, *p* = 0.236	F = 1.760, *p* = 0.173	F = 2.700, *p* = 0.068	F = 1.580, *p* = 0.206
BMI					
Underwight (27)[a]	23.88 ± 6.33	16.11 ± 4.29	13.51 ± 2.65	53.51 ± 12.87	97.22 ± 16.13
Normal weight (382)[b]	26.06 ± 5.51	17.81 ± 3.83	14.39 ± 2.49	58.26 ± 11.11	90.32 ± 15.74
Overweight (94)[c]	25.08 ± 6.55	17.00 ± 4.74	13.91 ± 3.03	56.00 ± 13.71	90.62 ± 20.32
Obesity (21)[d]	23.00 ± 8.42	14.71 ± 5.89	12.76 ± 3.34	50.47 ± 17.19	99.38 ± 14.32
Statistical analysis, post-hoc**	F = 3.133, ***p* = 0.025**, d < b, ***η²*=**0.01	F = 5.364, ***p* = 0.001**, a-d < b, ***η²*=**0.03	F = 3.734**, *p* = 0.011,** d < b, ***η²*=**0.02	F = 4.359**, *p* = 0.005,** d < a-b-c, ***η² =*** 0.02	F = 3.251**, *p* = 0.021,** b < a-d, ***η² =*** 0.01
Presence of family members with obesity					
Yes (81)	26.46 ± 6.68	17.49 ± 4.46	14.28 ± 3.10	58.24 ± 13.41	89.44 ± 16.56
No (443)	25.50 ± 5.77	17.44 ± 4.13	14.18 ± 2.57	57.13 ± 11.86	91.40 ± 16.76
Statistical analysis*	t = 1.349, *p* = 0.178	t = 0.093, *p* = 0.926	t = 0.314, *p* = 0.754	t = 0.761, *p* = 0.447	t = -0.969, *p* = 0.333
Exercise status ***					
None (218)	25.09 ± 6.51	16.68 ± 4.32	13.95 ± 2.86	55.73 ± 13.08	91.92 ± 17.88
At least a few times (306)	26.46 ± 5.01	18.26 ± 3.68	14.48 ± 2.38	59.21 ± 10.38	89.64 ± 15.36
Statistical analysis*	t = -2.549, ***p* = 0.011,** *d* = 0.26	t = -4.277, ***p* < 0.001,** *d* = 0.40	t = -2.23, ***p* = 0.026,** *d* = 0.20	t = -3.195**, *p* = 0.002,** *d* = 0.30	t = 1.489, *p* = 0.137

***** The Independent Samples t-test was performed. ****** One-Way ANOVA test was performed. *******Participants were asked about their weekly exercise habits.
[a,b,c,d] Each letter represents the relevant classification group. d: Cohen's d (Pooled SD) values; η^2: Eta squared values
SD: Standard Deviation; Min: Minimum; Max: Maximum

Table 3: The Relationship Between The Total and Sub-Dimensions of The OAS and The OPS

		The OAS	Obesity awareness	Nutrition	Physical activity
The OPS	Pearson Correlation*	-0.369	-0.349	-0.362	-0.334
	Sig. (2-tailed)	< 0.001	< 0.001	< 0.001	< 0.001

* Pearson Correlation test was performed.

students who were classified as underweight and obesity had significantly higher the OPS scores than those who were normal weight or overweight. No significant difference was found in the OPS scores according to economic status, the presence of individuals with obesity in the family, or exercise status (p > 0.05).

Table 3 presents the correlations between the total and subscale scores of the OAS and the OPS. A weak but statistically significant negative correlation was found between the OPS and the total OAS score (r = -.369, p < .001), as well as its subdimensions: obesity awareness (r = -.349, p < .001), nutrition (r = -.362, p < .001), and physical activity (r = -.334, p < .001).

Discussion

The primary objective of this study was to assess the level of obesity awareness and the prevalence of weight-related prejudice among students at a public university in Türkiye, and to explore the relationships between these variables. The findings indicated that although the students demonstrated a relatively high level of awareness regarding obesity, they also exhibited prejudicial attitudes toward individuals with obesity. A weak but statistically significant negative correlation was found between the OPS and both the total OAS score and its subscales (p < .001, r = -.369).

In the present study, students' obesity awareness was assessed using the OAS. In both the original and Turkish adaptation studies of the scale, the mean total scores were reported as 65.40 ± 8.84 and 65.20 ± 6.67, respectively (Allen, 2011; Kafkas & Özen, 2014). In the present study, the mean total OAS score was found to be 57.30 ± 12.11. Although this mean score is classified as "good," it is lower than that reported in previous studies. Overall, studies conducted among youth populations in Türkiye indicate that the OAS total scores generally from 55 to 65 (Özkan et al., 2020; Akin et al., 2022; İzgüden & Gökkaya, 2022; Onay, Beyazıt, Uçar & Bütün Ayhan, 2024). These findings indicate a need to enhance obesity awareness among young people in Türkiye.

Current evidence on obesity awareness by gender remains limited. A study conducted among individuals with overweight and obesity found no significant difference in obesity awareness between genders (Yılmaz, Uyanık, Kundakçı, Pamuk & Pamuk, 2021). Similarly, studies among university students have also found no significant relationship between gender and obesity awareness (Özkan et al., 2020; Akin et al., 2022). However, in contrast to these findings, the present study revealed a statistically significant, albeit small, difference in OAS scores between male and female students. In a study exploring gender-based perceptions of obesity, women attributed obesity to various genetic, environmental, and social factors, whereas men were more likely to attribute it to poor diet and insufficient physical activity (Rosenthal et al., 2017). The fact that women recognize a broader range of causes for obesity may partially explain the higher awareness among women. Conversely, the higher global prevalence of obesity among men compared to women (Muscogiuri et al., 2024) may be one of the underlying factors contributing to lower obesity awareness in males. The relationship between gender and obesity awareness can also be interpreted from a psychosocial perspective. For instance, a study conducted by Ergün et al. (2022) in Türkiye, which assessed body image and satisfaction among women aged 20 - 55, found that many women had a distorted body image, idealized a thinner body shape, and often classified mildly overweight silhouettes as obesity. These results suggest that the higher mean total score on the OAS among young women may be influenced by various factors. This may be partly explained by the social pressure on women to maintain a thin appearance, reinforced by globalized media and social networks, which could motivate them to engage more with obesity-related information and research.

While some studies suggest that significant increases in BMI may be associated with higher obesity awareness, other research has reported no statistically significant relationship between BMI and obesity awareness (Özkan et al., 2020; Yılmaz et al., 2021; Özdemir, Bıkmaz & Akgün, 2022). In the present study, obesity awareness was significantly lower among individuals with obesity compared to those in other BMI categories, with a small effect size. Post-hoc analysis revealed that students with obesity had significantly lower OAS scores than students with normal BMI. This finding indicates that individuals with a normal weight may have greater awareness of the physical and psychosocial complications associated with obesity.

In nearly all studies utilizing the OAS, the physical activity sub-dimension which assesses participants' physical activity status, has consistently yielded the lowest mean scores (Özkan et al., 2020; Terzi et al., 2021; Akin et al., 2022; Özdemir et al., 2022; Sezer, Hepsert, Akel & Kılıç, 2024). Similarly, in the present study, the physical activity sub-dimension had the lowest mean score, with a men of 13.20 ± 2.73. National data indicate that approximately 85% of women and 75% of men in Türkiye do not engage in adequate physical activity (Türkiye Physical Activity Guide, 2014). This is further supported by a study conducted by Özkatar Kaya et al. (2018), which investigated life satisfaction among sedentary and physically active individuals in Türkiye. Interestingly, the study found that sedentary individuals reported similarly high levels of life satisfaction compared to those who were physically active. In the present study, students' exercise habits were also examined to explore the relationship between physical activity and obesity awareness in more detail. Students who exercised at least several times a week had significantly higher total and subdimension OAS scores compared to those who did not engage in any physical activity, a small effect size. These findings suggest that encouraging students to participate in more physical activity and structured exercise programs may be an effective strategy for increasing

obesity awareness.

Individuals with obesity are often subjected to stigmatizing attitudes, prejudice, and discrimination (Arora et al., 2019; Ginsburg, Daley & Sheer, 2025). In a study conducted by Sert et al. (2016) aiming to assess university students' prejudices toward individuals with obesity, the mean score on the OPS was 78.55 ± 10.20. The findings showed that 51.3% of the participants were prone to prejudice, while 23.5% were classified as prejudiced. Similarly, in another study investigating obesity-related prejudiced among university students, the mean OPS score was reported as 79.57 ± 10.30 (Aydin, Erçelik, Gönen, Aydin & Günşen, 2020). The fact that even healthcare professionals demonstrate prejudiced toward individuals with obesity has prompted further scrutiny of weight-based prejudice among students in health-related fields. In studies conducted on these groups, the OPS mean score generally ranged from 75 to 85 (Sayın Kasar & Akyol, 2019; Kıskaç et al., 2024; Can Özdemir et al., 2025). In the present study, the overall OPS mean score among students was determined to be 91.10 ± 16.73, while among students in health sciences, it was at 91.12 ± 15.51. This mean score is the highest reported among studies utilizing the OPS. These findings suggest that weight-related prejudice is increasing among young people and may develop during the educational period, particularly among students in health sciences.

Many studies conducted to assess university students' prejudice toward individuals with obesity have reported no significant difference in obesity-related prejudice between genders (Sayın Kasar & Akyol, 2019; Aydin et al., 2020; Terzi et al., 2021) However, a limited number of studies have found a significant association between gender and obesity-related prejudice (Soto, Armendariz-Anguiano, Bacardí-Gascón & Jiménez Cruz, 2014; Yildiz & Yalcinoz Baysal, 2019; Kıskaç et al., 2024). In a study conducted by Yildiz and Yalçınöz Baysal (2019) including 729 university students, male students were found to exhibit significantly higher levels of prejudice toward individuals with obesity compared to female students. In a study by Soto et al. (2014) involving psychology and medical students, male students were also found to exhibit more negative attitudes and stronger prejudice toward individuals with obesity than female students. Similarly, in the present study, the mean OPS score was a significantly higher among male students than among female students. This finding suggests that female students' higher awareness of obesity may contribute to their lower levels of prejudice against individuals with obesity.

One of the key variables considered in examining prejudice toward individuals with obesity is also BMI. Studies have shown that individuals' levels of prejudice may vary depending on their BMI classifications (Aydin et al., 2020; Kıskaç et al., 2024; Can Özdemir et al., 2025). In the present study, students who were underweight or had obesity obtained significantly higher mean scores on the OPS compared to those with normal or overweight. The fact that these two contrasting groups, especially individuals with obesity, scored higher suggests that obesity may have adverse psychosocial consequences for those affected. These findings highlight the importance of including components aimed at addressing weight-related stigma and prejudice in obesity prevention and intervention programs.

The lack of a significant difference in obesity awareness scores between students in health sciences programs and those in other academic fields is a noteworthy finding of the present study. It might be expected that students in nursing, medicine, and midwifery programs would demonstrate higher levels of awareness due to more extensive obesity-related curricular content. However, the similarity in scores suggests that current educational efforts may not be as effective as intended. This indicates a need to critically evaluate and potentially revise the content and delivery methods of obesity-related education within health sciences curricula to ensure that theoretical knowledge translates into heightened awareness and sensitivity toward individuals with obesity.

Limitations

This study has several limitations that should be considered when interpreting the findings. First, the cross-sectional design precludes any causal inferences regarding the relationship between obesity awareness and obesity-related prejudice. Second, the study sample consisted of university students from a single university in Türkiye, thereby limiting the generalizability of the findings to other populations, including non-student groups, older adults, or individuals from different cultural or socioeconomic backgrounds. Additionally, height and weight data were based on self-reports and the majority of participants were young adults, both of which may have influenced levels of awareness and prejudice.

Conclusion

The findings of this study indicate that as students' awareness of obesity increases, their prejudices toward individuals with obesity decrease. This suggests that enhancing obesity awareness may play a significant role in reducing stigma against individuals with obesity. Moreover, the findings highlights that such awareness is not only crucial for combating physical illnesses associated with obesity but also contributes to the psychosocial well-being of those affected. Therefore, policymakers should implement more targeted educational initiatives for young people to improve obesity awareness.

Awareness campaigns targeting both students and healt care professionals could help reduce implicit prejudice/bias and promote more respectful and supportive environments for individuals with obesity. Healthcare professionals, including future nurses, physicians, and allied health students, should receive structured training that addresses not only the medical aspects of obesity but also the psychosocial impacts of weight stigma and discrimination.

Ethical Considerations: Ethical approval was obtained from the Non-Interventional Clinical Research Ethics Committee of Gaziantep Islamic Science and Technology University for this study (Date: 22.04.2024 and No: 413.37.14).

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