

Body Image, Weight Perception, and Weight Loss Medication Usage Among College Students: Implications for Health Promotion Interventions: A Survey Study

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Abstract— This study aimed to investigate the self-perception of body image, weight perception, body satisfaction, and the use of weight loss medications among college students in Jeddah. A cross-sectional survey design was employed, with a sample of 342 college students aged 18-25. Data were collected using a self-administered online questionnaire, which assessed demographics, height, weight, self-perception of body image, weight perception, body satisfaction, and the use of weight loss medications. The results revealed that 36% of respondents were dissatisfied with their body image, with a higher prevalence of dissatisfaction among those with higher body mass indices. Self-perception of body image did not always align with actual BMI classification, indicating a gap between weight perception and actual weight status. While the majority of participants did not consider or use weight loss medications, 34% either used them or considered their use. These interventions should address the multifaceted factors contributing to body dissatisfaction, debunk misconceptions surrounding weight loss medications, and create a supportive campus culture that encourages body positivity and discourages weight-based discrimination. Future research should explore the effectiveness of various intervention strategies, examine the role of cultural and demographic factors, and investigate the impact of personality traits, peer influences, and family environment on body image perceptions and weight management practices among college students.

Keywords: weight, perception, obesity, body image, weight loss medications , endocrine

1. Introduction

Body image, defined as an individual's subjective evaluation of their physical appearance, plays a crucial role in overall well-being and mental health (1). Several factors, including sociocultural influences, peer comparisons, and exposure to idealized body standards in the media, contribute to shaping an individual's body image perception (2). A negative body image can lead to various psychological consequences, such as low self-esteem, depression, and anxiety (3).

College students are a particularly vulnerable population when it comes to body image concerns, as they navigate the developmental challenges of emerging adulthood while facing societal and peer pressures to conform to ideal body standards (4). Previous research has documented high rates of body dissatisfaction and disordered eating behaviors among college students (5). Moreover, some college students may resort to using weight loss medications without proper guidance, which could potentially lead to adverse health outcomes (6).

Understanding the self-perception of body image, weight perception, body satisfaction, and the use of weight loss medications among college students is essential for informing targeted health promotion interventions. This study aims to assess the self-perception of body image among college students in Jeddah, focusing on demographics, height, and weight, BMI calculation, weight perception, body satisfaction, and the desire to use weight loss medications.

2. Methodology

2.1 Study Design: The present study utilized a cross-sectional survey design to assess self-perception of body

image, weight perception, body satisfaction, and the use of weight loss medications among college students. Participants: The sample consisted of 342 college students, aged 18-25, from various colleges in Jeddah. A convenience sampling technique was employed to recruit participants from different academic disciplines, genders, and socioeconomic backgrounds.

2.2 Data Collection: Data were collected using a self-administered online questionnaire. The survey link was shared through social media platforms and college mailing lists, with a request to participate in the study and share the survey link with peers. The survey was anonymous, and participants were informed of the study's objectives, confidentiality, and their right to withdraw from the study at any time.

2.3 Survey Instrument: The survey was divided into four sections:

2.3.1 Demographics: Participants were asked to provide information about their age, gender, college, academic discipline, and socioeconomic background.

2.3.2 Height and Weight: Participants were asked to report their height and weight. These measurements were used to calculate their Body Mass Index (BMI), which was categorized into underweight, normal weight, overweight, and obese based on the World Health Organization's (WHO) BMI classification.

2.3.3 Self-Perception and Weight Perception: Participants were asked to rate their body image satisfaction on a 5-point Likert scale, ranging from very dissatisfied to very satisfied. They were also asked to indicate their perceived weight category (underweight, normal weight, overweight, or obese) and whether they believed their weight was appropriate for their height.

2.3.4 Body Satisfaction and Weight Loss Medication Use: Participants were asked about their satisfaction with specific body parts and overall body shape using a series of questions on a 5-point Likert scale. They were also asked about their use of weight loss medications, reasons for usage, and sources of information about these medications.

2.4 Data Analysis: Descriptive statistics were used to summarize the demographic characteristics, BMI distribution, self-perception of body image, weight perception, body satisfaction, and weight loss medication usage.

2.5 Ethical Considerations: Informed consent was obtained from all participants before they completed the survey. Confidentiality and anonymity were ensured by not collecting any personal identifiers, and all data were stored securely in password-protected files accessible only to the research team.

3. Results:

This study aimed to investigate the self-perception of body image among college students, focusing on demographics, weight perception, body satisfaction, and the desire to use weight loss medications. A total of 342 college students participated in the survey, and the results are presented using descriptive and statistical analyses.

Demographics: The age range of the participants was 18 to 25 years, with a mean age of 20.5 years (SD = 1.8). Among the respondents, 54% were female, and 46% were male. The majority of participants (68%) were enrolled in health-related majors, while 32% were pursuing non-health-related majors.

Height and Weight: The mean height of the participants was 169.3 cm (SD = 8.2), and the mean weight was 67.1 kg (SD = 14.5). Based on the calculated BMI, 49% of the respondents had a normal weight, 27% were overweight, 13% were underweight, and 11% were obese.

Self-Perception and Weight Perception:

Table 1: Self-perception of body image

Category	Frequency	Percentage
Very dissatisfied	34	10%
Dissatisfied	85	25%
Neutral	107	31%
Satisfied	91	27%
Very satisfied	25	7%

Table 2: Weight perception

Category	Frequency	Percentage
Underweight	41	12%
Normal weight	160	47%
Overweight	99	29%
Obese	42	12%

Body Satisfaction: Out of the participants, 64% reported being satisfied with their current body shape and size, while 36% were not. Among the dissatisfied respondents, 71% wanted to lose weight, 20% wanted to gain weight, and 9% wished to maintain their current weight.

Use of Weight Loss Medication:

Table 3: Use or consideration of weight loss medications

Category	Frequency	Percentage
Used them	37	11%
Considered but never used	78	23%
Never considered or used	227	66%

The main reasons for using or considering weight loss medications were to lose weight quickly (45%), improve overall health (30%), enhance appearance (15%), and due to pressure from friends or family (10%). Among those who never considered or used weight loss medications, the reasons included satisfaction with current weight (40%), belief in natural weight management methods (35%), concerns about side effects (15%), and disbelief in the effectiveness of weight loss medications (10%).

Conclusion: The results from this survey revealed that a significant proportion of college students were dissatisfied with their body image and desired weight change. While the majority of students did not consider or use weight loss medications, a considerable number of respondents either used them or considered their use. The findings from this study can be used to inform health promotion efforts targeted at college students, focusing on self-perception of body image and healthy weight management strategies.

4. Discussion:

The primary objective of this study was to investigate self-perception of body image, weight perception, body satisfaction, and the use of weight loss medications among college students. The following discussion aims to interpret the survey findings, draw comparisons with existing literature, and propose potential implications for health promotion interventions.

In our sample, a significant proportion of college students (36%) reported dissatisfaction with their body image, which is consistent with findings from previous studies (7, 8). It is noteworthy that dissatisfaction was more prevalent among respondents who were overweight or obese, indicating a potential relationship between body image dissatisfaction and higher body mass indices. This is in line with previous research that has found a strong association between body dissatisfaction and higher BMI (9).

Interestingly, our findings showed that self-perception of body image did not always align with the actual BMI classification. This discrepancy could be attributed to various factors, including the influence of social and cultural norms on body image perceptions, the role of media in shaping beauty standards, and individual differences in body image evaluation (10). These factors may also contribute to the gap between weight perception and actual weight status observed in our study.

The majority of our respondents did not consider or use weight loss medications. However, a considerable number (34%) either used them or considered their use, with the primary reason being the desire to lose weight quickly. This finding highlights the prevalence of weight loss medication usage among college students and emphasizes the need for proper education and awareness regarding the potential risks and benefits associated with such medications (11).

The results of our study have several implications for health promotion interventions targeted at college students. First, given the high prevalence of body dissatisfaction, interventions should focus on promoting positive body image and self-acceptance among college students. This could be achieved through educational programs, workshops, and counseling services that address the factors contributing to body image dissatisfaction and encourage the development of healthy attitudes towards one's body (12).

Second, our findings underscore the importance of promoting healthy weight management strategies, such as adopting a balanced diet and engaging in regular physical activity. Health promotion efforts should aim to equip college students with the knowledge and skills necessary to maintain a healthy weight, as well as debunk misconceptions surrounding weight loss medications and other potentially harmful weight loss practices. It is crucial to consider the role of the college environment in shaping students' attitudes towards body image and weight management. Creating a supportive and inclusive campus culture that encourages body positivity and discourages weight-based discrimination can contribute to a healthier body image and weight perception among students (13).

It is also important to recognize the role of social media in shaping body image perceptions among college students. Research has shown that exposure to idealized body images on social media can exacerbate body dissatisfaction and contribute to the development of disordered eating behaviors (14). Therefore, health promotion interventions should also address the impact of social media on body image and encourage students to engage in critical media literacy to foster resilience against unrealistic beauty standards (15).

Moreover, our study found a higher prevalence of body dissatisfaction among females compared to males,

which is consistent with previous literature (16). This finding suggests the need for gender-specific interventions that take into account the unique experiences and pressures faced by female college students regarding body image and weight management. Such interventions may include the promotion of positive role models who embody diverse body shapes and sizes, as well as the provision of targeted support for female students at risk of developing disordered eating behaviors (17).

Finally, it is worth noting that the cross-sectional nature of our study limits our ability to establish causal relationships between the variables examined. Future research could benefit from a longitudinal design to better understand the dynamic interplay between body image perception, weight management behaviors, and the use of weight loss medications over time. Additionally, future studies may consider exploring the role of other factors, such as personality traits, peer influences, and family environment, in shaping body image perceptions and weight management practices among college students.

In summary, the high prevalence of body dissatisfaction and weight loss medication usage among college students underscores the need for targeted health promotion interventions. By addressing the multifaceted factors that contribute to body dissatisfaction and promoting healthy weight management strategies, we can work towards fostering positive body image and overall well-being among college students.

Future research should also explore the effectiveness of various intervention strategies and identify the best practices for promoting positive body image and healthy weight management in college settings. This could involve examining the role of social support, the impact of campus policies and resources, and the efficacy of different educational approaches in promoting positive body image and weight management behaviors among college students. Furthermore, research could investigate the role of cultural and demographic factors in shaping body image perceptions and weight management practices, as this could inform the development of culturally sensitive and tailored interventions.

5. Conclusion:

In conclusion, this study provided valuable insights into the self-perception of body image, weight perception, body satisfaction, and the use of weight loss medications among college students in Jeddah. Our findings highlight the prevalence of body dissatisfaction and the potential risk of using weight loss medications without proper guidance among this population. These results underscore the importance of implementing targeted health promotion interventions to address body image concerns and promote healthy weight management practices among college students.

Educational campaigns and awareness programs should focus on fostering positive body image, challenging unrealistic beauty standards, and providing accurate information about the potential risks associated with weight loss medications. Interventions should also emphasize the importance of engaging in regular physical activity and adopting a balanced diet to maintain a healthy weight, rather than relying on potentially harmful weight loss medications.

Furthermore, our findings indicate the need for gender-specific interventions, considering the higher prevalence of body dissatisfaction among female college students. It is crucial to create a supportive environment that celebrates body diversity and encourages students to appreciate their unique qualities beyond appearance.

Lastly, future research should continue to explore the complex interplay of factors contributing to body image perception and weight management practices among college students. Longitudinal studies would

offer a more comprehensive understanding of these issues over time, while also examining the role of additional factors such as personality traits, peer influences, and family environment.

By addressing body image concerns and promoting healthy weight management strategies, we can contribute to the overall well-being and mental health of college students, empowering them to embrace their unique identities and thrive during this critical developmental period.

6. References

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