

Relationship Between Higher Body Image Concern and Stress Level Among University Students

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Abstract

This study examined the empirical relationship between dysmorphic body image concerns and perceived stress among university undergraduates in Pakistan. A cross-sectional survey was administered to a purposive sample of 200 students aged 18 to 30 years, with equal gender representation (100 males, 100 females). Assessment tools included the Body Image Concern Inventory (BICI; Littleton et al., 2005) and the Perceived Stress Scale (PSS; Cohen et al., 1983). Statistical testing using Pearson correlation demonstrated a moderate, positive association between appearance concerns and perceived stress ($r = .373, p < .01$), indicating that greater distress over physical appearance corresponds with higher self-reported stress. Independent samples t -tests revealed that female undergraduates experienced significantly higher perceived stress ($M = 22.76, SD = 5.69$) than male peers ($M = 19.99, SD = 6.01$), whereas mean levels of body image concern did not differ significantly between genders. These findings suggest that dysmorphic appearance anxiety is a meaningful correlate of psychological strain in young adults, pointing to the need for tailored mental health support on academic campuses.

Keywords: *body image concerns, dysmorphia, perceived stress, undergraduate mental health, gender differences.*

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INTRODUCTION

Body image is an important psychological construct that refers to how people perceive, think about, evaluate, and react to their own physical appearance. It encompasses perceptions of body size, weight, shape, skin, hair, facial features, and other physical characteristics. Body image is more than just how a person looks objectively; it is also about an individual's subjective interpretation and emotional response to his or her appearance. Thus, two people with similar physical characteristics may have vastly different perceptions and feelings about their bodies. A positive body image is typically associated with acceptance, appreciation, and respect for one's body, whereas a negative body image can include dissatisfaction, selfconsciousness, negative self-evaluation, and persistent concern about perceived physical flaws. Because body image includes

cognitive, emotional, and behavioral components, concerns about appearance can have an impact on an individual's psychological and social well-being.

Personal, interpersonal, and sociocultural factors all contribute to the development of body image. People's perceptions of their physical appearance can be influenced by a variety of factors, including peer relationships, family attitudes, cultural expectations, media exposure, and individual experiences. Expectations regarding body size, shape, weight, facial features, and other physical attributes may arise from societal standards of attractiveness. People may feel unhappy with their appearance if they believe they don't live up to these expectations. Such discontent does not always point to a psychological disorder, but it may indicate a more serious body image issue if appearance-related thoughts become frequent, upsetting, or interfere with daily activities and social interactions.

Concerns about one's body are especially pertinent in adolescence and early adulthood. Significant physical, psychological, and social changes occur during these developmental stages. Young people may become more sensitive to how others perceive them and become more conscious of their appearance. Students go through additional changes during their time in college as they become more independent, make new friends, and learn to balance their personal and academic obligations. These adjustments might make people more conscious of their appearance and social acceptance. Students at universities may make comparisons between their appearance and that of friends, classmates, social groups, or people they see on traditional and social media. Therefore, when students perceive a difference between their own appearance and an idealized standard, appearance-related comparisons may exacerbate their discontent.

The social comparison theory offers a crucial viewpoint for comprehending issues related to body image. People can assess themselves by contrasting their traits and accomplishments with those of others. People may compare their body type, weight, facial features, attire, and general attractiveness to those of others. Dissatisfaction with one's own appearance may be exacerbated when these comparisons are viewed negatively. In a meta-analysis, Myers and Crowther (2009) discovered a strong correlation between body dissatisfaction and social comparison. According to their findings, comparison processes are important for comprehending body dissatisfaction, especially when people compare themselves to standards related to appearance. This implies that how people view their bodies can be significantly influenced by their social surroundings.

With the increasing use of social media, the impact of appearance-related social comparison has become especially significant. People frequently have the chance to view and compare themselves to others on social networking sites. Highly selective depictions of physical appearance may be found in photos and other appearance-focused content, which may increase exposure to idealized standards. The relationship between body image issues and social comparison on social media has been further investigated in recent studies. In a systematic review and meta-analysis, Bonfanti et al. (2025) found a link between body image issues and online social comparison. These results show how important modern social settings are when taking into account the psychological aspects of body image.

Self-discrepancy theory is another theoretical viewpoint that is pertinent to body image. According to Higgins (1987), people have two distinct representations of themselves: the ideal self, which stands for qualities they would ideally like to have, and the actual self, which represents how people think they currently are. Negative emotional experiences may be linked to a disparity between these self-representations. An individual may perceive a discrepancy between their idealized and actual physical appearance. A student might think, for instance, that their body does not match a socially acceptable or personally desired appearance. Such disparities may lead to discontent and emotional distress when they become significant to the person. Therefore, self-discrepancy theory offers a helpful theoretical justification for the potential psychological significance of perceived differences between desired and actual appearance.

Concerns about one's body can range from comparatively minor discontent to more enduring obsession with appearance. Littleton et al. (2005) created the Body Image Concern Inventory (BICI) to measure issues with dysmorphic appearance and body image. Checking, camouflaging, seeking reassurance, and social avoidance are among the appearance-related obsessions and behaviors covered by the inventory. The creation of the BICI gave researchers a tool to assess appearance issues in both research and nonclinical populations. Greater obsession or discontent with one's perceived physical appearance may be indicated by higher levels of body image concern (Littleton et al., 2005).

Social and emotional challenges may also be linked to ongoing worries about appearance. People who are very self-conscious about their appearance may become more aware of perceived physical defects and frequently assess their appearance in various contexts. Some people might try to hide perceived flaws, seek comfort from others, or steer clear of social situations where they think their appearance might be scrutinized. These actions may limit one's ability to interact with others and make one feel more self-conscious. Therefore, body image issues should be viewed as psychological experiences that may involve thoughts, emotions, and behaviors rather than just being dissatisfied with one's appearance.

Numerous measures of psychological well-being have been connected by research to body dissatisfaction and appearance-related issues. For instance, research has shown connections between anxiety and depressive symptoms and body dissatisfaction. In a systematic review and meta-analysis of men, Barnes et al. (2020) discovered positive correlations between self-reported anxiety and depression and body dissatisfaction. Because body image issues are sometimes mistakenly thought to primarily affect women, this finding is significant. Men may also have issues with weight, muscularity, body shape, and physical appearance, despite the fact that women have traditionally received a lot of attention in body image research. Consequently, both male and female experiences should be taken into account in body image research.

Concerns about appearance may be influenced by a person's gender. Men may face pressures regarding muscularity, body size, weight, and physical strength, while women may encounter social expectations that emphasize thinness, attractiveness, and specific standards of physical appearance. These classifications are not absolute, though, and a range of appearance-related issues can affect

both men and women. Myers and Crowther (2009) found that different groups had different relationships between social comparison and body dissatisfaction, highlighting the significance of taking gender and other demographic factors into account in body image research. Therefore, a more thorough understanding of body image issues within a student population can be obtained by looking at both male and female university students.

University students may be especially vulnerable to the psychological effects of body image issues. Academic competition, tests, assignments, shifting social relationships, money worries, family expectations, and career decisions are all aspects of university life. As a result, students might encounter several demands concurrently. Students may feel more emotional pressure when these demands are combined with appearance-related worries. Social settings, academic settings, or interpersonal relationships can occasionally cause students who are already very self-conscious about their appearance to feel more selfconscious.

Another significant psychological factor among university students is stress. Stress is a typical human reaction to difficult or demanding situations. However, the objective existence of stressful events is not the only factor that determines stress. People can view and assess the same situation in very different ways. Certain situations may seem manageable to one person but overwhelming to another. As a result, perceived stress offers a crucial means of comprehending a person's subjective perception of stress.

The Perceived Stress Scale (PSS) was created by Cohen et al. (1983) to gauge how unpredictable, uncontrollable, and overwhelming people think their lives are. Instead of just counting the number of stressful events encountered, the PSS focuses on the person's perception of stress. This distinction is crucial because psychological reactions to stressful situations can differ based on coping mechanisms and one's own assessment. Since then, research involving students and other populations has made extensive use of the PSS.

Academic workload, tests, assignments, time management issues, financial worries, family obligations, interpersonal relationships, and adjusting to university life can all cause stress for university students. Because students frequently have to balance numerous assignments and tests with social and familial obligations, academic expectations may be especially crucial. Persistent or elevated perceived stress may be linked to poorer psychological well-being and challenges in daily functioning, even though some stress may be a normal reaction to difficult situations.

Numerous psychological processes can be used to understand the connection between perceived stress and body image concerns. Students who are constantly self-conscious about their appearance may spend a lot of time considering how they appear and what other people might think of them. They might feel self-conscious, compare their appearance to others, look for validation, or steer clear of circumstances where they think their appearance will be scrutinized. Additional psychological demands could result from these experiences. As a result, people who have more

body image issues might find some social and interpersonal circumstances more difficult or stressful.

However, there may be a complicated and possibly reciprocal relationship between stress and body image issues. Stressful events can affect a person's mood, self-perception, and focus on perceived physical flaws. People may become more preoccupied with their appearance and other negative aspects of themselves when they are under a lot of stress. On the other hand, ongoing worries about appearance could lead to extra emotional demands that increase perceived stress. However, because the current study employs a cross-sectional design, it is impossible to ascertain whether stress leads to body image concerns or vice versa. Nonetheless, analyzing the relationship between the two variables can reveal important details regarding their co-occurrence among college students.

Stress and body image may also be related through social functioning and self-evaluation. People who are unhappy with how they look might be concerned about being judged by others, especially in social or interpersonal settings. These worries could make people more self-conscious and less confident when interacting with others. Regularly worrying about one's appearance to others can demand a significant amount of mental and emotional focus. These worries may increase the perception that daily life is challenging to handle when paired with personal and academic obligations. University students' perceptions of stress may therefore be influenced by a number of factors, including appearance-related psychological processes.

When researching body image, cultural context is also crucial. Physical attractiveness standards can vary among populations and are impacted by social and cultural contexts. Studies carried out in Western environments might not accurately reflect the experiences of students residing in Pakistani or South Asian cultural contexts. Pakistani university students may encounter a mix of cultural values, peer pressure, traditional family expectations, educational pressures, and growing exposure to international and social media-based appearance standards. Therefore, a more comprehensive understanding of these psychological variables may be achieved by looking at body image issues and perceived stress within the local university context.

The Pakistani context is especially pertinent because university students may encounter various forms of academic and social pressure as they adjust to the shifting demands of adulthood and higher education. Additionally, students can negotiate expectations about relationships, work, education, family, and appearance. Depending on a person's circumstances and gender, these experiences may differ. Therefore, researchers can gain a better understanding of how psychological factors like perceived stress and body image concerns are experienced within the local context by studying university students from diverse backgrounds.

Previous studies have shown that university students may experience significant perceived stress and that body image issues are linked to psychological challenges. To investigate the relationship between these variables within particular cultural and educational populations, more research is necessary. It may be possible to determine whether students who report higher levels of appearance-related concerns also report higher levels of perceived stress by looking at body image concern and

perceived stress together. Information about potential gender differences in these variables may also be obtained by including both male and female students.

University students are the focus of this study because they are a significant developmental and educational group where perceived stress and body image issues may coexist. Students at universities are juggling social obligations, academic obligations, personal growth, and career preparation. They might also become more conscious of how they look and what society expects of them. Therefore, knowing how students' perceptions of stress and body image issues relate to one another may have useful ramifications for student wellbeing and psychological support.

From a psychological standpoint, analyzing these variables collectively may also help identify elements linked to students' emotional experiences. When evaluating students' psychological issues, university counseling services and mental health specialists may find it helpful to identify appearance-related concerns if body image issues are linked to higher perceived stress. Similarly, when students exhibit ongoing dissatisfaction or obsession with their appearance, stress awareness may be pertinent. While acknowledging that the current study can establish association rather than causation, such findings may aid in the development of appropriate awareness and supportive interventions.

Therefore, the current study was carried out to investigate the connection between university students' perceived stress and body image concerns. The study specifically sought to ascertain whether higher levels of perceived stress are linked to higher levels of body image concern. The study also looked at how male and female university students' perceptions of stress and body image differed by gender. The study intends to add to the body of psychological literature on body image, stress, and student well-being by investigating these factors within a university population.

All things considered, body image is a complex psychological experience shaped by individual standards of appearance, social comparison, cultural expectations, and personal perceptions. Persistent worries about one's appearance may be linked to unpleasant emotional and social experiences, whereas perceived stress indicates how demanding, unpredictable, or challenging people find their lives to be. Students at universities may encounter situations that make stress and body image issues especially pertinent. The psychological experiences of young adults in higher education may thus be better understood by looking at the connections between these constructs. By examining perceived stress and body image concerns among college students and determining whether these factors vary by gender, the current study aims to make a contribution to this field.

RATIONALE

While body image and stress have been studied separately in clinical psychology, empirical research examining how they interact within higher education remains limited, particularly in South Asian contexts like Pakistan. University life introduces distinct environmental and social pressures that simultaneously impact body perception and daily stress. Mapping this link provides institutional counselors with clearer data for designing effective student wellness programs. Furthermore,

evaluating gender differences across both variables ensures that campus psychological services can tailor their support effectively.

Accordingly, this study investigated the relationship between dysmorphic body image concerns and perceived stress levels among Pakistani university undergraduates, testing for key gender-based variations across both measures.

OBJECTIVES & HYPOTHESES

The research addressed two main objectives:

- (1) to examine the correlation between body image concern and perceived stress in university students.
- (2) to evaluate whether male and female undergraduates differ significantly across both constructs.

Hypothesis 1 (H1): Students with higher body image concern will report significantly higher levels of perceived stress.

Hypothesis 2 (H2): Female undergraduates will exhibit significantly higher levels of both body image concern and perceived stress compared to male undergraduates.

METHODOLOGY

Research Design & Sample

This study used a quantitative, cross-sectional design to measure variables at a single point in time. A purposive sample of 200 undergraduate students (100 males, 100 females) aged 18 to 30 years was recruited from university campuses in Pakistan. Inclusion criteria required active university enrollment, age within the 18–30 range, voluntary consent, and functional English proficiency. Individuals outside this age bracket or presenting language difficulties were excluded.

Sampling and techniques

The sample was collected from different universities of Pakistan. The sample size was 200 with equal representation of both genders of age range 18 to 30. The data was collected through purposive sampling technique $N = 200$, $N_1 = 100$ males, $N_2 = 100$ girls.

Inclusion/exclusion criteria

The study included 200 participants, both boys and girls aged 18 to 30. Participants were required to provide informed consent, be in good physical and mental health, and possess a clear understanding of the study. Proficiency in the language used for assessment was required, and availability for the study duration was necessary. The research specifically monitored participants' body image and stress level through various assessments, aiming to examine the relationship between these factors and young adults.

Procedure

This study aimed to investigate the relationship between higher body image concerns and stress level among university students aged 18 to 30. It started by obtaining informed consent from participants, ensuring their comfort and understanding. To create a rounded sample, I purposely selected at least 200 participants, evenly divided into 100 boys and 100 girls. Confidentiality was a priority, and participants could trust that their information remained private. Building a positive rapport was key to collecting accurate data, so I established a connection with participants. They then filled out a demographic sheet, providing basic background information. The Body Image Concern Inventory (BICI) and Perceived Stress scale.

Instruments & Measures

Body Image Concern Inventory (BICI): Developed by Littleton et al. (2005), this 19-item self-report tool measures dysmorphic appearance worries. Items assess flaw fixation, checking behaviors, camouflaging, and social avoidance on a 5-point Likert scale. Higher total scores reflect greater appearance distress.

Perceived Stress Scale (PSS): Developed by Cohen et al. (1983), this 10-item instrument assesses the degree to which recent life events are evaluated as unpredictable or overwhelming. Items are rated on a 5-point scale, with higher cumulative scores indicating higher perceived stress.

Ethical Procedure & Analysis

Institutional ethical approval was obtained prior to data collection. Participants were informed about the study's purpose, confidentiality procedures, and their right to withdraw without penalty before providing written informed consent. Data were processed using IBM SPSS Statistics (Version 25). Analysis included descriptive metrics (mean, standard deviation, skewness, kurtosis), internal consistency checks (Cronbach's alpha), Pearson correlation, and independent samples *t*-tests.

RESULTS

The sample consisted of 200 undergraduates evenly split between males (50%) and females (50%). Demographic characteristics are summarized in Table 1 .

Table 1. Demographic Breakdown of the Sample (N = 200)

Variable		n	%
Gender	Male	100	50.0
	Female	100	50.0
Education Level	Higher Secondary	4	2.0
	College Level	24	12.0
	University Undergraduate	172	86.0

Descriptive statistics and internal reliability coefficients for the primary measures are detailed in Tables 2 and 3. Both measures displayed acceptable psychometric properties.

Table 2. Descriptive Parameters for Key Measures (N = 200)

Scale	Items	M	SD	Skewness	Kurtosis
Perceived Stress Scale (PSS)	10	21.37	6.00	-0.150	1.217
Body Image Concern Inventory (BICI)	19	46.34	13.97	0.250	-0.543

Table 3. Scale Reliability and Internal Consistency (N = 200)

Scale	Total Items	Cronbach's α
Perceived Stress Scale (PSS)	10	.666
Body Image Concern Inventory (BICI)	19	.892

Bivariate Correlation Analysis

To evaluate Hypothesis 1 , a Pearson product-moment correlation was calculated between BICI and PSS scores. The results are shown in Table 4.

Table 4. Pearson Correlation Between Body Image Concern and Perceived Stress

Variable	PSS	BICI
Perceived Stress Scale (PSS)	1	.373**
Body Image Concern Inventory (BICI)	.373**	1

** Correlation is significant at the 0. 01 level (2-tailed).

A statistically significant positive correlation was observed between body image concern and perceived stress ($r = .373, p < .01$). Higher levels of appearance anxiety were associated with greater perceived stress, supporting Hypothesis 1 .

Gender Comparison Analysis

Independent samples *t*-tests were conducted to test for mean gender differences across both variables. The results are presented in Table 5.

Table 5. Comparison of Study Variables Across Male and Female Undergraduates

Scale	Male <i>M</i>	Male <i>SD</i>	Female <i>M</i>	Female <i>SD</i>	<i>t</i>	95% CI	<i>p</i>
PSS	19.99	6.01	22.76	5.69	-3.34	[-4.40, -1 .13]	< .001
BICI	47.53	11 .69	45.15	15.91	1 .20	[-1 .51 , 6.27]	.231

Note. CI= Confidence Interval for mean difference.

Female students reported significantly higher perceived stress ($M = 22.76, SD = 5.69$) than male students ($M = 19.99, SD = 6.01$; $t = -3.34, p < .001$). However, the mean difference in body image concern between males ($M = 47.53, SD = 11 .69$) and females ($M = 45.15, SD = 15.91$) was not statistically significant ($t = 1 .20, p = .231$). Thus, Hypothesis 2 was only partially supported.

DISCUSSION

This investigation examined the connection between dysmorphic body image concern and perceived stress in a sample of Pakistani university undergraduates. The moderate positive correlation ($r = .373$) supports the idea that body image worries are meaningfully linked to overall emotional stress during young adulthood.

These empirical findings fit well with Higgins' (1987) self-discrepancy framework. When students feel their physical appearance falls short of personal or cultural standards, the resulting selfdiscrepancy generates ongoing distress. Furthermore, the behavioral habits measured by the BIC such as frequent checking, spending time camouflaging flaws, and avoiding social settings consume mental energy that could otherwise help students manage academic and social pressures.

Regarding gender differences, female undergraduates experienced significantly higher perceived stress than their male counterparts, echoing broader findings in student mental health literature. Interestingly, body image distress scores did not differ significantly by gender. Male participants showed a slightly higher sample mean score ($M = 47.53$) than females ($M = 45.15$), though this difference was not statistically significant. This highlights the importance of distinguishing descriptive trends from inferential results.

These findings caution against viewing body image concerns as an exclusively female issue. Male undergraduates face distinct cultural expectations regarding athleticism, height, and muscularity that can produce comparable distress, underscoring the importance of addressing body image issues across all genders.

CONCLUSION & IMPLICATIONS

The findings demonstrate a significant link between dysmorphic appearance worries and perceived stress among university students. While female undergraduates reported higher overall stress, body image distress affected male and female students at similar levels. Universities should recognize body image anxiety as a relevant factor in student mental health programming.

Practical applications include:

- **Counseling Intake Protocols:** University counseling services should screen for appearance anxiety when students present with elevated stress or social withdrawal.
- **Campus Wellness Initiatives:** Institutions can host body-positivity workshops and stress management groups that address appearance pressures and encourage self-acceptance.
- **Targeted Interventions:** Clinical staff can draw on cognitive-behavioral techniques aimed at reframing dysmorphic thoughts to help students build healthiest coping strategies.

LIMITATIONS

Several study limitations should be noted. First, the use of non-probability purposive sampling limits generalizability to the broader student population in Pakistan. Second, the cross-sectional design prevents drawing causal conclusions about whether body image distress directly drives stress or vice versa. Third, reliance on self-report instruments leaves room for response biases, such as social desirability.

Future studies should consider using probability sampling across multiple regions and institutions to improve representativeness. Longitudinal research tracking students across their degree programs would clarify how appearance worries and stress interact over time. Additionally, incorporating variables such as social media usage, physical activity levels, and self-esteem could yield a more complete model of young adult psychological well-being.

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