

Body Image Perception and Its Influence on Mental Health Among Indian Youth

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Abstract

Background: Preoccupation with appearance has become increasingly common, especially among young people. Fear of being perceived as unattractive or failing to meet societal body image ideals can contribute to serious mental health concerns, including eating disorders, unhealthy weight-control behaviours, and difficulties in maintaining social relationships. This study aimed to examine the association between negative body image and mental health among students, as well as to explore gender differences in body image perception and mental health.

Methods: A purposive sample of 400 students (200 males and 200 females), aged 15–25 years, was drawn from diverse educational institutions in Varanasi city. Participants completed the Body Image Dissatisfaction Scale (BID), Body Image Concern Inventory (BICI), and the General Health Questionnaire-28 (GHQ-28). Data were analysed using independent t-tests, Pearson's correlation, and stepwise regression analysis to address the study objectives.

Results: Findings revealed significant correlations between body image dissatisfaction, body image concern (including dysmorphic symptoms and symptom interference), and all dimensions of general health, as well as overall general health. A significant gender difference was also found, with females reporting higher body image dissatisfaction compared to males.

Conclusion: The study underscores the significance of acknowledging and addressing appearance-related concerns among Indian youth. Promoting awareness and positive body image attitudes may serve as crucial strategies for enhancing mental health and well-being in this population.

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Introduction

Body image is conceptualized as a multidimensional construct that includes: (a) a behavioural component, reflected in body-related behaviours such as body checking; (b) a perceptual component, involving the perception of body characteristics, such as estimation of body size or weight; and (c) a cognitive–affective component, encompassing thoughts, attitudes, and feelings toward one’s body (Cash, 2004; Thompson et al., 1999). It has also been described as the self-perception of one’s physical self and the resulting emotions and cognitions (Cash, 2004). Body image is shaped by subjective evaluations and satisfaction with appearance, objective physical factors (e.g., body mass, height, proportions), interpersonal influences (e.g., opinions of family and peers), and sociocultural pressures such as media portrayals of beauty (Cash & Pruzinsky, 2002).

Body image concerns fluctuate across the lifespan, with adolescence and young adulthood being critical stages due to heightened sensitivity to external judgments (Bucchianeri et al., 2013). During these stages, perceived bodily imperfections may trigger ridicule or rejection (Tuszynska-Bogucka & Bogucki, 2016). Social perceptions of attractiveness are also influenced by the “halo effect,” whereby physically attractive individuals are assumed to possess other positive attributes, while those considered unattractive are often associated with negative qualities (Lammers et al., 2016).

Body dissatisfaction refers to negative evaluations of one’s body or specific body parts and is associated with discontent toward physical appearance (Grogan, 2016). Broader than dissatisfaction, body image concern includes preoccupation with appearance, fears of unattractiveness, body-related checking behaviours (e.g., weighing, mirror-checking), attempts to conceal perceived flaws, and frequent appearance-based comparisons. Such concerns are linked to unhealthy weight control behaviours, lower life satisfaction, and poor mental health outcomes (Grogan, 2006; Mudgal & Tiwari, 2015). According to the *DSM-5* (APA, 2013), body dissatisfaction is a major contributor to dieting behaviour, negative affect, and the development and maintenance of eating disorders. Literature further suggests that negative body perceptions increase risks of depression and reduce self-esteem, particularly among adolescent girls (Seigal et al., 1999).

Medical conditions and chronic illnesses may further compromise body image. Surgical scars, chemotherapy-induced hair loss, and skin diseases often cause distress and reduce self-esteem (Tiwari, 2014). Similarly, patients with cancer or HIV/AIDS experience physical and psychological changes that undermine body image satisfaction, adversely affecting quality of life (Jain & Tiwari, 2016). Research also indicates that lower body concern is associated with better mental health among individuals undergoing cosmetic surgery (Sheikhi et al., 2019).

Negative body image has been consistently linked with adverse psychological, social, and behavioural outcomes. Gender plays a significant role in this context: socio-cultural perspectives highlight how societal ideals of beauty pressure women to prioritize physical attractiveness, fostering upward comparisons and dissatisfaction (Thompson, Coovert, & Stormer, 1999). Most studies report higher levels of body dissatisfaction among women compared to men (Shaheen, 2016). However, men are not immune—recent research highlights male concerns, especially about muscularity and perceptions of being underweight (McCabe & Ricciardelli, 2004; Grogan, 2021). While women often report dissatisfaction with specific body parts, men tend to focus on fitness, though both genders experience similar negative consequences of poor body image (Shaheen, 2016). Nonetheless, men remain underexplored in the literature on body image and mental health.

Given the inconsistent findings on gender differences, the present study aims to examine gender variations in body image and mental health, and to explore the association and predictive role of negative body image in mental health outcomes. It is hypothesized that females will report greater body dissatisfaction and poorer mental health. Furthermore, negative body image is expected to be associated with and predictive of multiple dimensions of mental health.

Methods

Study design and sample

This study adopted a between-group design to analyse gender differences and employed a correlational method to examine associations among variables. Data were collected using purposive sampling from 416 students who provided informed consent. After excluding incomplete responses and outliers, the final sample consisted of 394 participants. All participants were informed about the voluntary nature of their participation and assured that their data would remain confidential and be used solely for academic purposes. Informed consent was obtained from students aged 18 years and above, while assent was obtained from

those between 15 and 18 years of age. Only students who provided consent or assent were included. Exclusion criteria comprised students with physical disabilities, severe medical conditions, or a history of chronic illness, as well as those who had undergone cosmetic or medical surgery leading to temporary or permanent changes in body appearance.

Measures

Sociodemographic datasheet: Sociodemographic details of the participants, such as age, gender, BMI, education, place of living, and family structure, have been taken.

Body Dissatisfaction Scale

The body dissatisfaction scale was used to assess the body dissatisfaction level of students. This scale was originally developed by Tariq and Ijaz (2015). It consists of a total of 26 items, and all the items of the scale are rated on a 5-point Likert scale ranging from 0 to 4. Where 0 indicates “not at all and 4 indicates “always”. A high score on this scale denotes high dissatisfaction with the body. Cronbach's alpha of this scale was .83.

Body Image Concern Inventory (Littleton et al, 2005)

This inventory was originally developed by Littleton, Axson, and Pure in 2005. It consists of a total of 19 items that measure two aspects of body image (i.e., dysmorphic symptoms and symptom interference). For each item, the participants must respond on a Likert scale ranging from 1(never) to 5 (always). The total score ranges from 19 to 95, where higher scores represent a higher level of dysmorphic concern. Cronbach's alpha of this scale was 73.

General Health Questionnaire Scale (Goldberg, 1979)

The Hindi version of GHQ-28 (Shukla, Saxena, Dubey & Pandey, 2014) was used to assess general mental health. It comprises 28 items, which are divided into four subscales. These are Somatic symptoms, Anxiety/insomnia, Social Dysfunction, and severe depression. All the 28 items are rated on a 4-point Likert Scale coded from 0 to 3. A high score on this scale denotes high psychological distress. Cronbach's alpha of this scale was 81.

Statistical analysis

All statistical analyses were conducted using IBM SPSS Statistics, version 20. Descriptive statistics (mean and standard deviation) and independent t-tests were first computed to assess gender differences in body image dissatisfaction, dysmorphic concern, symptom interference, and various dimensions of mental health. Next, correlation analyses were performed to

examine the nature and strength of relationships between body image dissatisfaction, dysmorphic concern, and symptom interference with different dimensions of mental health among male and female students. Finally, stepwise regression analysis was carried out to determine the predictive role of negative body image (comprising body image dissatisfaction, dysmorphic concern, and symptom interference) in explaining variance across mental health problems.

Results

Table 1 Gender difference in Body image dissatisfaction, Dysmorphic symptoms, and symptom interference.

Measures	Male (n= 200)	Female (n=194)	't' Value	Cohen's D
	Mean (SD)	Mean (SD)		
Body image dissatisfaction	27.18(19.09)	31.13(18.75)	2.07*	0.208
Dysmorphic symptom	11.62(3.46)	12.10(4.51)	1.19	0.125
Symptom interference	17.52(5.08)	17.81(5.51)	0.53	0.054
Overall, Body Image Concern	29.15(7.61)	29.92(9.29)	0.90	0.090

* $p < 0.05$

Results in Table 1 revealed that females scored significantly higher on body image dissatisfaction ($t = 2.07$, $p < .05$) compared to males. However, no significant gender differences were observed on the overall body image concern scale or its subscales, namely dysmorphic symptoms and symptom interference.

Table 2 Gender difference in various dimensions of mental health (Somatic Symptoms, Anxiety/insomnia, Social Dysfunction, and Severe Depression).

Measures	Male (n= 199)	Female (n=194)	't' Value	Cohen's D
	Mean (SD)	Mean (SD)		
Mental health				
Somatic Symptoms	4.48(3.48)	5.36(3.83)	2.36*	0.240
Anxiety/insomnia	6.87(3.44)	7.75(3.54)	1.97*	0.252

Social Dysfunction	6.21(3.64)	7.23(4.30)	2.52*	0.284
Severe Depression	4.42(3.99)	4.57(4.65)	.359	0.034
Overall mental health	22.00(12.08)	24.74(13.93)	2.06*	0.210

*Significant $p < 0.05$

Table 2 shows that female students scored significantly higher than male students on all dimensions of mental health, including somatic symptoms ($t = 2.36$, $p < .05$), social dysfunction ($t = 2.52$, $p < .05$), and overall general health ($t = 2.06$, $p < .05$).

Table 3 Correlation coefficients between body image perception variables (body image dissatisfaction, dysmorphic symptoms, and symptom interference) and mental health problems (somatic symptoms, anxiety/insomnia, social dysfunction, and severe depression) among female students ($N = 194$)

Variables	Somatic symptoms	Anxiety/Insomnia	Social Dysfunction	Severe depression	Overall Mental Health
Symptom interference	0.263**	0.361**	0.313**	0.215**	0.333**
Dysmorphic symptoms	0.299**	0.347**	0.393**	0.292**	0.390**
Overall, Body image concern	0.301**	0.383**	0.377**	0.270**	0.387**
Body image dissatisfaction	0.235**	0.283**	0.236**	0.198	0.276**

** $p < 0.01$, * $p < 0.001$

Table 3 indicates that symptom interference, dysmorphic symptoms, and the overall body image score are significantly and positively correlated with all dimensions of mental health as well as the total mental health score. The strength of these correlations ranges from low to moderate. Additionally, body image dissatisfaction was found to be significantly and positively associated with somatic symptoms, anxiety/insomnia, social dysfunction, and the overall mental health score.

Table 4 Correlation coefficients between body image variables (dissatisfaction, dysmorphic symptoms, and symptom interference) and mental health dimensions (somatic symptoms, anxiety/insomnia, social dysfunction, and severe depression) among male students (n = 200).

Variables	Somatic symptoms	Anxiety/Insomnia	Social Dysfunction	Severe depression	Overall Mental Health
Symptom interference	0.355**	0.279**	0.356**	0.465**	0.443**
Dysmorphic symptoms	0.134	0.145*	0.149*	0.222**	0.198**
Body image concern	0.298**	0.252**	0.350**	0.411**	0.385**
Body image dissatisfaction	0.256**	0.095	0.181*	0.230**	0.232**

**p <0.01, *<0.001

Table 4 shows a significant positive association between the components of body image concern (dysmorphic concern and symptom interference), as well as the overall body image concern score, with all dimensions of mental health and overall mental health among male students. In addition, body image dissatisfaction was positively and significantly correlated with somatic symptoms, social dysfunction, and severe depression, but not with anxiety/insomnia in male students.

Table 5 Regression Result of Body image concern on anxiety/insomnia, social dysfunction, and severe depression.

Variables	R ²	B	SE	t	p	95% CI
Body image concern	Anxiety/Insomnia					
	.113	.321	.020	6.74	.000	[.094, .172]
	Social Dysfunction					
	.134	.163	.022	7.313	.000	[.119, .206]
	Severe Depression					
	.115	.165	.024	6.770	.000	[.117, .213]

Table 5 showed the results of stepwise regression analysis where demographic variables (age, gender, BMI, family structure, locale) have been controlled. The results indicates that total scores of body image concern inventory emerged as significant positive predictors of anxiety/insomnia ($B=, .321, p<.01, F_{(1,391)} = 45.466, p<.01$) social dysfunction ($B=.163, p<.01, F_{(1,391)} =53.486, p<.01$), and severe depression ($B=.165, p<.01, F_{(1,391)} =45.838, p<.01$). They are explaining 11.3%, 13.4%, and 11.5% of the variance respectively for various dimensions of mental health.

Table 6 Regression analysis results of the predictive role of symptom interference and body image dissatisfaction on somatic symptoms.

Variables	<i>R</i>²	<i>B</i>	<i>SE</i>	<i>t</i>	<i>p</i>	<i>95% CI</i>
Somatic Symptoms						
Symptom interference	.326	.171	.036	4.752	.000	 [.100, .241]
Body Image Dissatisfaction	.352	.028	.010	2.830	.005	 [.009, .048]

The results of stepwise regression analysis, after controlling for the effects of demographic variables (age, gender, BMI, family structure, locale), are presented in Table 6. Result revealed that symptom interference emerges as significant predictor of somatic symptoms ($B=.028, p<.01, F_{(1,391)} = 40.22, p<.01$), and body image dissatisfaction also emerge as significant predictor of somatic symptoms ($B= .028, p<.01, F_{(1,390)} =8.010, p<.01$). They are explaining 32.6% and 35.2% of the variance for somatic symptoms respectively.

Discussion

The findings revealed significant gender differences in body image dissatisfaction, with female participants reporting higher levels of dissatisfaction than their male counterparts. However, no significant gender differences were found for body image concern. These results are consistent with previous research that has produced mixed evidence on gender differences in body image perception. For instance, Shaheen et al. (2016) reported no gender difference, whereas Jain and Tiwari (2016) documented higher dissatisfaction among females. One possible explanation for women's greater dissatisfaction is their tendency toward upward social comparison (Morrison et al., 2004), which often results in more negative self-evaluations (Wheeler & Miyake, 1992).

The absence of gender differences in body image concern aligns with earlier findings (Pooja & Kakkar, 2020). However, other studies have noted greater dissatisfaction among males (Shaheen et al., 2016; Adithyan et al., 2018; Alharballeh & Dodeen, 2021). Such discrepancies may reflect changing societal perceptions of the male body, which has become increasingly objectified in media, thereby fuelling dissatisfaction among men (Singh, Parsekar, & Bhumika, 2016). Moreover, the rise of men's grooming products, targeted advertisements, and social campaigns promoting body acceptance, such as Dove's Stop the Beauty Test (Dove, 2022), may also influence these perceptions. In patriarchal contexts, male internalization of athletic and muscular ideals is further reinforced. Methodological differences across studies may also account for these inconsistencies, as research has noted that men and women experience body image concerns in qualitatively different ways: while women of all ages typically strive for thinness (Benuto, Haboush, & Forrester, 2007), men tend to focus on specific body parts, desiring broader shoulders or a more muscular chest (Gillen & Lefkowitz, 2012).

In terms of mental health, female participants scored higher on all dimensions, with significant differences observed in somatic symptoms, social dysfunction, and overall general health. These findings echo earlier studies reporting similar trends (Droogenbroeck, Spruyt, & Keppens, 2018). Such disparities may be linked to socially defined gender roles and expectations, where women are often perceived as more emotionally sensitive (Rosenfield & Mouzon, 2013), experience restricted gender roles (Haugen, Johansen, & Ommundsen, 2014), and are more likely to face challenges such as family violence, abuse, and academic performance pressures (Wiklund et al., 2012; Elliott, 2001). Collectively, these factors increase women's vulnerability to mental health difficulties.

The association between body image perception and mental health appears to vary by gender. Given the observed gender differences in body image dissatisfaction and certain dimensions of mental health (somatic symptoms, social dysfunction, and overall mental health), the relationship between body image dissatisfaction and body image concern with mental health was analysed separately for males and females. Results indicated a positive correlation between negative body perception and mental health difficulties. Specifically, body image dissatisfaction and body image concern were positively associated with social dysfunction and severe depression, consistent with findings by Regis, Ramos, and Torres (2018), who reported that students dissatisfied with their bodies experienced depressive symptoms, interpersonal difficulties, and greater family, social, and emotional stress.

Previous research has consistently linked body image dissatisfaction with depression (Manaf, Sarvanan, & Zuhrah, 2016). Among obese individuals, particularly girls, dissatisfaction often contributes to depressive symptoms due to the challenging pursuit of the thin-ideal and the frustration of repeated unsuccessful dieting attempts (Bearman, 2008). Beyond depression, body image also affects social interactions, daily activities, interpersonal communication, and family relationships (Fallon, 1990). From a sociocultural perspective, adolescents dissatisfied with their bodies may internalize pressures from peers, family, and media to conform to cultural ideals or engage in appearance-based comparisons, increasing risks of anxiety and social withdrawal (Stice, 2001; Thompson, 1999). These findings align with the cognitive-behavioural model, which suggests that body dissatisfaction fuels negative self-evaluations and cognitive biases, thereby maintaining anxiety (Aspen et al., 2013; Pallister & Waller, 2008).

In contrast, some studies emphasize the protective role of psychological resources. For example, Negar et al. (2018) reported a positive relationship between body image satisfaction and psychological well-being among women. Similarly, Delfabbro et al. (2011) found that obese girls, despite experiencing body dissatisfaction, could still maintain good well-being if supported by factors such as extraversion, strong social networks, and close friendships. Such contradictory findings suggest that the relationship between body image dissatisfaction and psychological well-being may be influenced by mediating variables, notably self-esteem (Duchesne et al., 2016).

Conclusion

This study examined gender differences and the impact of negative body image and body dissatisfaction among young individuals. Findings revealed that females were more dissatisfied with their bodies than males and scored significantly higher on somatic symptoms, social dysfunction, and overall mental health, suggesting that women may be more vulnerable to mental health problems when holding negative body perceptions. Correlation analyses further demonstrated significant associations between negative body image and various mental health issues across both genders. Specifically, body image dissatisfaction and body image concern both predicted somatic symptoms, while body image concern additionally predicted anxiety/insomnia, social dysfunction, and severe depression. These results suggest that, although gender differences exist in levels of body dissatisfaction

and certain mental health outcomes, negative body image poses a risk for psychological difficulties in both males and females.

Implication

Body image issues are a significant risk factor for developing mental health problems, particularly among students. Screening for subclinical signs of poor body perception, such as body image dissatisfaction and body image concern, is helpful to prevent adverse effects on mental health. The student population is the most vulnerable to body image issues. The findings of the study have counselling implications. Providing Intervention at this stage may prevent the development of more severe mental health problems. This study may serve as a foundation for more in-depth research.

Limitations and future directions

The present study employed a quantitative design using self-report questionnaires for data collection. However, adopting a qualitative approach in future research could yield a more nuanced and comprehensive understanding of body image perception. Body image is shaped by multiple factors, including social status, cultural norms, personality traits, and media influences (Bergeron, 2007). It is also deeply rooted in a cultural context. In Indian culture, perceptions of body image differ notably between males and females. For men, a masculine, mesomorphic physique characterized by broad shoulders, a strong chest, and a slender waist is often idealized, while skin tone holds comparatively little significance. In contrast, for women, greater emphasis is placed on slenderness and fair complexion (Parihar et al., 2022). Future studies should therefore examine the cultural role in shaping body image perceptions to provide deeper insight into these gendered and context-specific ideals.

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