

THE RELATIONSHIP BETWEEN BODY IMAGE SATISFACTION AND CLASSROOM PARTICIPATION ANXIETY AMONG UNIVERSITY STUDENTS

Ammara Wali¹, Areeba Ahmed Ali², Ayesha Dilawar Khan³, Sanaullah⁴,
Bushra Abdul Khaliq⁵, Aamna Sajjad⁶, Umme Aiman Abdul Haq⁷, Nimra Zada⁸,
Eisha Fatima⁹

¹Lecturer FUUAST, Karachi
^{2,3,4,5,6,7,8,9}Bs Student FUUAST, Karachi

¹amarawali6@gmail.com, ²areeba.ahmed1510@gmail.com, ³ayeshakhaan591@gmail.com,
⁴khansnahullahkhan9876@gamil.com, ⁵km5371310@gmail.com, ⁶aamnasajjad84@gmail.com,
⁷missumme018@gmail.com, ⁸nk7170282@gmail.com, ⁹eishaaslam99@gmail.com

DOI: <https://doi.org/10.5281/zenodo.20807745>

Keywords

Body image satisfaction, classroom participation anxiety, university students, quantitative correlation, Karachi

Article History

Received: 25 April 2026

Accepted: 05 June 2026

Published: 23 June 2026

Copyright @Author

Corresponding Author: *

Ammara Wali

Abstract

This study examined the relationship between body image satisfaction and classroom participation anxiety among university students. Body image played an important role in shaping how students felt about themselves, and concerns about physical appearance could affect their confidence and willingness to participate in classroom activities. Although appearance-related stress and anxiety had been widely studied in different countries, limited research had explored this relationship among university students in Pakistan. Therefore, the present study investigated whether body image satisfaction was associated with classroom participation anxiety. It was hypothesized that there would be a significant relationship between body image satisfaction and classroom participation anxiety among university students. A quantitative, cross-sectional correlational research design was used. Using convenience sampling, 304 university students (147 females and 157 males) from public and private universities in Karachi participated in the study through online surveys. Most participants were enrolled in undergraduate BS programs. Data were collected using the Body-Image Questionnaire (BIQ; Koleck et al., 2002; $\alpha = .82$) and the Classroom Anxiety Measure (CAM; Richmond et al., 2001; $\alpha = .90$). The data were analyzed using SPSS Version 27. The findings revealed a significant negative relationship between body image satisfaction and classroom participation anxiety $r(304) = -.489, p < .001$. Students who were more satisfied with their appearance reported lower levels of anxiety when participating in class, whereas students who were less satisfied with their appearance experienced greater classroom participation anxiety. The study's limitations, recommendations for future research, and counseling implications were also discussed.

INTRODUCTION

Body image was defined as the way an individual perceived, evaluated, and felt about their own body, particularly regarding features like weight, shape, size, and general appearance. This represented a deeply personal construct shaped by a blend of cultural pressures and internal psychological mindsets; ultimately, body image played a critical role in identity formation and self-worth (Schilder, 1935; Slade, 1994). When individuals developed a negative perception of their bodies, it frequently manifested as social physique anxiety. This specific type of distress stemmed from the persistent, uncomfortable fear that others were observing and negatively judging one's physical form. Rather than being a minor or superficial worry about looks, negative body image acted as a deep psychological vulnerability that could severely harm a student's broader mental health outcomes (Pablos-Gabriel et al., 2026). Within the university setting, this anxiety heavily altered student behavior. When students felt acutely self-conscious about their physical appearance, they tended to withdraw from and avoid public activities, such as participating in class discussions, engaging in group projects, or delivering presentations, solely to escape evaluation by their peers (Hart et al., 1989).

To achieve academic success, university students required effective social adjustment, which entailed balancing rigorous academic expectations while establishing positive relationships with peers (Baker and Siryk, 1989). However, when students became overwhelmed by poor body image and its associated anxiety, they often experienced difficulties in adjusting academically and socially. According to Objectification Theory, when people were exposed to appearance-focused environments, they began to view themselves from an outsider's perspective (Fredrickson & Roberts, 1997). This perspective triggered an ongoing state of body surveillance, where students constantly checked and worried about how they looked to those around them. Synthesizing these dynamics, Pablos-Gabriel et al. (2026) confirmed that this persistent appearance-related anxiety directly increased social anxiety and social dysfunction

among higher education populations, driving a persistent fear of being judged negatively by peers. As a result, students began to isolate themselves from others, which eventually compromised their academic potential and performance. Highlighting this specific issue, Nadeem et al. (2025) argued that it was crucial to investigate how appearance-related stress inhibited classroom participation. They specifically noted that this phenomenon warranted closer examination within Pakistani universities, where unique social and cultural pressures uniquely influenced how young adults perceived themselves.

Conversely, body image satisfaction referred to feeling secure, content, and comfortable with one's physical body. Feeling positive about one's appearance naturally enhanced self-esteem, boosted overall morale, and protected mental health. On the other hand, body dissatisfaction fueled constant insecurity and self-doubt. Consequently, researchers recognized body perception as a foundational pillar of emotional well-being and personality development (Cash & Pruzinsky, 1990; Koleck et al., 2002). Examining the context of Pakistan, Sonia et al. (2024) discovered a strong link between body satisfaction and social anxiety among female college students, demonstrating that as body satisfaction increased, social anxiety decreased. Their findings proved that body image struggles were not merely private, isolated issues rather, these struggles acted as tangible academic barriers that undermined student confidence and detracted from the overall university experience.

This vulnerability appeared especially pronounced during emerging adulthood, a developmental stage that coincided with the college years. Manzoor et al. (2024) observed that young adults faced intense societal and media pressures to conform to specific appearance ideals, making body image a major determinant of their mental health. Their study revealed that body dissatisfaction sparked a profound fear of negative evaluation. Furthermore, when students struggled with emotion regulation, this fear triggered intense social anxiety, making

them feel highly uncomfortable during routine peer interactions and collaborative assignments. This strong impulse to withdraw explained why many students chose to remain silent during class. Karim and Shah (2012) pointed out that when university students refused to speak up or deliver presentations, it was rarely due to laziness or apathy. Instead, it was typically driven by classroom participation anxiety, which was a specific form of distress wherein students were highly anxious about making mistakes, stammering, or facing humiliation in front of their peers. Although modern higher education institutions favored active learning methodologies, Cooper et al. (2018) cautioned that instructional practices such as cold-calling or mandatory group work could backfire. For students who were already highly self-conscious and fearful of judgment, these teaching methods drastically elevated stress levels, leading them to withdraw from participation and remain silent in classroom settings.

In summary, university life represented an important stage in the lives of young adults, and students in Pakistan often experienced social and cultural pressures related to their physical appearance. Body image was not only concerned with appearance but was also closely connected to how students felt about themselves. Students with lower levels of body image satisfaction often experienced greater concerns about how others perceived them, which could affect their confidence and participation in classroom activities. As a result, some students avoided speaking in class, participating in group discussions, or giving presentations. In contrast, students with higher levels of body image satisfaction appeared to experience lower levels of anxiety and were more willing to engage in classroom activities. Since active participation is an important part of university education, appearance-related concerns may have acted as barriers to academic engagement for some students. Therefore, examining the relationship between body image satisfaction and classroom participation anxiety among Pakistani university students was important for understanding factors

that may influence both their emotional well-being and academic involvement.

Rationale of the Study

Firstly, body image satisfaction is an important aspect of psychological well-being and self-confidence among university students. The way students feel about their physical appearance can influence their thoughts, emotions, and social interactions. Students with lower levels of body image satisfaction may experience concerns about how they are perceived by others, which can affect their confidence in academic settings. Therefore, the present study aims to examine the relationship between body image satisfaction and classroom participation anxiety among university students.

Secondly, although international research has highlighted the importance of body image satisfaction in relation to self-esteem, confidence, and social functioning, limited research has explored its relationship with classroom participation anxiety among university students in Pakistan. Pakistani students experience unique social and cultural influences that may shape their perceptions of physical appearance differently from students in other countries. Therefore, this study addresses an important gap in the local literature and contributes to a better understanding of this relationship within the Pakistani context.

Thirdly, classroom participation anxiety is recognized as an important challenge that may affect students' academic experiences. Students who experience anxiety in classroom settings may feel uncomfortable speaking in discussions, answering questions, or giving presentations. As classroom participation is often an essential part of learning, understanding factors associated with this type of anxiety is important. Examining its relationship with body image satisfaction may provide valuable insights into students' academic and emotional experiences.

Fourthly, most studies conducted in Pakistan have focused on body image concerns in relation to clinical issues such as eating disorders or psychological difficulties. In contrast, the present study focuses on university students from the

general population. This approach highlights how everyday concerns related to physical appearance may be associated with students participation and engagement in academic settings.

Fifthly, gender has frequently been discussed in body image research, as experiences related to appearance may differ among students. By including both male and female university students, the present study aims to provide a broader understanding of the relationship between body image satisfaction and classroom participation anxiety within the Pakistani university population.

Lastly, understanding this relationship has practical importance for educational institutions and mental health professionals. The findings may help psychologists, counselors, educators, and university administrators better understand factors associated with students classroom participation. In addition, the results may contribute to the development of awareness programs, counseling services, and student support initiatives aimed at promoting confidence, well-being, and academic engagement among university students.

LITERATURE REVIEW

Body image was defined as a multidimensional psychological construct encompassing cognitive, affective, and behavioral dimensions of how individuals perceived, thought about, and related to their physical appearance. Grogan (2017) defined body image as the combination of thoughts, feelings, and behaviors directed toward one's body, emphasizing that it extended beyond mere physical appearance to include subjective experiences of body competence and satisfaction. Cash and Pruzinsky (2002) argued that body image functioned as a core component of self-concept, influencing emotional stability, self-esteem, and social functioning. Leone et al. (2014) demonstrated that body image was not a unitary construct but rather comprised multiple aspects including body competence, body-related insecurity, and internal conflict about physical appearance. These conceptual perspectives established that body image satisfaction reflected

not only how individuals viewed their bodies but also how comfortable and confident they felt within their physical selves. However, while scholars had extensively examined body image in relation to eating behaviors, mental health, and general well-being, limited research explored how body image satisfaction specifically influenced academic behaviors such as classroom participation anxiety.

Objectification Theory provided a foundational framework for understanding how sociocultural appearance standards shaped individuals body-related experiences and subsequent behaviors. Developed by Fredrickson and Roberts (1997), the theory proposed that repeated exposure to appearance-focused cultural messages led individuals, particularly women, to internalize an observer's perspective on their own bodies. This phenomenon was termed self-objectification. This internalization manifested as chronic self-monitoring of physical appearance, known as body surveillance, wherein individuals habitually monitored how their bodies appeared to others rather than how their bodies felt or functioned. Moradi and Huang (2008) highlighted that self-surveillance was associated with heightened self-consciousness and reduced psychological well-being. In educational contexts, students experiencing high self-objectification often became excessively aware of their physical appearance during classroom interactions, particularly when required to occupy visible positions such as speaking before peers, answering questions, or delivering presentations. Despite the theoretical relevance of Objectification Theory to understanding appearance-related anxiety in evaluative situations, empirical research did not systematically apply this framework to examine classroom participation anxiety as a specific outcome, leaving an important gap between theory and educational practice.

Self-Presentation Theory complemented Objectification Theory by explaining the motivational and behavioral consequences of appearance concerns in social situations. Leary and Kowalski (1990) proposed that individuals were fundamentally motivated to control how

others perceived them and that this impression management process became particularly salient in evaluative contexts. When individuals believed they might fail to create a favorable impression, they experienced a fear of negative evaluation, a specific form of social anxiety characterized by apprehension about being judged unfavorably by others. This fear often manifested as avoidance of high-visibility situations where evaluation seemed likely. For university students with low body image satisfaction, classroom participation represented precisely such a high-visibility, evaluative situation. When called upon to speak, present, or contribute verbally, these students feared that their physical appearance would be judged negatively by peers, leading them to avoid participation. Gleeson and Frith (2006) demonstrated that body-related self-narratives shaped interpersonal confidence, suggesting that how individuals conceptualized their bodies influenced their willingness to engage in social interactions. While Self-Presentation Theory had been applied extensively to understand social anxiety and avoidance in general contexts, it was not integrated with body image research to explain specific academic behaviors such as verbal participation in university classrooms.

Control-Value Theory offered an educational psychology framework that specifically addressed how emotions arose in achievement situations and influenced academic behavior. Pekrun (2006) proposed that achievement emotions depended on two critical appraisals: perceived control over the situation and the subjective value attached to it. When students perceived high value but low control in an academic situation, they experienced anxiety. This framework was particularly relevant for understanding classroom participation anxiety among students with body image concerns. Students who felt dissatisfied with their physical appearance often perceived reduced control over how they were evaluated by peers during visible academic tasks such as oral presentations, spontaneous question responses, or group discussions. Even though they valued academic success and recognized the importance of participation, the perceived lack of control over

appearance-based peer evaluation generated anxiety. Pekrun et al. (2007) found that when students considered academic situations important but felt low perceived control, they experienced heightened anxiety that interfered with performance. Shao et al. (2023) demonstrated that classroom emotions were directly related to student silence and engagement patterns. Reuman et al. (2017) reported that socially anxious students experienced particular difficulty with interactive tasks in active learning classrooms. While Control-Value Theory illuminated how perceived control and value generated achievement emotions, existing research did not examine whether appearance-related perceived control deficits stemming from low body image satisfaction constituted a distinct pathway to classroom participation anxiety.

These international theoretical perspectives helped explain why body image satisfaction mattered in visible academic settings, including Pakistani university classrooms. Empirical research on social physique anxiety provided evidence linking appearance concerns with discomfort in public evaluative situations. Hart et al. (1989) developed the Social Physique Anxiety Scale to measure the extent to which individuals experienced anxiety about others' evaluations of their physique. Their research established that concerns about physical evaluation were associated with discomfort and avoidance in situations involving public visibility, such as exercise settings where the body was conspicuous. Hagger and Stevenson (2010) reported that lower physical self-worth and self-esteem predicted elevated social physique anxiety, with female students consistently demonstrating higher anxiety levels than male students. This gender difference suggested that sociocultural appearance pressures differentially affected how women experienced visibility in public situations. These studies established that body-related appearance anxiety influenced behavior in physical activity contexts. However, they did not examine whether similar anxiety patterns emerged in academic contexts where the body remained visible but was

not the explicit focus of the activity, such as classroom discussions and presentations.

Research consistently documented associations between body dissatisfaction and patterns of psychological distress and social withdrawal. Cash and Pruzinsky (2002) argued that body dissatisfaction was linked with emotional instability, reduced self-esteem, and compromised social functioning, suggesting that individuals unhappy with their appearance experienced both emotional difficulties and behavioral withdrawal. Stice and Shaw (2002) found that lower body satisfaction, particularly when reinforced by media exposure and social comparison, contributed to anxiety and withdrawal tendencies. Their research demonstrated that appearance-related distress extended beyond private emotional experiences to influence observable social behaviors. These findings indicated that body image concerns had tangible consequences for how individuals engaged with their social environments. While this body of research established clear connections between body satisfaction and general social withdrawal, it did not specify whether withdrawal extended to academic participation behaviors or whether the mechanisms operated similarly in educational versus purely social contexts.

Emerging research from Pakistani university settings suggested that appearance-related concerns carried particular psychological and academic significance within this cultural context. Sonia et al. (2024) found that body image satisfaction was negatively correlated with social anxiety among female university students in Pakistan, indicating that lower body satisfaction corresponded with greater social anxiety. This relationship suggested that cultural beauty standards and appearance-related social pressures in Pakistan intensified the psychological impact of low body satisfaction. Rashid et al. (2021) found that body image concerns were significantly associated with psychological distress among Pakistani university students, indicating that negative perceptions of one's appearance may adversely affect psychological well-being. Manzoor et al. (2024) identified fear of negative evaluation and weak emotional regulation as mediating

mechanisms explaining the relationship between body image dissatisfaction and social anxiety. Nadeem et al. (2025) found that social physique anxiety negatively predicted social adjustment and was significantly elevated among overweight students, with female students reporting higher anxiety levels than male students. These studies established the prevalence and psychological impact of body image concerns among Pakistani university students however, they focused primarily on general social anxiety, psychological distress, and broad social adjustment rather than examining classroom participation anxiety as a specific academic behavior warranting separate investigation.

Classroom participation represented a critical dimension of student engagement associated with learning outcomes, skill development, and academic achievement. Freeman et al. (2014) conducted a meta-analysis demonstrating that active learning strategies requiring student participation were associated with improved academic performance across disciplines. These findings highlighted that classroom engagement and participation contributed positively not only to learning outcomes but also to students' academic motivation and overall educational experience. However, for many students, participating in class activities generated significant anxiety. Karim and Shah (2012) found that communication apprehension and concerns about being judged unfavorably were primary barriers to classroom participation among university students. Rocca (2010) reported that student reticence stemmed from multiple sources including fear of making mistakes, sensitivity to peer judgment, and general social anxiety. McCroskey and Richmond (1992) described communication apprehension as a trait-like tendency to experience fear or anxiety associated with real or anticipated communication with others. Individuals with high communication apprehension often avoid communication situations and participate less in classroom discussions, which may manifest as silence and reluctance to speak.

Despite growing scholarship on body image and anxiety, several critical gaps remained in the literature. First, most existing research examined lower body satisfaction in relation to general social anxiety, eating behaviors, mental health outcomes, or physical activity contexts, with limited attention to specific academic behaviors such as classroom participation. Second, while educational research identified fear of negative evaluation and communication apprehension as barriers to classroom participation, these studies did not systematically investigate body image satisfaction as a predictor of such evaluative fears. Third, theoretical frameworks including Objectification Theory, Self-Presentation Theory, and Control-Value Theory offered compelling explanations for how body image concerns might influence classroom participation anxiety, yet these frameworks had not been empirically tested in educational contexts with participation as the outcome variable. Fourth, much of the available research originated from Western cultural contexts, with comparatively fewer studies exploring body image and academic behavior relationships within Pakistani university settings where appearance norms, gender expectations, and peer evaluation processes operated distinctively. The present study addressed these gaps by examining whether body image satisfaction directly predicted classroom participation anxiety among university students in Pakistan. This investigation held significance for multiple reasons. First, classroom participation constituted a critical academic behavior associated with learning, communication skill development, critical thinking, and academic confidence. Understanding appearance-related barriers to participation explained persistent silence and disengagement among capable students. Second, by integrating body image research with educational psychology frameworks, this study contributed to theoretical development bridging appearance psychology and achievement emotions. Third, by focusing on Pakistani university students, this research provided culturally situated evidence that accounted for local appearance norms and educational contexts. Finally, findings informed

practical interventions including inclusive teaching practices, counseling support, and classroom environment modifications that reduced appearance-based barriers and promoted equitable participation opportunities for all students regardless of body image satisfaction levels.

HYPOTHESES

On the basis of extensive literature review, the following hypotheses was formulated.

H1: There would be a significant relationship between body image satisfaction and classroom participation anxiety among university students.

Methodology

Research Design

Present study was, a quantitative correlational cross-sectional research design was used to examine the relationship between body image satisfaction and classroom participation anxiety among university students. Data were collected at a single point in time through standardized psychological scales.

Sampling Techniques

Convenience sampling technique (non-probability sampling) was used to select participants from different public and private universities in Karachi.

Participants

The present study comprised 304 university students enrolled in various academic programs. The sample included 147 female and 157 male students, all aged 18 years or older. Participants were recruited from undergraduate and postgraduate degree programs. Specifically, 287 participants (94.4%) were enrolled in BS undergraduate programs, 14 participants (4.6%) were pursuing MS/MPhil degrees, and 3 participants (1.0%) were enrolled in PhD programs. This diverse academic representation enabled the inclusion of students at different stages of higher education.

Research Sites

Participants were selected through online data collection from different public and private universities in Karachi.

Measures

It should be noted that formal written permission from the original authors/authorities was obtained through email correspondence for all psychological measures used in the current study.

A) Consent Form

A consent form was provided to all participants before participation in the study. The form included details regarding the purpose of the study, confidentiality, voluntary participation, anonymity, and the right to withdraw at any stage. All ethical guidelines provided by the American Psychological Association (APA) and the Ethical Review Committee (by Department of Psychology, FUUAST) were strictly followed.

B) Demographic Form

A demographic form was developed by the researcher to obtain relevant personal information from participants. The form included demographic variables such as age, gender, academic program, marital status, family system, employment status, locality, religion, ethnicity, and mother language.

C) Body-Image Questionnaire (BIQ; Koleck et al., 2002)

Participants' level of body image satisfaction was assessed using the English version of the Body-Image Questionnaire (BIQ; Koleck, Bruchon-Schweitzer, Cousson-Gélie, Gilliard, & Quintard, 2002). The BIQ consists of 19 items presented as bipolar adjective pairs describing physical self-perceptions. Each item is rated on a 5-point Likert-type scale anchored by opposite adjectives. Total scores range from 19 to 95, with higher scores reflecting greater body image satisfaction. Scoring followed the original guidelines favorable items (1, 6, 7, 9, 10, 12, 14, 16, and 18) were scored directly (1-5), while unfavorable items (2, 3, 5, 8, 11, 13, 15, 17, and

19) were reverse-scored (5 = 1, 4 = 2, 3 = 3, 2 = 4, 1 = 5). Item 4 (Feminine-Masculine) was scored according to participants' gender directly for male respondents and reverse-scored for female respondents. The BIQ has demonstrated satisfactory psychometric properties. The validation study reported good construct validity and acceptable internal consistency (Cronbach's $\alpha = .82$). Formal permission to use the scale in the present study was obtained from the original author via email correspondence.

D) Classroom Anxiety Measure (Richmond et al., 2001)

The Classroom Anxiety Measure (CAM) was used to assess students' anxiety related to classroom participation. Developed by Richmond, Wrench, and Gorham (2001), the scale consists of 20 items adapted from Richmond's Situational Communication Apprehension Measure. Items are rated on a 5-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree), yielding total composite scores between 20 and 100. Higher scores reflect greater levels of classroom participation anxiety; specifically, scores of 25 and below indicate low anxiety, scores between 26 and 79 indicate moderate anxiety, and scores of 80 and above indicate high classroom anxiety. To ensure that higher overall scores consistently reflect greater anxiety, 10 positively worded items reflecting calm or positive affect were reverse-scored (1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1) prior to analysis, Item 3, Item 4, Item 6, Item 10, Item 12, Item 13, Item 15, Item 16, Item 18, and Item 19. The CAM has demonstrated strong internal consistency in educational research, with an expected Cronbach's alpha reliability coefficient of approximately 0.90. Formal permission to utilize the instrument for the present study was obtained from the primary author via email correspondence.

Inclusion Criteria

○ Students aged 18 years and above who were currently enrolled in undergraduate, MS/MPhil, and PhD university programs were included in the present study.

- Participants from both male and female genders studying in different public and private universities were included to ensure diversity in the sample.
- Only those students who voluntarily agreed to participate in the study and provided informed consent were considered eligible for participation.
- Students who were able to understand and respond to the English language questionnaires appropriately were included in the study.
- Participants having internet access and availability for online data collection were included because all responses were collected through online survey forms.
- Students enrolled in full-time academic programs with regular classroom participation were considered suitable for the present study.
- Only those participants who provided complete, valid, and carefully filled responses on all study measures were included in the final sample.

Exclusion Criteria

- Students below 18 years of age and individuals who were not enrolled in any university program were excluded from the present study.
- Students who were unwilling to participate voluntarily or did not provide informed consent were not included in the study sample.
- Participants who submitted incomplete questionnaires or left major portions of the survey unanswered were excluded from the final analysis.
- Students who were unable to understand or respond properly to the English language questionnaires were excluded from the study.
- Participants enrolled in distance-learning or fully online academic programs were excluded because the study focused on classroom participation anxiety.
- Students with diagnosed psychological or medical conditions that could affect their responses or influence the study variables were not included in the present study.
- Participants providing inconsistent, random, or careless responses during data collection were excluded from the study analysis.

- Students who had previously participated in similar research studies were also excluded from the present study.

Ethical Considerations

All ethical considerations provided by the American Psychological Association (APA) and the Ethical Review Committee of the Department of Psychology were strictly followed.

Procedure

In the current study, participants were selected from different public and private universities located in Karachi through online data collection. The objective and nature of the study were explained to all participants before participation. All ethical standards were explained to participants and strictly followed throughout the study. Participation was completely voluntary, and informed consent was obtained from all participants prior to data collection. Data were collected individually through online survey forms. First, participants completed the demographic form followed by all psychological measures used in the study, including the Body-Image Questionnaire (BIQ) and the Classroom Anxiety Measure (CAM). Participants were requested to respond honestly and carefully to all items. By the end of the data collection process, participants were thanked for their valuable participation in the current study.

Statistical Analysis

Scoring was done according to the respective scoring manuals of the scales. Descriptive and inferential statistics were computed by using SPSS Version 27. Mean, standard deviation, minimum, and maximum scores were calculated for the study variables. Pearson Product Moment Correlation was used to examine the relationship between body image satisfaction and classroom participation anxiety among university students.

Operational Definitions

Body image satisfaction

“Body image refers to the multifaceted psychological experience of embodiment, especially but not exclusively one’s physical appearance” (Cash & Pruzinsky, 2002).

Classroom participation anxiety

“Communication apprehension is an individual’s level of fear or anxiety associated with either real

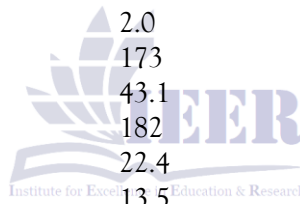
or anticipated communication with another person or persons” (McCroskey, 1977).

RESULT

The chapter presents the statistical analysis of the research data. Statistical Package for Social Sciences (SPSS) was used to analyze the collected data. Significant level of 0.05 was used for the analysis.

Table 1
Demographic Characteristics of Participants (N = 304)

Variable	Category	n	%
Gender	Female	147	48.4
	Male	157	51.6
Academic Program	BS (Undergraduate)	287	94.4
	MS/MPhil	14	4.6
	PhD	3	1.0
Marital Status	Single	276	90.8
	Married	22	7.2
	Other	6	2.0
Family System	Nuclear	173	56.9
	Joint	131	43.1
Employment Status	Not Employed	182	59.9
	Part-time	68	22.4
	Employed	41	13.5
	Full-time Employed	13	4.3
Locality	Urban	229	75.3
	Rural	75	24.7
Religion	Islam	297	97.7
	Hinduism	5	1.6
	Christianity	2	0.7
Ethnicity	Urdu Speaking	135	44.4
	Pushto	54	17.8



Variable	Category	n	%
	Sindhi	36	11.8
	Punjabi	33	10.9
	Balochi	2	7
	Other	44	14.5
Mother Language	Urdu	129	42.4
	Punjabi	36	11.8
	Sindhi	34	11.2
	Pashto/Pushto	54	17.8
	Balti/Baltee	14	4.6
	Hindko/Hinko	10	3.3

Memoni	3	1.0
Balochi	2	0.7
Hazara	2	0.7
Kashmiri	2	0.7
Shina	2	0.7
Saraiki/Seraiyki	4	1.3
Other Languages	12	3.9

Note. N = total number of participants; n = frequency; % = percentage. Percentages may not sum to exactly 100% due to rounding.

Table 2
Descriptive Statistics for Study Variables

Variable	N	M	SD
TOTAL_BIQ	304	61.90	8.482
TOTAL_CA	304	52.27	9.931

TOTAL_BIQ scores ranged from 29 to 95; TOTAL_CA scores ranged from 24 to 82.

Table 3
Bivariate Correlation Between Study Variables

Variable	1	2
1. TOTAL_BIQ	—	
2. TOTAL_CA	-0.489**	—

Note. N = 304. $p < .001$. ** indicates correlation is significant at the .01 level (2-tailed).

DISCUSSION

The purpose of the present study was to examine the relationship between body image satisfaction and classroom participation anxiety among university students. The findings provided valuable information about how students' feelings about their physical appearance might have affected their confidence and participation in classroom activities. The demographic information of the participants was presented in Table 1. A total of 304 university students participated in the study. The sample included both male (51.6%) and female (48.4%) students, showing a fairly balanced gender distribution. Most participants were undergraduate (BS) students (94.4%), while only a small number belonged to MS/MPhil and PhD programs. The majority of participants were single (90.8%), belonged to nuclear families (56.9%), were not employed (59.9%), and lived in urban areas (75.3%). Most participants were Muslim (97.7%). Students from different ethnic and language backgrounds were also represented

in the study, with Urdu-speaking participants forming the largest group. This diversity helped provide a broader picture of university students from different backgrounds. The descriptive statistics shown in Table 2 provided an overview of the study variables. The average score for body image satisfaction was 61.90 (SD = 8.48), indicating that many students reported a moderate level of satisfaction with their appearance. The average score for classroom participation anxiety was 52.27 (SD = 9.93), suggesting that many students experienced some level of anxiety when participating in classroom discussions, answering questions, or giving presentations. The variation in scores showed that students differed in their experiences of both body image satisfaction and classroom participation anxiety. The hypothesis of the study stated that there would be a significant relationship between body image satisfaction and classroom participation anxiety among university students. The results supported this hypothesis. As shown in Table 3, a significant negative

relationship was found between body image satisfaction and classroom participation anxiety ($r = -.489, p < .001$). This meant that students who felt more satisfied with their appearance generally reported lower levels of classroom participation anxiety. On the other hand, students with lower levels of body image satisfaction tended to experience higher levels of anxiety during classroom participation. The findings of the present study were consistent with previous research. Ahmed et al. (2026) reported that body dissatisfaction and appearance-related concerns contributed to emotional distress and anxiety among university students in Pakistan. Similarly, Dou et al. (2023) found that individuals who were dissatisfied with their appearance often experienced higher levels of social anxiety and negative feelings about themselves. The present study added to this literature by showing that body image concerns might also have affected students' confidence and participation in academic settings. One possible explanation for these findings was that university students often interacted with classmates and teachers through discussions, presentations, and other classroom activities. Students with lower levels of body image satisfaction might have worried about how others viewed them and might have feared being judged negatively. Because of these concerns, they may have felt nervous when speaking in class or participating in academic activities. As a result, they may have avoided classroom participation, which could have increased their anxiety over time. The demographic characteristics of the sample might also have helped explain the findings. Most participants were undergraduate students who were likely in late adolescence or early adulthood. This stage of life is often associated with greater concern about appearance, identity, and social acceptance. Many young adults compared themselves with others and might have felt pressure to meet certain appearance standards promoted by society and social media. These pressures could have affected how they felt about their bodies and might have influenced their confidence in social and academic situations. The findings could also be understood through

Objectification Theory and Self-Presentation Theory. Objectification Theory suggests that people who are highly concerned about their appearance may become more focused on how they look and how others view them. This can increase self-consciousness and anxiety. Self-Presentation Theory explains that people often feel anxious when they believe they may be judged by others. In classroom settings, students who were less satisfied with their appearance might have worried about making mistakes or attracting negative attention, which may have increased their anxiety about participation. Overall, the findings suggested that body image satisfaction played an important role in students' classroom experiences. Students who felt positive about their appearance appeared to be more confident, comfortable, and willing to participate in class activities. In contrast, students with lower levels of body image satisfaction experienced greater anxiety and were less likely to engage actively in classroom discussions and presentations. Therefore, promoting positive body image among university students may help improve their confidence, participation, and overall academic experience.

CONCLUSION

The overall findings suggested that positive body image plays an important role in supporting students' psychological well-being, self-confidence, and academic functioning. Students who felt satisfied with their physical appearance experienced reduced fear of negative evaluation and greater comfort in socially interactive academic environments. As a result, they participated more confidently in classroom discussions, presentations, and other learning activities. The study also highlighted the importance of creating supportive and psychologically safe educational environments within universities. Educational institutions, teachers, and mental health professionals should promote self-esteem, body positivity, and emotional well-being among students in order to reduce classroom participation anxiety and encourage active academic involvement. Awareness programs, counseling services, and

positive peer environments may help students develop healthier self-perceptions and greater confidence in classroom settings.

Limitations

The present study focused only on university students. Future research should include individuals from different age groups, educational levels, or occupational backgrounds to develop a broader understanding of the relationship between body image satisfaction and classroom participation anxiety. Demographic variables were included; certain related psychological factors such as self-esteem, social comparison, social media usage, and peer influence were not examined in the current study. Including these variables in future studies may provide a deeper understanding of the psychological factors associated with body image and anxiety. Therefore, causal relationships could not be established. Future researchers are encouraged to conduct longitudinal studies to examine how body image satisfaction and classroom participation anxiety may change over time during students' academic years.

Implication of the study

The findings of the present study suggest that body image satisfaction plays an important role in reducing classroom participation anxiety among university students. Students who feel satisfied and confident about their physical appearance are more likely to participate actively in classroom discussions, presentations, and other academic activities. Therefore, the findings of this study may help teachers, psychologists, counselors, and educational professionals better understand the emotional difficulties faced by students who struggle with body image concerns. The findings also indicated that, university counselors and mental health professionals can arrange awareness programs, counseling sessions, and workshops to help students develop positive body image and self-confidence. Such efforts may help reduce anxiety related to classroom participation and improve students' academic confidence and emotional well-being. Moreover, the study suggests that

teachers should create supportive and friendly classroom environments where students feel comfortable expressing their opinions without fear of criticism or negative judgment. Positive classroom environments may encourage students to communicate more openly and participate confidently in academic activities.

REFERENCES

- Ahmed, R., Malik, S., & Iqbal, N. (2026). The impact of body shaming on psychological stress and anxiety among higher education cohorts in Pakistan. *Pakistan Journal of Social Science Review*, 14(2), 112–125.
- Baker, R. W., & Siryk, B. (1989). *Student Adaptation to College Questionnaire (SACQ): Manual*. Western Psychological Services.
- Cash, T. F., & Pruzinsky, T. (Eds.). (1990). *Body images: Development, deviance, and change*. Guilford Press.
- Cash, T. F., & Pruzinsky, T. (Eds.). (2002). *Body image: A handbook of theory, research, and clinical practice*. Guilford Press.
- Cooper, K. M., Downing, V. R., & Brownell, S. E. (2018). The dark side of student activation: Class anxiety in underrepresented students in large-enrollment active learning science courses. *CBE—Life Sciences Education*, 17(3), Article 49.
- Dou, Q., Chang, R., & Hui, X. (2023). Body dissatisfaction and social anxiety among adolescents: A moderated mediation model of feeling of inferiority, family cohesion and friendship quality. *Applied Research in Quality of Life*, 18(4), 1873–1895.
- Fredrickson, B. L., & Roberts, T. A. (1997). Objectification theory: Toward understanding women's lived experiences and mental health risks. *Psychology of Women Quarterly*, 21(2), 173–206.
- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the National Academy of Sciences*, 111(23), 8410–8415.

- Gleeson, K., & Frith, H. (2006). Deconstructing body image. *Journal of Health Psychology, 11*(1), 79-90.
- Grogan, S. (2017). *Body image: Understanding body dissatisfaction in men, women and children* (3rd ed.). Routledge.
- Hagger, M. S., & Stevenson, S. J. (2010). Social physique anxiety in college students. *Journal of Sport and Exercise Psychology, 32*(3), 311-332.
- Hart, E. A., Leary, M. R., & Rejeski, W. J. (1989). The measurement of social physique anxiety. *Journal of Sport and Exercise Psychology, 11*(1), 94-104.
- Karim, N. H. A., & Shah, P. M. (2012). Classroom participation anxiety as a predictor of oral communication competence among university students. *Journal of English Language and Literature, 2*(4), 188-197.
- Koleck, M., Mazaux, J. M., Rasclé, N., & Bruchon-Schweitzer, M. (2002). Body image and coping strategies in patients with physical disabilities. *International Journal of Rehabilitation Research, 25*(4), 311-317.
- Leary, M. R., & Kowalski, R. M. (1990). Impression management: A literature review and two-component model. *Psychological Bulletin, 107*(1), 34-47.
- Leone, J. E., Mullin, E. M., Gray, K. A., & Aguiar, M. (2014). Development and validation of the Adolescent Body Image Satisfaction Scale. *International Journal of Men's Health, 13*(1), 38-52.
- Manzoor, Z., Ali, G., Nadeem, U., Fatima, S. M., & Sultan, S. (2024). Body image impacts social anxiety: Chain mediation of fear of negative evaluation and emotional regulation. *Journal of Population Therapeutics and Clinical Pharmacology, 31*(9), 1957-1964.
- McCroskey, J. C. (1977). Quiet children and the classroom teacher. *Today's Speech, 25*(4), 14-17.
- Moradi, B., & Huang, Y. P. (2008). Objectification theory and psychology of women: A decade of advances. *Psychology of Women Quarterly, 32*(4), 377-398.
- Nadeem, H., Saleem, M. A., Khan, R. A. A., & Ahmad, R. Z. (2025). Social physique anxiety and body image as precursors of social adjustment among university students. *Social Science Review Archives, 3*(2), 982-1009.
- Pablos-Gabriel, C., Sánchez-García, A. B., Patino-Alonso, C., & Sánchez-García, J. C. (2026). Body image and mental health in university students: A scoping review. *Frontiers in Psychology, 17*, Article 1796613.
- Pekrun, R. (2006). Control-value theory of achievement emotions. *Educational Psychology Review, 18*(4), 315-341.
- Pekrun, R., Frenzel, A. C., Goetz, T., & Perry, R. P. (2007). Control-value theory of achievement emotions. In *Emotion in education* (pp. 13-36). Academic Press.
- Rashid, Z., Arzeen, N., & Shah, M. (2021). Body image and psychological distress among university students. *Journal of Postgraduate Medical Institute, 35*(3), 181-184.
- Reuman, L., Jacoby, R. J., Fabricant, L. E., & Abramowitz, J. S. (2017). Social anxiety in active learning classrooms. *Journal of Anxiety Disorders, 49*, 103-111.
- Richmond, V. P., & McCroskey, J. C. (1992). *Communication: Apprehension, avoidance, and effectiveness* (3rd ed.). Gorsuch Scarisbrick.
- Rocca, K. A. (2010). Student participation in the college classroom. *Communication Education, 59*(2), 185-213.
- Schilder, P. (1935). *The image and appearance of the human body*. Kegan Paul.
- Shao, K., Pekrun, R., Marsh, H. W., & King, R. B. (2023). Achievement emotions and classroom engagement. *Learning and Instruction, 85*, Article 101746.
- Slade, P. D. (1994). What is body image? *Behaviour Research and Therapy, 32*(5), 497-502.

Sonia, A., Sikandar, A., & Azhar, L. (2024). Body image satisfaction and social anxiety among female students at tertiary level. *International Research Journal of Social Sciences and Humanities*, 3(2), 376-385.

Stice, E., & Shaw, H. E. (2002). Body dissatisfaction and media exposure in eating disorders. *Journal of Social and Clinical Psychology*, 21(1), 1-16.

