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Evaluation of Self-Perception and Obesity Prejudice among Generation Z

Z Kuşağının Kendilik Algısı ve Obezite Önyargısının Değerlendirilmesi

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Abstract

Background: Obesity has arisen as an increasingly noteworthy public health issue worldwide, exerting its impact on nearly all countries. The objective of this study was to assess the self-perception and obesity prejudice among young individuals enrolled in health sciences programs and belonging to Generation Z.

Materials and Methods: Irrespective of the magnitude of the sample, a collective of 787 individuals, including 450 undergraduate students and 337 associate degree students, were involved in the study. Researchers utilized a "Personal Information Form" created to measure students' attitudes towards obese individuals and gather information related to nutrition, with the second section employing the "Obesity Bias Scale for Health Sciences Students (GAMS 27-OB)" for data collection.

Results: It was determined that 68.7% of the students perceived themselves as normal/average weight, while 51.5% had perceived themselves as overweight at some point in their lives. The study revealed that a significant proportion of students, including 31.0% and 64.8% respectively, exhibited bias towards those who are obese.

Conclusion: The results of our study indicate that the younger individuals belonging to Generation Z exhibit views characterized by bias against individuals with obesity. Taking proactive measures to mitigate prejudice in the educational experiences of health sciences students prior to embarking on their professional endeavors has significant importance.

Keywords: Obesity, Self-Perception, Generation Z

ÖZ

Amaç: Obezite küresel ölçekte giderek önem kazanan bir halk sağlığı sorunu olarak ortaya çıkmış ve hemen hemen her ülkeyi etkilemektedir. Bu çalışma, sağlık bilimleri bölümlerinde öğrenim gören ve Z Kuşağı içerisinde yer alan gençlerin kendilik algısı ve obezite önyargılarının değerlendirilmesi amacıyla planlanmıştır.

Gereç ve Yöntem: Araştırmada örneklem büyüklüğüne bağlı kalmadan 450 lisans ve 337 ön lisans olmak üzere toplam 787 öğrenci katılmıştır. Öğrencilerin, obez bireylere karşı yaklaşımlarını ölçmek ve beslenmeyle ilgili bilgilerinin toplanmasına yönelik araştırmacılar tarafından oluşturulmuş "Kişisel Bilgi Formu", ikinci bölümde "Sağlık Bilimleri Öğrencileri için Obezite Önyargı Ölçeği (GAMS 27-OÖÖ)" kullanılmıştır.

Bulgular: Öğrencilerin %68.7'nin kendilerini normal/ortalama ağırlıkta gördüğünü, %51.5'inin ise daha önce hayatının herhangi bir döneminde kendini şişman olarak gördüğü belirlendi. Öğrencilerin %31.0'inin obeziteye karşı önyargı eğiliminde ve %64.8'inin obeziteye karşı önyargılı olduğu bulundu.

Sonuç: Bulgular, çalışmamızda yer alan Z Kuşağı içerisindeki gençlerin obezite önyargısı tutumlarına sahip olduğunu doğrulamaktadır. Sağlık bilimlerinde öğrenim gören öğrencilerin mesleklerine başlamadan önce eğitim hayatlarında bu önyargı düzeylerini azaltacak girişimlerde bulunulması önem arz etmektedir.

Anahtar Kelimeler: Obezite, Kendilik Algısı, Z Kuşağı

Highlights

- The study found that many health sciences students, particularly Generation Z, are biased toward obese people.
- Many students consider their weight normal or average, but over half were overweight before.
- Age was positively correlated with obesity prejudice.

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Introduction

The term "generation" refers to a cohort of individuals who were born within a roughly comparable time span (1). Generations are designated by naming distinct age groups, for instance Generation X, Y, and Z. The cohort of individuals born between 1965 and 1980, Generation X follows the baby boom generation (2). One of the defining attributes of Generation X is its membership comprise self-assured individuals who possess a high degree of practical adaptability and technological proficiency (3). Generation Y, comprising individuals born between 1980 and 2000, is frequently referred to as "millennials" (2). Its numerous distinguishing characteristics set it apart from previous generations. Among its general characteristics are the following: liberal ideology, intelligence, a strong affinity for technology, and proficient technology usage. However, they also desire the highest possible standard of living (3).

Generation Z, also referred to as IGen, Gen Wii, Post Gen, and Digital Natives, has been exposed to the entirety of digital comprehension development since infancy (4,5). Generation Z is the succeeding cohort following Generation Y and previous Generation Alpha. In broad terms, he designates the mid-to-late 1990s and the early 2010s as the initial and final years of his birth years, respectively. Economic crises, conflicts, terrorism, and unemployment are at their peak during Generation Z; digitalization is manifesting its influence in every field (4).

Despite being classified as youthful individuals based on their age range, Generation Z is confronted with significant health risks. Due to the proliferation of mobile phones, computers, and devices among this generation, there is an increased allocation of time towards online activities and social media platforms. Consequently, these individuals experience reduced sleep duration, physical activity levels, and social connections. Despite this circumstance, academic achievement declines and the prevalence of severe health conditions, including obesity and melancholy, rises (6).

A multitude of definitions pertaining to self-perception can be found throughout the literature. The notion of self-perception was explained by Mind in his publication "Self and Society" as follows: "The concept of the "self" is not inherent at birth; rather, it is developed over time through social interactions and activities. It distinguishes itself from the individual's psychological organism and plays a role in the language (speech) process, which facilitates interpersonal connections" (7). Concurrently, the self-concept serves as a comprehensive and methodical framework through which we endeavor to comprehend the emotions, cognitions, and actions of others (8).

Obesity has emerged as a progressively significant public health concern on a global scale, affecting nearly every nation. Since 1980, there has been an observed increase in obesity rates worldwide by more than twofold (9). Turkey exhibits a prevalence of obesity of 32.1%, as reported by the World Health Organization in 2018 (10). Obesity prejudice refers to adverse perceptions, conclusions, convictions, and choices made concerning the weight of individuals who are overweight or obese (11). When examining the prevalence of discrimination in the United States, weight-based discrimination against individuals ranks fourth (12). Obese individuals are stigmatized in social environments and the media. They are perceived as lacking success, motivation, initiative, self-control, and organization, and have a negative body image. This form of assessment leads members of society to internalize this perception, which subsequently results in prejudiced attitudes toward rotund individuals (13).

Materials and Methods

Study design

The cross-sectionally designed research group comprised students enrolled in the Vocational School Medical Services and Techniques Program (n = 357), as well as the Faculty of Health Sciences (n = 450), at a foundation university in Gaziantep.

Patient population

During the fall semester of 2022-2023, at a foundation university in Gaziantep, the Faculty of Health Sciences had the following student quotas: Nursing: 442, Nutrition and Dietetics: 299, Physiotherapy and Rehabilitation: 259. Additionally, within the Medical Services and Techniques Department of the Vocational School, there were a total of 1460 students, with 150 specializing in Dialysis, 150 in Anesthesia, and 160 in the Emergency Medical Services Program. As per the findings of power analysis, the number of samples required to calculate sample sizes for a significance level of 0.05 is 278 when the population size is 1000 (p = 0.5, q = 0.5). In the context of power analysis, the number of samples required to calculate sample sizes for a significance level of ∓ 0.05 is 217 when the population size is 500 (p = 0.5 q = 0.5). The study intends to involve a minimum of 278 undergraduates and 217 associate degree candidates, for a total of 495 participants. The research sample consists of 787 students, irrespective of the specific magnitude of the sample.

The researchers utilized a "Personal Information Form" in the initial phase to gather data for the study. Researchers utilized a "Personal Information Form" created to measure students' attitudes towards obese individuals and gather information related to nutrition, with the second section employing the "Obesity Bias Scale for Health Sciences Students (GAMS 27-OB)" for data collection. The personal information form comprises a total of fifteen inquiries that inquire about the participants' socio-demographic characteristics. GAMS-27 Obesity Prejudice Scale; The scale is a five-point Likert type. "Strongly disagree," "strongly agree," "undecided," and "strongly agree" comprise the scale. The scale for positive items is from 5 to 1, with the option "strongly agree" serving as the starting point; the scale for negative items is from 1 to 5, with the option "strongly agree." The rating scale for positive items (2, 4, 7, 10, 11, 14, 15, 17, 20, 22, 25, 27) is from 1 to 5, with "strongly agree" representing the highest score; for negative items (1, 3, 5, 6, 8, 9, 12, 13, 16, 18, 19, 21, 23, 24, 26), the scale is from 5 to 1, with "strongly agree" representing the lowest score. The scale provides the opportunity to attain a maximum score of 135 and a minimum score of 27. It was determined that the scale had a mean score of 76.394 and a median score of 76. Upon examining the percentiles of the scores, it is determined that the 5th percentile corresponds to a score of 58, the 25th percentile to 68, the 50th percentile to 76, and the 75th percentile to 84. The score that corresponds to the 95th percentile is 96. Upon analyzing the scores in relation to positive and negative items, it was ascertained that individuals held unprejudiced views regarding obesity as their score decreased, whereas they held prejudiced views regarding obesity as their score increased. The classification of the scale score was determined by considering both the scores associated with the percentiles and the scale score's normal distribution curve The reliability coefficient (Cronbach's alpha) of the scale is 0.847. In our study, however, the Cronbach's alpha coefficient was found to be 0.888. (14).

Evaluation of GAMS-27 Obesity Prejudice Scale score

Score Range	Obesity Bias Status
Below 68.00 (Below 25th percentile)	Unbiased
68.01 - 84.99 (25th-75th percentile)	Inclined towards bias
85.00 and above (Above 75th percentile)	Biased

The independent variables of the study include gender, age, field of study, self-identification of students, whether they have experienced a period in their lives when they perceived themselves as overweight, and how they perceive obese individuals. The dependent variable is the "Obesity Bias Scale for Health Sciences Students (GAMS 27-OÖÖ)." Students were provided with information that included online links to the Personal Information Form and GAMS 27 OOO via their class representatives. The study exclusively recruited students whose birth years fell within the period from 1997 to 2004.

Statistical Analysis

Utilizing Statistical Package for the Social Sciences (SPSS) 25.0, the research data were analyzed. The data were presented in the form of means (Mean) and standard deviations (SD) for continuous variables, and numbers (n) and percentages (%) for categorical variables. The Kolmogorov-Smirnov normality test yielded insignificant results ($p>0.05$) regarding the normality distribution of continuous dependent variables. The study does not focus on validation; hence, detailed discussion regarding skewness and kurtosis is unnecessary. It suffices to state that the skewness and kurtosis values fall within the acceptable range of ±1. Additionally, normality checks, such as the bell-shaped histogram and the Normal Q-Q plot, confirm the data's adherence to normal distribution assumptions. As the aforementioned characteristics are predominantly supplied by continuous variables, parametric tests were employed. The one-way ANOVA test was utilized for variables with three or more groups, while the independent sample t test was applied to variables with two groups. When the variances exhibited non-uniform distribution, the Welch test (Robust test of equality of means) was applied as a more reliable alternative to non-parametric tests. To assess the relationship between categorical variables, the Chi-Square test was employed. The statistical significance level utilized in all conducted tests was $p<0.05$.

Results

With 787 participants in total, the mean age of the group was 20.94±1.44 years. It was determined that the mean Body Mass Index (BMI) of the participants was 22.31±3.78 kg/m2. 68.5% of the students were of normal weight, 28.8% were 21 years old, 82.2% were female, 32.0% were nursing students, and 51.0% were in their first year. The literacy rate of the mothers of 54.3% of the pupils was ascertained, while the educational attainment of the fathers of 51.0% was limited to primary school. It was ascertained that a majority of the students (68.7%) regarded their weight as normal or average, slightly more than half (51.5%) had previously perceived themselves as overweight, and 56.9% were dissatisfied with their physical appearance but did not

withdraw from society. 64.4 percent of respondents consider obese individuals to be harmful, 68.1 percent say they consume more food when they are in a good mood, and 31.3 percent say they consume grains. A total of 92.9% of the students were found to be free from chronic diseases, 78.7% abstained from smoking, and 92.5% abstained from alcohol consumption (Table 1).

Table 1. Distribution of Socio-demographic Characteristics of Students (n=787)

Variables	**Mean ± SD**	**Min. – Max.**
Age (years)	20.94 ± 1.44	18-26
BMI (kg/m^2)	22.31 ± 3.78	15.62-39.25
Variables and Subgroups	**Number (n)**	**Percentage (%)**
Age		
18-19 years	125	15.9
20 years	198	25.2
21 years	227	28.8
22 years	237	30.1
Gender		
Female	647	82.2
Male	140	17.8
Department		
Nursing	252	32.0
Nutrition and Dietetics	96	12.2
Physical Therapy and Rehabilitation	102	13.0
Dialysis	133	16.9
Anesthesia	146	18.6
First Aid	58	7.4
BMI		
Underweight	104	13.2
Normal Weight	539	68.5
Owerweight	114	14.5
Obese	30	3.8
Self-perceived Weight		
Underweight	170	21.6
Normal/average Weight	541	68.7
Overweight	76	9.7

Abbreviations: Mean: Mean, **SD:** Standard Deviation, **Min.:** Minimum value, **Max.:** Maximum value

The participants obtained an average GAMS-27 score of 90.49±14.07. The minimal score achieved was 54, while the maximum score reached 132 **(Table 2).**

Table 2. Distribution of GAMS-27 Scale Scores

Scales and Sub-dimensions	**Number of Items**	**Expected Min-Max**	**Observed Min-Max**	**Mean ± SD**	**Median (IQR)**
GAMS-27	27	27-135	54-132	90.49±14.07	88 (96-82)

Abbreviations: Mean: Mean, **SD:** Standard Deviation, **Min.:** Minimum value, **Max.:** Maximum value, **IQR:** Interquartile Range, **Q3:** 75th Percentile, **Q1:** 25th Percentil, **GAMS-27:** Weight Bias Scale

Upon assessing the students based on predetermined thresholds, the results indicated that 4.2% lacked prejudice against obesity, 31.0% exhibited a tendency toward prejudice, and 64.8% harbored prejudice against obesity.

An analysis was conducted to compare the rates of prejudice among students with those of their socio-demographic characteristics, including the following: "age," "class," "BMI," "education level of mother," "education level of father," "self-evaluation regarding weight," "isolation from society due to appearance," and "eating in accordance with mood" within the groups. A statistically insignificant relationship was found to exist between the variables "alcohol use," "diet," and "chronic disease status" ($p>0.05$). Conversely, a statistically significant correlation was found between the following group variables: "smoking status," "gender," "department," "previously perceiving oneself as fat," and "identifying obese individuals" ($p<0.05$) **(Table 3)**.

Table 3. Comparison of Prejudice Status Rates and Socio-demographic Characteristics of Students

Varaiables	Non-prejudiced	Tendency toward Prejudice	Prejudiced	Total
	n (%)	n (%)	n (%)	n (%)
Gender				
Female	32 (97.0)	204(83.6)	411(80.6)	647(82.2)
Male	1(3.0)	40(16.4)	99(19.4)	140 (17.8)
Total	33(100.0)	244 (100)	510 (100)	787(100)
Test	**χ^2=6.158, p=0.046**			
Department				
Nursing	14 (42.4)	91 (37.3)	147(28.8)	252(32)
Nutrition and Dietetics	5 (15.2)	28 (11.5)	63(12.4)	96(12.2)
Physical Therapy and Rehabilitation	0(0)	40 (16.4)	62(12.2)	102(13)
Dialysis	4 (12.1)	22 (9)	107(21.0)	133(16.9)
Anesthesia	8 (24.2)	48 (19.7)	90(17.6)	146(18.6)
First Aid	2 (6.1)	15 (6.1)	41(8.0)	58 (7.4)
Total	33 (100)	244(100)	510(100)	787(100)
Test	**χ^2=28.255, p=0.002**			
Have you ever perceived yourself as overweight?				
Yes	23 (69.7)	113(46.3)	269(52.7)	405(51.5)
No	10(30.3)	131(53.7)	241(47.3)	382(48.5)
Total	33(100)	244(100)	510(100)	787(100)
Test	**χ^2=7.320, p=0.026**			
How do you describe obese people?				
Normal	14 (42.4)	96(39.3)	128(25.1)	238(30.2)
Bad	2(6.1)	8(3.3)	32(6.3)	42(5.3)
Unhealthy	17(51.5)	140(57.4)	350(68.6)	507(64.4)
Total	33(100)	244(100)	510(100)	787(100)
Test	**χ^2=19.709, p=0.001**			
Smoking status				
Yes	7 (21.2)	39(16)	122(23.9)	168(21.3)
No	26(78.8)	205(84)	388(76.1)	619(78.7)
Total	33(100)	244(100)	510(100)	787(100)
Test	**χ^2=6.194. p=0.045**			

Abbreviations: n: *Number*, **%:** *Percentage*, **Test (χ^2):** *Pearson Chi-Square test*

When comparing the rates of prejudiced attitudes among students with their socio-demographic characteristics, it was observed that there were no statistically significant relationships ($p>0.05$) between the variables of "age," "grade," "BMI," "mother's education level," "father's education level," "self-assessment regarding weight," "tendency to isolate oneself from society based on appearance," "eating habits based on mood," "chronic illness status," "dietary habits," and "alcohol consumption status". On the other hand, statistically significant relationships were found ($p<0.05$) between the variables of "gender," "department," "previous self-perception of being overweight," "perception of obese individuals," and "smoking status" **(Table 4).**

Table 4. Comparison of GAMS-27 Scale Average Scores According to Socio-demographic Characteristics of Students (n=787)

Variables	GAMS-27 Scale	Statistical Evaluation		
	Mean ± SD	test	p	Post Hoc*
Gender Female[1] n= 647	89.56 ± 13.90	**t=-3.488**	**0.001**	2>1
Male[2] n=140	94.10 ± 14.30			
Department				
Nursing[1] n=252	88.07 ± 13.41	**F=4.019**	**0.001**	4>1
Nutrition and Dietetics[2] n=96	89.31 ± 13.59			
Physical Therapy and Rehabilitation[3] n=102	90.24 ± 12.69			
Dialysis[4] n=133	94.47 ± 14.69			
Anesthesia[5] n=146	90.61 ± 15.20			
First Aid[6] n=58	92.31 ± 13.75			
How do you describe obese people?				
Normal[1] n=238	86.82 ± 12.94	**W=14.652**	**<0.001**	2>1-3
Bad[2] n=42	98.19 ± 16.66			3>1
Unhealthy[3] n=507	91.38 ± 13.95			
Smoking status Yes[1] n=168	92.95 ± 15.07	**t=2.697**	**0.007**	1>2
No[2] n=619	89.66 ± 13.72			

Abbreviations: n: Number**, Avg.:** Average, **SS:** Standard deviation, **1-2-3-4-5-6:** Representation of differences between groups ***Post Hoc:** Bonferroni correction, **W:** Welch test (Robust test of equality of means), **F:** One-way ANOVA test, **t:** Independent samples t-test

According to the findings, a statistically significant, weak positive correlation (r=0.097) was found between age and GAMS-27 (p=0.006). However, it should be noted that a positive correlation does not necessarily imply causation; rather, it indicates that as age increases, there is a tendency for GAMS-27 scores to increase or decrease, albeit modestly. On the other hand, a weak positive correlation (r=0.060) was observed between GAMS-27 and students' BMI, although this correlation did not reach statistical significance (p=0.090). **(Table 5).**

Table 5: Correlation Between Sociodemographic Variables and GAMS-27 Scale

Sociodemographic Variables	GAMS-27 Scale (n=787)	
	r	p
Age (years)	**0.097**	**0.006**
BMI (kg/m²)	0.060	0.090

Abbreviations: r: *represents the Pearson Product-Moment Correlation Coefficient.* r values between 0.1 and <0.3 indicate a weak correlation. r values between 0.3 and <0.7 indicate a moderate correlation. r values between 0.7 and <1.0 indicate a high level of correlation. p values are provided for each correlation coefficient to assess the statistical significance of the correlations.

Discussion

Ensuring proper nutrition is critical for individuals to maintain optimal health and mitigate the risk of developing chronic illnesses. (15). The literature indicates that complications associated with malnutrition are comparatively less frequent than complications related to obesity. (16).

It is critical to maintain a Body Mass Index (BMI) within the acceptable ranges during adolescence and youth (17). This is when nutritional behaviors become particularly influential. (18). Overweight and obesity have increased among members of Generation Z, a cohort that spends a great deal of time with technological

devices, due to their preference for online food applications, fast food orders, and global coffee chains (19).

The average body mass index (BMI) of the participants in our research remained within the normal range as established by the World Health Organization (WHO) (20). The increasing use of contemporary technology has led to a rise in the consumption of conveniently prepared, high-calorie foods and a concomitant obesity epidemic among members of Generation Z. This demographic predominantly engages with electronic devices such as computers and mobile phones (21). Furthermore, we did not observe any statistically significant correlation between BMI and prejudice against obesity. According to the findings of Aydin et al. (2020) and Balaban et al. (2022), the majority of students enrolled in the health program were at an ideal weight (11, 22). This result may have been attributable to the fact that over half of the participants in our study had a body mass index of normal or average. Further, the composition of the research group, consisting of students pursuing degrees in health disciplines, might have contributed to this outcome. The exemplary behavior of these individuals, who will soon be health professionals, will serve as a model for overweight or obese patients who utilize their services, given that their BMI values are within normal ranges.

Our research revealed that students consumed more food when they were joyful. Adults frequently perceive food consumption and eating as a pleasant reward in circumstances where their interests and activities are restricted (23). Due to the fact that students' mobility is partially restricted during the academic year, dining can become a pastime. Generation Z exhibits a preference for consuming food that provides them with increased delight and enjoyment. As the food diversity spectrum continues to expand, they are exposed to a wider variety of novel and distinct foods, which can elicit happiness and subsequently influence their eating habits (18, 24).

Our research findings revealed that marginally more than half of the participants identified as overweight at some juncture. Furthermore, we found that over half of the participants expressed contentment with their physical appearance and did not withdraw from social interactions. Particularly during adolescence and youth, when body image is prominent and significant, how individuals perceive their own bodies and even minor flaws becomes problematic; therefore, even a slight weight gain is crucial.

Obesity, apart from being a significant contributor to health decline, presents a propensity for numerous other ailments, particularly those of the metabolic and cardiovascular varieties (25). Due to the fact that health department students are cognizant of this, over fifty percent of the participants in our study consider obese individuals to be hazardous.

One critical factor that impacts individuals' well-being is the quantity and composition of their food intake (26). According to research, Generation Z places a greater emphasis on weight management and associates it with maintaining good health. Additionally, despite not enjoying them, Generation Z prefers nutritious foods, according to observations (27). An examination of the students' dietary patterns reveals that they consume cereals predominately, followed by fast food and a meat-based diet. The environmental conditions have a substantial impact on decisions pertaining to food consumption (28, 29). The prevalence of grain and meat-based diets may vary depending on the geographical region in which one resides. Furthermore, it is hypothesized that the research group's student status contributes to the widespread consumption of fast food nutrition.

More than half of the participants exhibited prejudice towards obesity. Prior research has yielded results that are comparable to those of our study (30). It is crucial to address the significant degree of prejudice present in the research group, as they will be exposed to overweight and obese individuals on a regular basis as a result of their chosen profession. Efforts should be made to mitigate this prejudice during the students' academic years, prior to commencing their professional careers.

The variables included in our research were the following: age, class, BMI, educational attainment of the mother and father, self-perceived overweight status, tendency to isolate oneself from social interactions due to appearance, occurrence of cravings for food, chronic illness, dietary habits, smoking status, and alcohol consumption. Nevertheless, no statistically significant correlation was found between prejudice against obesity and $p>0.05$. A statistically significant relationship ($p<0.05$) was observed between the variables of gender, department, past self-perceived fatness, evaluation of obese individuals, and prejudice against obesity. The research conducted by Sayın Kasar et al. (2019), Sert et al. (2019), and Usta et al. (2015) identified a correlation between prejudice against obesity and the following variables: age, grade level, BMI, educational status of both parents (both mothers and fathers), smoking, and alcohol use. is not present (31). In contrast, certain studies have identified a correlation between age, BMI, and prejudice against obesity (32). The relationship between age, grade level, body mass index, and prejudice against obesity is shaped by individuals' lifelong experiences, perceptions, and societal norms, often resulting from comparisons related to body image, social interactions, and external appearances.

Our research revealed a positive correlation between age and prejudice against obesity. Analogous findings to the present investigation were observed in the scientific inquiries of Işık et al. (2019) and Phelan et al. (2014) (33). The connection between age and increasing prejudice against obesity can be explained by the deepening

of individuals' acquired biases and negative perceptions within society as they age.

As a rule, women are more likely than men to experience dissatisfaction with the physical alterations that occur to them (34). The issue of obesity becomes more pronounced among women as a result of their apprehension regarding weight gain and the potential loss of their aesthetic appeal. This may result in a more pessimistic perception of obese individuals among women (38 35). In our investigation, however, the exact opposite occurs. Men have been observed to be more prejudiced than women regarding obesity. In contrast to the findings of our study, Mengi Çelik et al. (2022) discovered that women held more prejudices against obesity than men did, and that their awareness of these biases was substantial (16). The reason why men exhibit higher levels of prejudice towards obesity compared to women may stem from various factors such as societal gender norms, media influence, cultural stereotypes, and individual experiences.

An observation was made that students enrolled in the dialysis program held more extreme prejudices against obesity than students enrolled in other programs. Due to the lack of a direct study comparing students enrolled in the dialysis program and those enrolled in the health department, the existing body of research has yielded inconsistent findings across programs. Research has indicated that prejudice has a tendency to increase among health department students, occasionally among midwives, nurses, or students from other programs (36,37). The study's findings revealed that students who characterized the situation of obese individuals as undesirable scored higher on the average obesity prejudice scale, whereas those who characterized the situation as normal and unhealthy displayed lower scores but were more prejudiced against obesity.

Study limitations

The findings may be limited by the study's foundation university setting. Study participants may not reflect other countries or areas due to demography and culture.

Conclusions

More than half of the participants exhibited prejudice towards obesity. Additional studies and methodologies should be made available to undergraduate and associate degree students in order to enhance their understanding of diet and physical activity, hence mitigating adverse alterations in body composition. Additionally, it should prioritize the development of treatments aimed at mitigating students' prejudices.

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Ethical Approval: *This study was approved by The Hasan Kalyoncu University Facultyof Health Sciences Non-Interventional Research Ethics Committee. (Date: 25.07.2023; Protocol Number: 2023/57). In addition, all participants were provided with an online explanation of the study's objectives and were required to provide informed consent by volunteering to participate.*

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