



Original Research Article

Relationship Between Perceived Stress and Body Self-Image Among Students of Selected Nursing College: A Correlational Study

Yashraj Anand^{1*}, Archana Nandmer²

¹Assistant Professor, Department of Mental Health Nursing, Bhopal, Madhya Pradesh, India

²Tutor, People's College of Nursing and Research Center, Bhopal, Madhya Pradesh, India

Abstract

Introduction: Body self-image is a multidimensional concept that encompasses how people think, feel, and act in relation to their own physical characteristics. Perceived stress is an individual's feeling or thought about the amount of stress they are under at a particular point in time or over a particular period.

Methodology: A correlational non-experimental research design was used, and a purposive sampling of 100 students from a nursing college was done. The tools used were socio-demographic data and the body self-image questionnaire (BSIQ-SF). Descriptive statistics and the Spearman rank correlation test were used to find the relationship between the variables.

Results: The results showed a very weak correlation between perceived stress and body self-image ($r = 0.009$, $p = 0.931$). The study also found that 54% of the participants were dissatisfied with their body self-image, and 94% were experiencing moderate stress. Significant association was seen between weight and perceived stress ($p = 0.010$).

Conclusion: The study concluded that there is a weak correlation between perceived stress and body self-image among nursing college students. The findings suggest that nursing college students experience moderate stress and are dissatisfied with their body self-image. The study recommends interventional research to enhance individuals' ability to appreciate their own body and reduce unrealistic body standards. The study's findings have implications for nursing education and practice, highlighting the need to address body self-image concerns and perceived stress among nursing students to promote their mental health and well-being.

Keywords: *Correlation, Assess, Relationship, Perceived stress, Body self-image*

INTRODUCTION

Body self-image is a multidimensional concept that encompasses how people think, feel, and act in relation to their own physical characteristics (Muth & Cash, 1997). Given that most of the people are unhappy and displeased with the image of their bodies at some point in time, the main concern here is not how dissatisfied people are with their bodies but how their view of their bodies is affecting their idea of self and mental health. Acknowledging and accepting their body for the way it is, just for the sake of being part of a group, does more harm than good – it leads to down spiralling of self-worth.^{1,2}

Keeping in mind the given point, the current research focuses on Body Self-Image in students pursuing graduation. Perceived stress is an individual's feeling or a thought about

the amount of stress they are under at a particular point in time or over a particular period. Perceived stress includes uncontrollability and unpredictability feelings about one's life.^{3,4} Different individuals may suffer negative events in life, which are similar in nature, but they may evaluate the severity of the effect to a different degree. Perceived stress reflects the interaction of an individual with their environment that they evaluate or appraise. It seems at hand that an association between perceived stress and Body Self-Image is likely and has been shown for body dissatisfaction and perceived stress in a large sample of adolescent girls^{5,6}

Address for correspondence: Yashraj Anand,

Assistant Professor, Department of Mental Health Nursing, Bhopal, Madhya Pradesh, India

E-mail: simmuanand21@gmail.com

Access this article online

Quick Response Code



Website:
journal.gfnps.org

Doi: 10.0000/02.020.X

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

How to cite this article: Anand Y, Nandmer A. Relationship Between Perceived Stress and Body Self-Image Among Students of Selected Nursing College: A Correlational Study. GFNPSS Global Nursing Journal of India. 2026;9(1):931-935.

Submitted: 07/03/2026, **Accepted:** 29/04/2025, **Published:** 30/04/2026

Background of the study: Urvelyte, E. & Perminas, A. (2020) conducted a study among 80 adolescents from Kaunas gymnasium in which the multidimensional body-self relations questionnaire, negative affect scale (PANAS-X) and Reeder stress inventory were used to assess the relationship between negative affect, stress and body self-image. It was found that participants with higher stress were more dissatisfied with their body areas and less satisfied with their appearance compared to those who reported feeling less stressed. Girls with a higher negative affect were more dissatisfied with their body areas, tended to invest less in their appearance and also thought they weighed more; furthermore, they were more concerned with their weight and, in general, were less satisfied with their appearance.^{7,8}

Moreover, much of the research done in the area of body self-image has been done on women, ignoring the experiences and perspectives of men, to a certain extent. Body self-image issues in boys and men are on the rise, given the emergence of norms and standards of ideal Body Self-Image. Body self-image can be transmitted implicitly and indirectly via subtle acceptance-based messages from family members and friends about style or appearance (e.g., “The dress looks really good on you” or “That haircut really suits you”), infrequent or less appearance-related talk, and general messages about beauty and love for the body (e.g. Everyone has a unique beauty.” or “We all need to love and appreciate our bodies).”

Self-objectification, appearance anxiety, low Body Self-Image, low body appreciation, and disordered eating have all been related to having a sense of self-worth that is based on appearance (i.e., appearance-contingent self-worth), making it an important construct for evaluation and objective for intervention for all genders.⁹

Taking these points into consideration, the present study attempts to account for a gap in the literature of Body Self-Image by utilizing a diverse community sample of male and female college students and their relation to perceived stress.¹⁰

Objectives

- To assess the relationship between perceived stress and Body Self-Image among students of a nursing college.
- To correlate the relationship between perceived stress and Body Self-Image among students of a nursing college.
- To find out the association of perceived stress and Body Self-Image among students of nursing college with selected socio-demographic variables.

Hypotheses

The hypotheses will be tested at a 0.05 level of significance. H_0 - There is no significant association between perceived stress and self-esteem among college students with their selected socio-demographic variables.

H_1 - There is a significant association between perceived stress and self-esteem among college students with their selected socio-demographic variables.

METHODOLOGY

To guarantee precise and trustworthy results, the investigation was carried out using a methodical methodology:

A correlational non-experimental research design was used in the study. The tool was Socio demographic data and Body Self-Image questionnaire (BSIQ-SF). The socio-demographic variable consists of 7 items appropriate to the demographic variables of the college students, like age, gender, height, weight, socio-economic status, residential area, physical activity level, and use of social media. The body self-image questionnaire (BSIQ-SF) is a standardized rating tool consisting of 27 items related to self-image. Purposive sampling was done on 100 students from the People’s College of Nursing and Research Center. Subjects who can complete the survey in a single sitting and who were enrolled in people’s College of Nursing and the research center were included in the inclusion criteria.

A correlational non-experimental research design was used in the study. The tool was Socio demographic data and Body Self-Image questionnaire (BSIQ-SF). The socio-demographic variable consists of seven items appropriate to the demographic variables of the college students, like age, gender, height, weight, socio-economic status, residential area, physical activity level and use of social media. Body self- image questionnaire (BSIQ-SF) is a standardized rating tool, consisting of 27 items related to self-image. Purposive sampling was done on 100 students from People’s College of nursing and Research Center. Subjects who can complete the survey in a single sitting and who were enrolled in people’s College of Nursing and the research center were included in the study. Participation was voluntary and anonymous. Descriptive statistics (mean and SD) and the Spearman rank correlation test were used to find the relationship between the variables. Chi-square test was used to test the association of stress and Body Self-Image with selected demographic variables.

RESULT

The gathered information was methodically examined and interpreted in line with the study’s goals. The results are shown in the sections that follow (Tables 1-11 and Figures 1 and 2).

DISCUSSION

The current study evaluated the association between nursing students’ bodily self-image and reported stress. The results showed that over half of the participants had a negative self-image of their bodies, and the majority of students reported moderate levels of perceived stress. These results are in line with other research that found students to be moderately stressed and dissatisfied with their bodies.

Additionally, the study discovered a very weak and statistically non-significant association between body self-image and experienced stress, suggesting that while there is a

Table 1: Showing frequency and percentage distribution of students according to their age in years

Age	Frequency	Percent
17–19 years	15	15.0
20–22 years	22	22.0
23–25 years	37	37.0
25 and above	25	25.0
Total	100	100.0

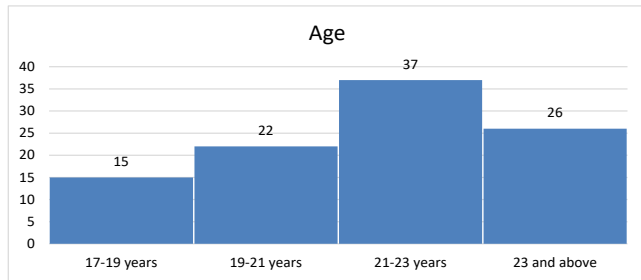


Figure 1: Showing the frequency distribution of students' ages

Table 2: Showing frequency and percentage distribution of students according to their gender

Gender	Frequency	Percent
Female	51	51.0
Male	49	49.0
Total	100	100.0

Table 3: Showing frequency and percentage distribution of students according to their height

Height	Frequency	Percent
4 feet and below	2	2.0
4.1–5.0 feet	17	17.0
5.1–6.0 feet	77	77.0
6.1 and above	4	4.0
Total	100	100.0

Table 4: Showing frequency and percentage distribution of students according to their weight

Weight	Frequency	Percent
Below 40 kg	5	5.0
41–60 kg	54	54.0
61–80 kg	33	33.0
Above 81 kg	8	8.0
Total	100	100.0

Table 5: Showing frequency and percentage distribution of students according to their family income per month

Family income per month	Frequency	Percent
Below 10,000 rs	26	26.0
10,000–30,000rs	41	41.0
31,000–50,000rs	20	20.0
Above 50,000 rs	13	13.0
Total	100	100.0

Table 6: Showing frequency and percentage distribution of students according to their residential area

Residential area	Frequency	Percent
Rural	40	40.0
Semi Urban	13	13.0
Urban	47	47.0
Total	100	100.0

Table 7: Showing frequency and percentage distribution of students according to their physical activity level

Physical activity level	Frequency	Percent
Never	7	7.0
Regularly	35	35.0
sometimes	58	58.0
Total	100	100.0

Table 8: Showing frequency and percentage distribution of students according to their use of social media

Use of social media (Instagram, Facebook, etc.)	Frequency	Percent
No	13	13.0
Yes	86	86.0
Total	100	100.0

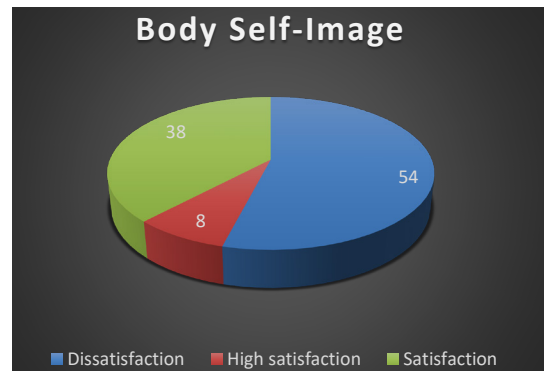


Figure 2: Distribution of body self-image

Table 9: Distribution of body self-image according to frequency and percentage

Body self-image	Frequency	Percent
Dissatisfaction	54	54.0
High satisfaction	8	8.0
Satisfaction	38	38.0
Total	100	100.0

Table 10: Distribution of stress according to frequency and percentage

Stress	Frequency	Percent
High stress	5	5.0
Low stress	1	1.0
Moderate stress	94	94.0
Total	100	100.0



Table 11: Showing the association between body self-image among students of nursing college with their selected socio-demographic variables

	<i>Dissatisfaction</i>	<i>High satisfaction</i>	<i>Satisfaction</i>	<i>Total</i>	<i>Chi-square value</i>	<i>df</i>	<i>p-value</i>	<i>Significance</i>
Age								
17–19 years	11	2	2	15	9.694	6	.138	NS
20–22 years	11	0	11	22				
23–25 years	22	3	12	37				
25 and above	10	3	13	26				
Gender								
Female	31	4	16	51	2.093	2	.351	NS
Male	23	4	22	49				
Height								
4 feet and below	2	0	0	2	6.395	6	.380	NS
4.1–5.0 feet	12	0	5	17				
5.1–6.0 feet	37	8	32	77				
6.1 and above	3	0	1	4				
Weight								
Below 40 kg	4	1	0	5	10.874	6	.092	NS
41–60 kg	29	5	20	54				
61–80 kg	19	0	14	33				
Above 81 kg	2	2	4	8				
Family Income per month								
Below 10,000 rs	16	4	6	26	9.085	6	.169	NS
10,000-30,000rs	17	3	21	41				
31,000–50,000rs	13	0	7	20				
Above 50,000 rs	8	1	4	13				
Residential Area								
Rural	21	4	15	40	1.419	4	.841	NS
Semi Urban	8	0	5	13				
Urban	25	4	18	47				
Physical Activity Level								
Never	5	1	1	7	3.622	4	.460	NS
Regularly	16	4	15	35				
sometimes	33	3	22	58				
Use of Social Media (Instagram, Facebook etc.)								
No	8	1	4	13	.365	2	.833	NS
Yes	46	7	34	87				

relationship, it is not particularly strong. Additionally, weight was significantly correlated with felt stress, although there was no significant correlation between body self-image and socio-demographic factors. The findings point to the necessity of treatments to help nursing students manage their stress and have a positive body image.

CONCLUSIONS

The majority of nursing students reported moderate levels of perceived stress, and over half expressed dissatisfaction with their body image, according to the study's findings. Perceived stress and body self-image were found to have a very weak and

statistically non-significant association. Weight had a strong correlation with perceived stress, but there was no significant correlation between body self-image and socio-demographic factors. Overall, the results show that while stress and body self-image are present among nursing students, there is little correlation between the two.

RECOMMENDATION

- Programs for counseling and stress management should be set up for nursing students.
- To encourage a positive body image, health education should be offered.

- There should be workshops on body respect, self-esteem, and mental wellness.
- It is important to motivate students to engage in regular physical exercise.
- It is advised to conduct more interventional research and studies with bigger sample sizes.

FINANCIAL SUPPORT AND SPONSORSHIP

Nil.

CONFLICTS OF INTEREST

The author declares that they have no conflict of interest with regard to the content of the report.

REFERENCES

1. Kim Y, Woo H. The association between perceived stress and obesity among young adults: mediating effect of health status. *Public Health*. 2025;246:105816. doi:10.1016/j.puhe.2025.105816.
2. Anosike C, Udoh JP, Ugochukwu EJ, Okonkwo VC, Okoye CO, Nebonta SA. Perceived stress and body image perception as correlates of eating disorders among pharmacy students in a Nigerian university: a cross-sectional survey. *Pharmacy Education*. 2025;25(1):105-114. doi:10.46542/pe.2025.251.105114.
3. Khoshkerdar P, Raeisi Z. The effect of mindfulness-based stress reduction on body image concerns of adolescent girls with dysfunctional eating attitudes. *Australian Journal of Psychology*. 2020;72(1):11-19. doi:10.1111/ajpy.12265.
4. Shabadi N, Arora M, R M, Gopi A, R NM. Risk and relationship of eating disorders with body image, stress and self-esteem among university students. *International Journal of Community Medicine and Public Health*. 2021;8(12):5896-5900. doi:10.18203/2394-6040.ijcmph20214586.
5. Zartalousi A, Christopoulos D, Kelesi M, Govina O, Mantzorou M, Adamakidou T, et al. Body image, social physique anxiety levels and self-esteem among adults participating in physical activity programs. *Diseases*. 2023;11(2):66. doi:10.3390/diseases11020066.
6. Virk A, Singh P. A study on relationship between body-image and self-esteem among medical undergraduate students. *International Journal of Community Medicine and Public Health*. 2020;7(2):636-641. doi:10.18203/2394-6040.ijcmph20200441.
7. Velásquez Muñoz A, Cardenas Vargas M. Relationships between gender, weight, and body image: effects on stress management and life satisfaction in university students. *Journal of Biosciences and Medicines*. 2024;12:130-136.
8. Sharma P, Noronha FS, Nayak AK. A correlational study to assess the relationship between body image, appearance contingent self-worth, and self-compassion among youth of Karnataka. *Clinical Epidemiology and Global Health*. 2024;25:101461. doi:10.1016/j.cegh.2023.101461.
9. Ziser K, Finklenburg C, Behrens SC, Giel KE, Becker S, Skoda EM, et al. Perceived stress mediates the relationship of body image and depressive symptoms in individuals with obesity. *Frontiers in Psychiatry*. 2019;10:852. doi:10.3389/fpsyt.2019.00852.
10. Urvelyte E, Perminas A. The relationship between negative affect, stress and body image in adolescent girls. *Global Journal of Psychology Research: New Trends and Issues*. 2020;10(2):154-159. doi:10.18844/gjpr.v10i2.4969.

