

Assessment of Eating Habit and Body Shape Concern among Students of SGT University, Gurugram, Haryana

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Abstract: ***Introduction:** A balanced diet is essential for meeting one's nutritional needs, and the way we eat has a significant impact on our long-term health. Body shape concerns refer to how people perceive their bodies in their minds. Negative effects such as anxiety, depression, low self-esteem, and poor quality of life are often caused by negative body image. **Objectives:** To assess eating habit and body shape concern among students of SGT University, Gurugram, Haryana. To find the association between eating habit & body shape concern with selected Socio-demographic variables. **Methodology:** For this study, a quantitative research approach was taken, utilizing a descriptive research design. The Total Enumeration sampling technique was used to enroll a total of 95 participants. Prior to data collection in May-June 2023, ethical approval (FON/SGTU/23 dated on 04/07/23), was obtained from the Dean of the Faculty of Nursing at SGT University in Gurugram, Haryana. The questionnaire used for data collection included sections on socio-demographic profiles, eating habits, and body shape concerns. Both descriptive and inferential statistics were employed to analyze the data. **Results:** The study revealed that 57.9% of participants had an average eating habit, while 36.8% had poor eating habits, and only 5.3% had good eating habits. When it came to body shape concerns, 58.9% had moderate concerns, whereas 21.1% had severe concerns and 20.0% had mild concerns. The study found significant associations between eating habits and socio-demographic variables like gender and self-perceived ideal weight, as well as a significant association between body shape concerns and weight. **Conclusion:** The study concluded that nursing students possess average eating habits and a moderate level of concern regarding their body shape. This highlights the importance of introducing educational programs that promote healthy food consumption and positive body image. Such initiatives can increase the awareness and adoption of healthy nutritional habits among nursing students. Further research is necessary to identify other factors that influence eating habits and body shape concerns. This can aid in the personal and professional growth of student nurses.*

Keywords: Eating Habits, Body Shape Concern, Students

1. Introduction

A balanced diet is one that satisfies a person's nutritional requirements while still being practical from cultural and financial perspectives. It is a cost-effective eating plan that provides the body with all the necessary nutrients to function at its best. A balanced diet should consist of six different nutrients: fats, protein, minerals, vitamins, carbohydrates, and water. It is important to consume all six on a regular basis.¹ Our diet affects how we feel, and we should feel good after eating. Food should be both tasty and nourishing for our bodies. However, eating too much or too little can have an impact on your health and quality of life, which can lead to negative feelings about food.²

As young people grow up, they gain more control over what they eat. However, this newfound freedom can lead to health issues, such as a higher risk of being overweight or obese.³ The global spread of fast food is expected to have a major impact on the eating habits of today's students. Fast food is often associated with negative health effects and lacks the nutritional value of traditional cuisines that have been enjoyed by diverse communities for generations.

Understanding the eating habits of students is essential for promoting good health and achieving their behavioral goals.⁴

Paul Ferdinand Schilder, an Austrian psychiatrist, developed the idea of "body image" as a psychological concept in 1935.⁵ According to him, how people perceive their own bodies in their minds explains how people first become aware of them. Sensations, concepts, and sentiments that are typically unconscious are what shape a person's mental image of their body. Over the course of a lifetime, this representation is built and rebuilt. A multifaceted dynamic construct, body shape image is influenced by both internal biological and psychological variables as well as exterior cultural and social determinants.⁶

Negative body image can lead to anxiety, depression, low self-esteem, and a poor quality of life. This often results in dissatisfaction with one's body shape. A study by Kamaria K et al. found that young individuals have varying perceptions of their physical weight and shape. Both males and females expressed concern about their bodies, but more women than men were dissatisfied with their body shapes. It is crucial to promote healthy body image and implement effective weight-management programs, especially among young

females, to address the potential public health issue associated with body shape dissatisfaction.⁷

People's weight loss and control habits are often affected more by how they feel about their weight and body shape than their actual weight. This mindset can lead to negative physical and mental effects and even serious conditions like eating disorders that could be fatal.⁸ The emphasis on being thin as the ideal body type has grown as economic prosperity has increased, leading to greater concerns about body weight and unhappiness.⁹

To promote healthy habits, healthcare professionals should assess individuals' typical diets. Undergraduate nursing students are considered a high-risk group and should act as role models for healthy behaviors. It is important to address eating disorders in preventative mental health care and conduct screening studies to identify those at risk, as the prevalence of these disorders continues to rise. Identifying nursing students' eating habits and other factors that influence them can aid in their personal and professional growth.

Objectives: To assess eating habit and body shape concern among students of SGT University, Gurugram, Haryana. To find the association between eating habit & body shape concern with selected Socio-demographic variables.

2. Method and Material

Design

A quantitative research approach was taken, utilizing a descriptive research design.

Sample

In this study, 95 students of BSc. Nursing 3rd year were enrolled. A total Enumeration sampling approach was used.

Inclusion criteria

Nursing students of B.Sc. Nursing 3rd year and students who were available during the period of Data Collection.

Exclusion criteria

B.Sc. Nursing 3rd year students not willing to participate and who were unavailable during the period of Data Collection.

Tools

Eating Habits Questionnaire

This tool is used to evaluate eating habits and consists of 21 items. The items are rated on a four-point Likert scale. The final version of the tool showed excellent internal consistency, with subscale alphas of .90, .82, and .86 for the Problems, Knowledge, and Feelings factors, respectively. The subscale scores also had acceptable test-retest reliability, with correlations of $r = .81$, $r = .81$, and $r = .72$.

Body Shape Concern Questionnaire

There are 15 items in this self-reporting tool, which are rated on a four-point Likert scale. The tool has a Cronbach's alpha coefficient of 0.9.

Ethical Consideration

Ethical approval (FON/SGTU/23 dated on 04/07/23) was taken from Dean, Faculty of Nursing, SGT University, Gurugram, Haryana. Informed consent was acquired from study participants before starting the research study. Assurance regarding the maintenance of confidentiality was given. Data was collected between June to July 2023. Written Informed consent was obtained from participants.

3. Results

Table 1: Demographic Profile of study participants, N = 95

Variables	Options	Percentage (%)	Frequency (f)
Age	18 - 20 year	37.9%	36
	20 - 22 year	49.5%	47
	22 - 24 year	9.5%	9
	24 - 26 year	3.2%	3
Gender	Female	68.4%	65
	Male	31.6%	30
Family	Nuclear	68.4%	65
	Joint	31.6%	30
Residency	Rural	46.3%	44
	Urban	53.7%	51
Education	Diploma	9.5%	9
	Graduate	80.0%	76
	Post graduate	10.5%	10
Religion	Hindu	90.5%	86
	Muslim	2.1%	2
	Sikh	2.1%	2
	Christian	5.3%	5
	Others	0.0%	0
Socio-economic status	Upper Income group	9.5%	9
	Middle Income group	85.3%	81
	Lower Income group	5.3%	5
Weight in kg	Upto 40 Kg	4.2%	4
	41-50 Kg	25.3%	24
	51-60 Kg	33.7%	32
	61-70 Kg	20.0%	19
	71-80 Kg	12.6%	12
	>80 Kg	4.2%	4
Height in cm	115-130 cm	2.1%	2
	131-145 cm	2.1%	2
	146-160 cm	34.7%	33
	161-175 cm	46.3%	44
	>175cm	14.7%	14
Self-perceived ideal weight in kg	< 40 Kg	1.1%	1
	40 - 50 Kg	70.5%	67
	50 - 60 Kg	14.7%	14
	60 - 70 Kg	13.7%	13
	> 70 Kg	0.0%	0
BMI in kg/m ²	< 18.5	12.6%	12
	18.5 - 24.9	56.8%	54
	25 - 29.9	20.0%	19
	30- 34.9	6.3%	6
	35 - 39.9	3.2%	3
> 40	1.1%	1	
Did you take any medication to maintain your	Yes	0.0%	0
	No	100.0%	95

weight ?			
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- **The data in Table 1** shows that the majority of adults surveyed (49.5%) were in the age group of 20-22 years, followed by 37.9% in the age group of 18-20 years. Only 9.5% of the respondents were in the age group of 24-26 years. When it comes to gender, 68.4% of the participants were female, while males accounted for only 31.6%. In terms of family structure, 68.4% had a nuclear family, while 31.6% had a joint family. Regarding residency, 53.7% of the respondents lived in urban areas, while 46.3% lived in rural areas.
- As for education, 80% of the participants were graduates, 10.5% were postgraduates, and 9.5% had a diploma. In terms of religion, 90.5% were Hindu, 2.1% were Muslim, 5.3% were Christian, and only 2.1% were Sikh. The majority (85.3%) of the study participants belonged to the middle-income group, while 5.3% belonged to the lower-income group.
- When it comes to weight in kg, 33.7% of the participants had a weight of 51-60 kg, 25.3% had a weight of 41-50 kg, 20% had a weight of 61-70 kg, 12.6% had a weight of 71-80 kg, and only 4.2% had a weight of over 80 kg. According to height in cm, 46.3% of the participants had a height of 161-175 cm, 34.7% had a height of 146-160 cm, 14.7% had a height of over 175 cm, and only 2.1% had a height of 115-130 cm or 131-145 cm.
- When asked about their self-perceived ideal weight in kg, 70.5% of the participants preferred a body weight between 40-50 kg, while 14.7% preferred a body weight between 50-60 kg, and 13.7% preferred a body weight between 60-70 kg. Only 1.1% preferred a body weight of less than 40 kg.
- In terms of BMI in kg/m², 56.8% of the study participants had a BMI between 18.5-24.9, 20% had a BMI between 25-29.9, 12.6% had a BMI of less than 18.5, 6.3% had a BMI between 30-34.9, 3.2% had a BMI between 35-39.9, and only 1.1% had a BMI of over 40. None of the participants reported taking any medication for weight maintenance.

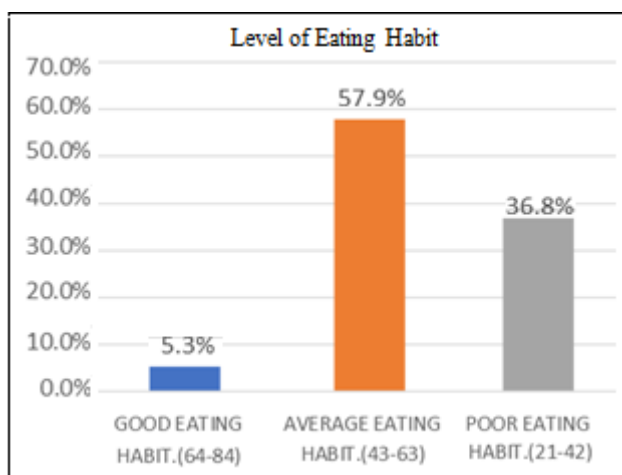


Table 3: Table Showing Association of Eating Habit Scores and Demographic Variables, N = 95

Demographic Data		Levels of Eating Habit			Association with Eating Habit Score				
Variables	Opts	Good Eating Habit	Average Eating Habit	Poor Eating Habit	Chi Test	P Value	df	Table Value	Result
Age	18 - 20year	2	20	14	8.910	0.179	6	12.592	Not Significant
	20 - 22 year	2	24	21					

Figure 1: Pyramidal diagram showing the percentage distribution level of Eating Habit

Figure No: 1 shows the percentage distribution of study participants by their level of Eating Habit. It can be seen that more than half of the study participants (57.9%) have average eating habits, while (36.8%) have poor eating habits and only (5.3%) have good eating habits.

Table 2: Shows Domain wise analysis of Eating Habits Scores, N = 95

Descriptive Statistics	Problems	Knowledge	Feelings	Overall
Mean	25.38	11.31	9.41	46.09
S.D.	5.936	3.060	2.447	10.037

Table 2 shows domain wise analysis of eating habit score. The mean scores for eating habits in relation to problems, knowledge, feelings, and overall are 25.38, 11.31, 9.41, and 46.09 respectively. The standard deviation (S.D) for eating habit scores in relation to problems, knowledge, feelings, and overall are 5.936, 3.060, 2.447, and 10.037 respectively.

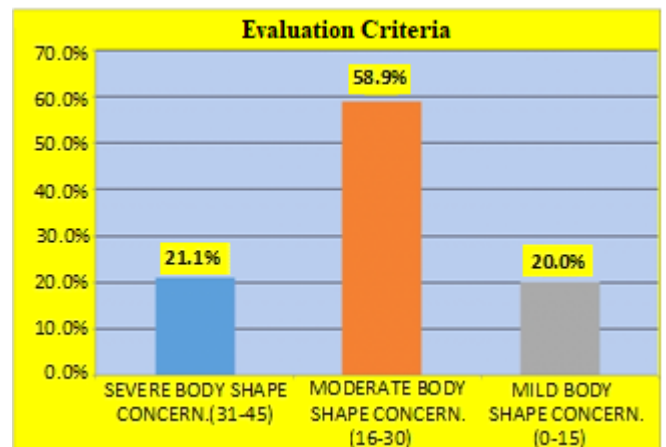


Figure 2: Pyramidal diagram showing the percentage distribution level of Body shape Concerns

Figure No 2 shows the percentage distribution of study participants by their level of Body Shape Concern. It can be seen that more than half of the study participants (58.9%) have moderate body shape concern, while (21.1%) have severe body shape concern and (20%) have mild body shape concern.

	22 - 24 year	1	8	0					
	24 - 26 year	0	3	0					
Gender	Female	1	33	31	13.808	0.001	2	5.991	Significant
	Male	4	22	4					
Family	Nuclear	2	37	26	2.460	0.292	2	5.991	Not Significant
	Joint	3	18	9					
Residency	Rural	3	28	13	2.028	0.363	2	5.991	Not Significant
	Urban	2	27	22					
Education	Diploma	0	6	3	1.457	0.834	4	9.488	Not Significant
	Graduate	5	43	28					
	Post graduate	0	6	4					
Religion	Hindu	5	50	31	0.787	0.992	6	12.592	Not Significant
	Muslim	0	1	1					
	Sikh	0	1	1					
	Christian	0	3	2					
	Others	0	0	0					
Socio-economic status	Upper Income group	0	7	2	3.143	0.534	4	9.488	Not Significant
	Middle Income group	5	44	32					
	Lower Income group	0	4	1					
Weight in kg	Upto 40 Kg	0	1	3	10.648	0.386	10	18.307	Not Significant
	41-50 Kg	0	13	11					
	51-60 Kg	1	19	12					
	61-70 Kg	3	11	5					
	71-80 Kg	1	8	3					
	>80 Kg	0	3	1					
Height in cm	115-130 cm	0	0	2	12.709	0.122	8	15.507	Not Significant
	131-145 cm	0	1	1					
	146-160 cm	0	17	16					
	161-175 cm	5	28	11					
	>175cm	0	9	5					
Self-perceived ideal weight in kg	< 40 Kg	0	0	1	14.177	0.028	6	12.592	Significant
	40 - 50 Kg	2	37	28					
	50 - 60 Kg	3	7	4					
	60 - 70 Kg	0	11	2					
	> 70 Kg	0	0	0					
BMI in kg/m ²	< 18.5	1	4	7	11.343	0.331	10	18.307	Not Significant
	18.5 - 24.9	2	31	21					
	25 - 29.9	1	14	4					
	30 - 34.9	0	4	2					
	35 - 39.9	1	1	1					
	> 40	0	1	0					
Did you take any medication to maintain your weight?	Yes	0	0	0					
	No	5	55	35		N.A		N.A	

Table 3 shows that there is significance association between the score level and demographic variables (Gender and Self-perceived ideal weight). The calculated chi-square values were more than the table value at the 0.05 level of significance. There is no significance association between the level of scores and other demographic variables (Age, Family, Residency, Education, Religion, Socio-economic status, Weight, Height, BMI and any medication taken for maintaining weight.) The calculated chi-square values were less than the table value at the 0.05 level of significance

Table 4: Showing Association of Body Shape Concern Scores and Demographic Variables, N = 95

Demographic Data		Levels of Body Shape Concern			Association with Body Shape Concern Score				
Variables	Opts	Severe Body Shape Concern	Moderate Body Shape Concern	Mild Body Shape Concern	Chi Test	P Value	df	Table Value	Result
Age	18 - 20 year	9	18	9	5.6	0.45	6	12.592	Not Significant
	20 - 22 year	10	28	9					
	22 - 24 year	0	8	1					
	24 - 26 year	1	2	0					
Gender	Female	14	37	14	0.4	0.81	2	5.991	Not Significant
	Male	6	19	5					
Family	Nuclear	12	36	17	4.9	0.08	2	5.991	Not Significant
	Joint	8	20	2					
Residency	Rural	8	25	11	1.4	0.49	2	5.991	Not Significant
	Urban	12	31	8					

Education	Diploma	3	4	2	1.0	0.89	4	9.488	Not Significant
	Graduate	15	46	15					
	Post graduate	2	6	2					
Religion	Hindu	17	50	19	4.7	0.57	6	12.592	Not Significant
	Muslim	1	1	0					
	Sikh	0	2	0					
	Christian	2	3	0					
	Others	0	0	0					
Socio-economic status	Upper Income group	2	6	1	0.5	0.97	4	9.488	Not Significant
	Middle Income group	17	47	17					
	Lower Income	1	3	1					
Weight in kg	Upto 40 Kg	1	3	0	19.049	0.04	10	18.307	Significant
	41-50 Kg	9	9	6					
	51-60 Kg	5	20	7					
	61-70 Kg	2	13	4					
	71-80 Kg	0	10	2					
	>80 Kg	3	1	0					
Height in cm	115-130 cm	1	1	0	4.131	0.84	8	15.507	Not Significant
	131-145 cm	0	2	0					
	146-160 cm	6	21	6					
	161-175 cm	11	23	10					
	>175cm	2	9	3					
Self perceived ideal weight in kg	< 40 Kg	0	1	0	2.127	0.90	6	12.592	Not Significant
	40 - 50 Kg	14	38	15					
	50 - 60 Kg	4	8	2					
	60 - 70 Kg	2	9	2					
	> 70 Kg	0	0	0					
BMI in kg/m ²	< 18.5	3	5	4	12.039	0.28	10	18.307	Not Significant
	18.5 - 24.9	12	33	9					
	25 - 29.9	2	13	4					
	30- 34.9	3	3	0					
	35 - 39.9	0	1	2					
	> 40	0	1	0					
Did you take any medication to maintain your weight?	Yes	0	0	0		N.A		N.A	
	No	20	56	19					

Table 4 shows that there is significance association between the score level and demographic variables (weight in kg). The calculated chi-square values were more than the table value at the 0.05 level of significance. There is no significance association between the level of scores and other demographic variables (age, gender, family, residency, education, religion, socioeconomic status, height in cm, self perceived ideal weight in kg and BMI in kg/m²). The calculated chi-square values were less than the table value at the 0.05 level of significance.

4. Discussion

Throughout adolescence, there are substantial physical and behavioral transformations taking place. To decrease the chances of developing chronic illnesses during this period, it's crucial to maintain a well-balanced diet and participate in routine physical activity. In India, there is a growing worry among teenagers regarding body image, which was once considered a Western idea. This may be due to the influence of media and globalization. Eating behaviors are significantly impacted by societal beauty norms and an individual's body shape perception.¹⁰

The study found that 57.9% of participants had average eating habits, while 36.8% had poor habits and only 5.3% had good habits. These results are similar to a study by Adel

Bashatah, which showed that 85.7% of students had fair nutritional habits, while 7.9% had good habits and 7.9% had poor habits. This suggests that there is still room for improvement in overall eating habits among the population.¹¹

The current study showed that more than half of the study participants (58.9%) had moderate body shape concern, whereas (21.1%) of study participants had severe body shape concern and (20.0%) of study participants had mild body shape concern. Similarly a study conducted by Kamaria. K, et al. showed that majority of study participants (42.18%) had no body shape concern, while (39.46%) of study participants had mild body shape concern and (18.36%) of study participants had moderate body shape concern.¹²

According to this study, there is a significant association between eating habits and demographic variables, such as gender and self-perceived ideal weight. The chi-square values calculated were higher than the table value at a 0.05 significance level. However, a study by Adel Bashatah contradicts these findings and shows no significant association between eating habits and demographic variables. Additionally, this study reveals a significant association between body shape concern and demographic variables, specifically weight.

5. Conclusion

The study found that nursing students possess average eating habits and show a moderate level of concern about their body shape. This emphasizes the need for various interventions to promote healthy eating habits and a positive body image among nursing students. Identifying their eating patterns and other influencing factors can assist student nurses in developing both professionally and psychologically.

6. Recommendation

Similar research study can be carried in other settings and different population.

For better generalization, the study can be conducted on larger population.

Other study designs can be used for assessment. The impact of a systematic education programme on eating habits and body image issues may be evaluated through an experimental research.

Financial Support and Sponsorship

Nil.

Conflicts of Interest

There is no conflict of interest.

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