

Body Image Anxiety Factors in College Students: A Mental Health Perspective

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Abstract: Using methods such as literature review, questionnaire surveys, interviews, and statistical analysis, this study investigates the current status of body image anxiety, contributing factors, and mental health levels among university students. It explores the correlations between various factors and the frequency of body image anxiety, as well as between anxiety frequency and mental health levels, while proposing recommendations. The results indicate: 82.08% of college students experience body image anxiety, with 75.65% of male students and 88.00% of female students affected; a negative correlation exists between body image anxiety frequency and mental health levels; significant differences in self-body satisfaction were observed across BMI groups. Self-body satisfaction, behavioral efficiency, and frequency of positive evaluations showed significant positive correlations with mental health levels, while social media influence and frequency of negative evaluations demonstrated significant negative correlations with mental health.

Keywords: Body Image Anxiety, Mental Health Factors, University Students.

1. Introduction

In the era of rapid internet development, online platforms have profoundly influenced societal beauty standards, giving rise to distorted aesthetic ideals such as the "fair-skinny-youth" stereotype. Such trends have exacerbated body image anxiety among college students, significantly jeopardizing their mental health. In recent years, mental health issues stemming from body image anxiety have garnered widespread attention. Empirical studies from both domestic and international contexts reveal that individuals with unhealthy lifestyles, low satisfaction with their appearance or body parts, and negative body image are more prone to social anxiety (Chen, 2021; Li, 2011)[8][11]. Concurrently, global mental health challenges, particularly among college students, have intensified, with rising rates of depression, anxiety, and suicidal risks (Liu et al., 2019)[4]. Body image anxiety, as a pervasive stressor in this population, not only threatens their well-being but also disrupts academic performance and daily functioning.

Domestic studies have demonstrated a significant positive correlation between appearance comparison (including its two dimensions: upward and downward appearance comparison) and mental health, as well as its five dimensions (anxiety, depression, paranoia, inferiority, and sensitivity). Specifically, frequent appearance comparisons among college students are strongly associated with heightened risks of anxiety, depression, and other psychological issues, aligning with prior findings (Ma, 2023)[13]; Peng et al., 2017)[14].

International research suggests that body image anxiety often stems from societal pressures. Appearance comparison can be viewed through the lens of Social Comparison Theory, which posits that individuals evaluate their self-worth and capabilities by comparing themselves to others (Festinger, 1954)[5]. While the theory emphasizes comparisons with similar peers, women frequently engage in upward comparisons with idealized media portrayals, with such comparisons occurring as frequently as peer-based evaluations (Engeln-Maddox, 2005; Strahan et al.,

2006)[2][7]. Excessive appearance comparisons exacerbate mental health risks, including increased depression and anxiety (Fardouly et al., 2015)[4]. Furthermore, they foster hyperfocus on physical flaws, perpetuating dissatisfaction and chronic stress (Fuller-Tyszkiewicz et al., 2019)[6].

Existing research highlights that college students face multifaceted pressures, including adapting to new environments, academic demands, and interpersonal relationships (Byrd & McKinney, 2012)[1]. While body image anxiety is prevalent in this group, its impact on mental health varies depending on contributing factors. Key questions remain: Which factors of body image anxiety pose the greatest harm to mental health? How does body image anxiety correlate with psychological well-being? Addressing these questions is critical for developing targeted interventions. This study aims to investigate the current status of body image anxiety among undergraduates, analyze the intensity of anxiety triggered by different factors, and explore the correlations between these factors and mental health outcomes. By doing so, it seeks to provide evidence-based strategies for mitigating body image-related mental health risks and fostering resilience in college populations.

2. Research Subjects and Methods

2.1. Research Subjects

The study targeted students enrolled at Huzhou University.

2.2. Research Methods

2.2.1. Questionnaire Survey

(1) Survey Scope

Participants were randomly selected from diverse academic majors and grade levels at Huzhou University. Questionnaires were distributed through multiple online platforms, including dormitory group chats, student organization communities, and personal social networks.

(2) Measurement Scales

1) Symptom Checklist-90 (SCL-90)

The Symptom Checklist-90 (SCL-90), also known as the

Self-Reporting Inventory, assesses a broad spectrum of psychological symptoms across nine domains, including somatization, interpersonal sensitivity, depression, and anxiety. Each of the 90 items is rated on a 1–5 Likert scale (1 = "none" to 5 = "severe"). For this study, selected items were integrated into the questionnaire to evaluate differences in participants' mental health levels.

2) Self-Rating Anxiety Scale (SAS)

The SAS is a validated tool for measuring anxiety frequency, comprising 20 items scored on a four-point scale (1 = "rarely or never," 2 = "occasionally," 3 = "frequently," 4 = "almost always"). A subset of SAS items was adapted to specifically analyze variations in anxiety frequency among participants.

2.3. Questionnaire

The questionnaire for this study included the Self-Rating

Scale for Psychological Symptoms, the Self-Rating Anxiety Scale, and the College Students' Body Image Anxiety Survey, comprising a total of 27 questions divided into five sections: basic information, the impact of body image anxiety on individuals (manifestations), behaviors triggered by body image anxiety, factors contributing to body image anxiety, and measures to cope with body image anxiety. From December 2024 to February 2025, the survey was conducted online with the informed and voluntary participation of students at Huzhou University. A total of 240 valid questionnaires were collected, including 115 from male students and 125 from female students, with a male-to-female ratio of 8:9. Among the respondents, freshmen accounted for 20.00%, sophomores for 20.83%, juniors for 19.17%, seniors for 20.83%, and graduate students for 19.17% (see Table 1).

Table 1. Basic Information of Survey Sample

Grade	Freshman	Sophomore	Junior	Senior	Graduate
Total	48	50	46	50	46
Male	23	24	22	24	22
Female	25	26	24	26	24
Percentage(%)	20.00	20.83	19.17	20.83	19.17

2.4. Interviews

In addition to the quantitative analysis of body image anxiety among students at Huzhou University through the questionnaire, this study further employed qualitative interviews to explore the issue. The interview method involves face-to-face discussions between interviewers and interviewees based on a pre-designed outline, allowing for the collection of in-depth information. This method offers flexibility and adaptability, enabling a deeper exploration of interviewees' perspectives on the topic.

To better understand the current state of body image anxiety among contemporary college students, interviews were conducted via WeChat voice calls with seven students from Huzhou University between January and February 2025. The interview topics included factors contributing to body image anxiety—such as online clothing sizes, discrepancies between personal and model figures, social media marketing, weight-loss product advertisements, peer evaluations, and potential career requirements—as well as personal experiences, views on contemporary beauty standards, and suggestions for alleviating body image anxiety.

2.5. Statistical Analysis

The collected data were imported into SPSSAU statistical software to establish a database, and analyses such as correlation and variance were conducted.

3. Results

3.1. Current State of Body Image Anxiety Among Students

The survey results indicated that the prevalence of body image anxiety among students at Huzhou University was 82.08%, with 75.65% of male students and 88.00% of female students reporting such anxiety. Across all grades, female students exhibited higher levels of body image anxiety than male students. Among the grades, seniors reported the highest anxiety rate at 92.00%, while graduate students reported the

lowest at 67.39% (see Table 2).

Table 2. Overall Prevalence of Body Image Anxiety Among Students

Variable	Group	Number	Body Image Anxiety Cases	Detection Rate (%)	
Overall		240	197	82.08	
Gender	Male	115	87	75.65	
	Female	125	110	88.00	
Grade	Freshman	Male	23	14	60.87
		Female	25	19	76.00
			48	33	68.75
	Sophomore	Male	24	22	91.67
		Female	26	25	96.15
			50	47	94.00
	Junior	Male	22	16	72.73
		Female	24	24	100.00
			46	40	86.96
	Senior	Male	24	22	91.67
Female		26	24	92.31	
		50	46	92.00	
Graduate	Male	22	13	59.09	
	Female	24	18	75.00	
		46	31	67.39	

3.2. Correlations between Body Image Anxiety and Various Factors

3.2.1. Self-Body Satisfaction and Body Image Anxiety

(1) BMI and Self-Body Satisfaction

Using BMI as the independent variable and self-body satisfaction as the dependent variable, a one-way ANOVA was conducted to examine differences in body satisfaction among students with different BMI levels. The results showed significant differences ($p < 0.05$), indicating that BMI levels affect self-body satisfaction. Specifically, BMI had a significant impact ($F = 11.798$, $p = 0.000$), with notable differences between groups (e.g., BMI < 18.4 vs. 18.5 – 23.9 ; BMI < 18.4 vs. > 24) (see Table 3).

Table 3. Differences in BMI and Self-Body Satisfaction

	BMI (Body Mass Index)			<i>F</i>	<i>p</i>
	<18.4(<i>n</i> =49)	18.5-23.9(<i>n</i> =154)	>24(<i>n</i> =37)		
Self-Body Satisfaction	2.55±0.84	1.92±0.85	1.81±0.88	11.798	0.000**
* <i>p</i> <0.05 ** <i>p</i> <0.01					

(2) Self-Body Satisfaction and Body Image Anxiety

A Spearman correlation analysis revealed a significant negative correlation ($r = -0.423$, $p < 0.01$) between self-body satisfaction and body image anxiety frequency. Lower self-body satisfaction was associated with higher body image anxiety (see Table 4).

Table 4. Correlation Between Body Image Anxiety and Self-Body Satisfaction

	Self-body Satisfaction
Body Image Anxiety	-0.423**
* <i>p</i> <0.05 ** <i>p</i> <0.01	

3.2.2. Correlation between Action Efficiency and Body Image Anxiety

Using behavioral efficiency as the independent variable and the frequency of body image anxiety as the dependent variable, a correlation analysis was conducted to examine their relationship. The Spearman correlation coefficient was employed to quantify the strength of this association. A significant negative correlation ($r = -0.383$, $p < 0.01$) was found between action efficiency and body image anxiety frequency, indicating that lower action efficiency was associated with higher body image anxiety (see Table 5).

Table 5. Correlation Between Behavioral Efficiency and Body Image Anxiety

	Behavioral Efficiency
Body Image Anxiety	-0.383**
* <i>p</i> <0.05 ** <i>p</i> <0.01	

3.2.3. Correlation between Social Media Influence and Body Image Anxiety

Using social media influence as the independent variable and the frequency of body image anxiety as the dependent variable, a correlation analysis was conducted to investigate their relationship. The Spearman correlation coefficient was utilized to quantify the strength of the association. A significant positive correlation ($r = 0.511$, $p < 0.01$) was observed between social media influence and body image anxiety frequency, suggesting that greater social media influence was associated with higher body image anxiety (see Table 6).

Table 6. Correlation Between Social Media Influence and Body Image Anxiety

	Social Media Influence
Body Image Anxiety	0.511**
* <i>p</i> <0.05 ** <i>p</i> <0.01	

3.2.4. Correlation between External Evaluations and Body Image Anxiety

Using the frequencies of negative and positive evaluations as independent variables and the frequency of body image anxiety as the dependent variable, a correlation analysis was conducted to examine the relationships between body image anxiety frequency and both types of evaluations. The

Spearman correlation coefficient was employed to quantify the strength of these associations. Positive evaluations showed a significant negative correlation ($r = -0.276$, $p < 0.01$) with body image anxiety, while negative evaluations showed a significant positive correlation ($r = 0.436$, $p < 0.01$). Higher frequencies of positive evaluations were associated with lower body image anxiety, and vice versa (see Table 7).

Table 7. Correlation Between Positive/Negative External Evaluation and Body Image Anxiety

	Positive Evaluation	Negative Evaluation
Body Image Anxiety	0.436**	-0.276**
* <i>p</i> <0.05 ** <i>p</i> <0.01		

3.3. Correlation between the Impact of Body Image Anxiety and Mental Health Levels

3.3.1. Correlation between Mental Health and Body Image Anxiety

Using the frequency of body image anxiety as the independent variable and mental health levels as the dependent variable, a correlation analysis was conducted to investigate the relationship between the frequency of body image anxiety and the total score of the mental health scale. The Spearman correlation coefficient was employed to quantify the strength of this association. A significant positive correlation ($r = 0.330$, $p < 0.01$) was found between body image anxiety frequency and mental health scale scores, indicating a negative relationship between body image anxiety and mental health (see Table 8).

Table 8. Correlation Between Body Image Anxiety and Mental Health Levels

	Mental Health Scale Scores
Body Image Anxiety	0.330**
* <i>p</i> <0.05 ** <i>p</i> <0.01	

3.3.2. Qualitative Analysis of Factors Contributing to Body Image Anxiety and Mental

In this study, seven interview subjects with diverse backgrounds were randomly selected from the questionnaire survey sample. A qualitative analysis of their interview content was conducted to identify key elements reflecting mental health status. Based on the criteria of the Symptom Checklist-90 (SCL-90), their mental health levels were systematically assessed.

(1) Online Shopping and Body Image Anxiety

1) Online Clothing Sizing Issues

All seven interviewees reported anxiety due to inconsistent clothing sizes online, with an average anxiety level rated as "moderate." Female interviewees who encountered severe sizing issues exhibited higher anxiety levels. Interviewees attributed this to varying sizing standards among brands and labels like "trendy" or "plus-size," which they found unreasonable. Problematic labeling practices, such as

categorizing sizes with stigmatizing terms like "teen-style" (辣妹) or "curvy" (微胖), which often led to irrational sizing.

For example:

Interviewee A stated, "Some Taobao stores specializing in teen-style clothing use extremely small sizes-almost fitting only middle or high schoolers. The sizing is utterly unreasonable."

Interviewee B commented, "Items labeled 'curvy' are often excessively oversized, far beyond standard measurements."

2) Online Clothing Models

All seven interviewees in this study reported that discrepancies between the actual fit of clothing and the model images displayed online contributed to their body image anxiety. Based on the Symptom Checklist-90 (SCL-90) metrics, their anxiety levels ranged from mild to moderate, with no significant variations observed across participants. Notably, five female interviewees indicated that recognizing the potential use of digital editing techniques (e.g., photo retouching) in model images partially reduced their anxiety.

(2) Social Media-Induced Body Image Anxiety and Mental Health Levels

All seven interviewees reported that exposure to idealized body images (e.g., "perfect" physiques promoted through social media marketing or celebrity culture) triggered body image anxiety. Based on the Symptom Checklist-90 (SCL-90) criteria, participants with higher exposure exhibited greater anxiety levels. In-depth interviews revealed unanimous criticism of distorted aesthetic standards such as the "fair-skinny-youth" stereotype. Interviewee C remarked, "In my view, a healthy body shouldn't look frail or sick. True beauty lies in health."

(3) Weight-Loss Product Marketing and Mental Health

None of the seven interviewees reported purchasing pharmaceutical weight-loss products advertised online. However, four had tried meal replacement products for weight loss, all abandoning them due to poor taste. According to SCL-90 metrics, the three participants who never purchased such products exhibited an average anxiety level of "mild," while the four who had tried them showed anxiety levels of "moderate" or higher.

(4) Peer Evaluations and Mental Health

Five of the seven interviewees received positive evaluations about their appearance more frequently than negative ones, while the remaining two experienced more negative feedback. SCL-90 assessments indicated that participants with higher frequencies of negative evaluations averaged anxiety levels of "moderate or higher," whereas those with predominantly positive feedback reported "mild or lower" anxiety.

Qualitative analysis revealed that body image anxiety induced by unreasonable clothing sizing, higher relative frequency of negative vs. positive evaluations, and social media influence negatively correlated with mental health levels, aligning with the quantitative survey results. However, factors such as model imagery discrepancies and weight-loss product marketing showed inconclusive correlations with mental health, likely due to cognitive gaps in participants' perceptions of safety and personal efficacy.

4. Discussion

The findings of this study reveal significant differences in self-body satisfaction across BMI groups, with the frequency of body image anxiety demonstrating a negative correlation

with mental health levels. Consequently, self-body satisfaction, behavioral efficiency, and the frequency of positive evaluations exhibit significant positive correlations with mental health, while social media influence and negative evaluation frequency show significant negative correlations. Based on these results, the following recommendations are proposed:

4.1. Strengthen Mental Health Education and Counseling

Mental health literacy critically impacts psychological well-being. Curriculum-based interventions to enhance such literacy can effectively address body image anxiety (Chen, Yang, & Li, 2018)[9]. Studies indicate rising rates of depression, anxiety, and suicidal risks among college students (Liu et al., 2019)[3]. University should integrate specialized mental health courses targeting body image anxiety into its educational framework, emphasizing the relationship between body health and aesthetic perceptions. Additionally, a comprehensive counseling system-including individualized consultations and group therapy-should be established to support students with severe anxiety.

4.2. Address Gender Differences Through Tailored Interventions

Body image is closely linked to mental health, and gender-specific guidance can alleviate anxiety (Zhou et al., 2020)[15]. Given the higher prevalence of body image anxiety among female students, Huzhou University should organize workshops led by experts to educate women on healthy physiological standards and body positivity. Male students also require targeted support, such as sports-oriented programs to promote fitness while reducing anxiety.

4.3. Enhance BMI Management and Health Guidance

BMI, a key indicator of weight status, reflects systemic adiposity and obesity risks (Fang, Wei, et al., 2025)[10]. The university should conduct regular BMI assessments, maintain health records, and provide personalized guidance based on individual results. Students with underweight or overweight BMI values should receive dietary and exercise recommendations to achieve healthier weights and improve self-body satisfaction.

4.4. Promote Responsible Social Media Engagement

Strengthened national regulations and positive societal messaging can transform maladaptive anxiety into constructive motivation (Liu, 2021)[12]. Huzhou University should launch campaigns to cultivate critical thinking about social media content and restrict campus platforms from disseminating body-shaming material.

5. Conclusion

The prevalence of body image anxiety among college students remains alarmingly high, necessitating urgent institutional prioritization of psychological support. Female students report higher anxiety levels than males. Significant differences in self-body satisfaction were observed across BMI groups, with body image anxiety frequency negatively correlated with mental health. Self-body satisfaction, behavioral efficiency, and positive evaluations positively

correlate with mental health, while social media influence and negative evaluations exhibit negative correlations. These findings underscore the need for multifaceted interventions—spanning education, gender-sensitive counseling, health monitoring, and media literacy—to mitigate body image-related mental health risks.

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