

Original Research Article

## **A Comparative Study to Assess Prevalence of Eating Behavior and Self Esteem among Female Students of General and Professional Courses of Selected Colleges of Ambala, Haryana**

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### **ABSTRACT**

Eating behaviour is a complex interplay of psychological, social and genetic factors that influence meal timing, quantity of food intake, food preferences and food selection.

**Materials and Methods:** The research approach adopted for this study was quantitative research approach (non-experimental) and the design used was descriptive comparative research design. The convenient sampling technique was used to select 522 female students of general and professional courses comprises of 261 each.

The tool used for data collection was personal variables, eating behavior scale was used to assess prevalence of eating behaviour, Sorenson Self esteem test was used to assess self esteem among female students. Bio physiological measurement and Paper pencil technique was used for data collection and data obtained were analyzed using both descriptive and inferential statistics.

**Results:** The mean eating behavior score among general courses was 42 and 46.2 among professional courses. The computed t value (1.96) (p value= 0.04) shows significant difference between eating behavior among female students of general population.

The mean self esteem of general courses (25) and professional courses mean (18) were having the mean difference of 6.2. The computed t-value=22.5 shows significant difference between the self esteem among female students of general and professional courses, which was found to be statistically significant i.e. t= 1.96.

The coefficient of correlation between eating behaviour and self esteem of female students of general courses was 0.47 showing a moderate positive correlation between eating behaviour and self esteem and it was statistically significant at 0.05 level of significance.

**Key words:** Eating behaviour, Self esteem, prevalence, general courses, professional courses

### **INTRODUCTION**

Adolescents eating behaviour is a function of individual and environmental influences. Individual influences are psychological as well as biological, whereas, environmental influences include social environments such as family and friends and peers networks and other factors such as school meals and fast food outlets. In addition, another important factors in

social system or macro system which includes mass media, marketing and advertising social and cultural norms of the society. [1]

Eating behaviour is a complex interplay of psychological, social and genetic factors that influence meal timing, quantity of food intake, food preferences and food selection. They are very anxious about their weight and keep it as possible by

strictly controlling and limiting what they eat. Many female with anorexic will excessively exercise to lose weight. To control things by strictly regulating food and weight. [1] They will do almost anything to avoid gaining weight including starving themselves or exercise too much. Female with eating behaviour have a distorted body image – they think that they are fat (even when they are extremely thin) and won't maintain a proper weight. [2]

Many female with anorexic will excessively exercise to lose weight. To control things by strictly regulating food and weight. [1] Female with eating behaviour often feel that their self-esteem is tied to how thin they are. It is increasingly common, especially among young women in industrialized countries where cultural expectations encourage women to be thin. [2]

According to researcher eating behaviour is a complex interplay of psychological, social, and genetic factors that influence meal timing, quantity of food intake, and food preferences and Female students in general courses refers to students who are undergoing through 3 years degree programme in general field. [3]

The current estimate of the 2 months prevalence of eating behaviour in European people over 19 years is approximately 0.2-0.7% with one population study estimating the mean incidence in the UK at 4 in 100,000 in people aged 15-19 years. This eating disorder mainly affects women, 1 in 250 in the UK as opposed to 1 in 2000 men, and in fact the female prevalence of eating behaviour in some western countries is reported to be as high as 5.7% Specific risk factors seem to include high parental expectations, certain personality traits including a morbid perfectionism and psychiatric conditions including obsessive compulsive disorders and various affective disorders. [3]

A study was conducted to assess gender and self esteem contributes to the development of eating disorder. Result shows a higher self esteem and less

experience with eating disorder. The study was conclude that students have high self esteem are less likely have a eating disorder the women are more likely than a men to suffer from eating disorder. [4]

Following are some factors which are responsible the eating behaviour:

1. Emotional issue – Not eating is a way to cope with painful or distressing emotions
2. (anger, sadness, frustration)
3. Weight comment - 'You look much better now,' 'How is your weight been'.
4. Image-Skinny female, picture or food
5. Eating with others-In some case, eating with other people made feel like a pig. No matter what was it on the plate it always seemed like 10 times as what everyone else had to eat.
6. Exercise promotion- How often it is heard that diet and exercise go hand-in-hand? For some folks exercise sets the wheel of eating in motion. In this case it's usually called a 'diet'. [5]

## MATERIALS AND METHODS

The research approach adopted for this study was quantitative research approach and the design used was descriptive comparative research design. The study was conducted at Maharishi Markandeshwar College of Nursing Mullana, Ambala and Sanatan Dharam College Ambala. The convenient sampling technique was used to select 522 students of general and professional courses comprises of 261 each. Three general courses were selected, Bachelor of Arts, Bachelor of Commerce, Bachelor of Science.

Three professional colleges were selected, Maharishi Markandeshwar College of Nursing, Maharishi Markandeshwar College of Physiotherapy and Maharishi Markandeshwar College of Pharmacy from University. The colleges were selected conveniently and stratified random technique sampling was used for sample selection. The criterion for the selection of the sample subject was.

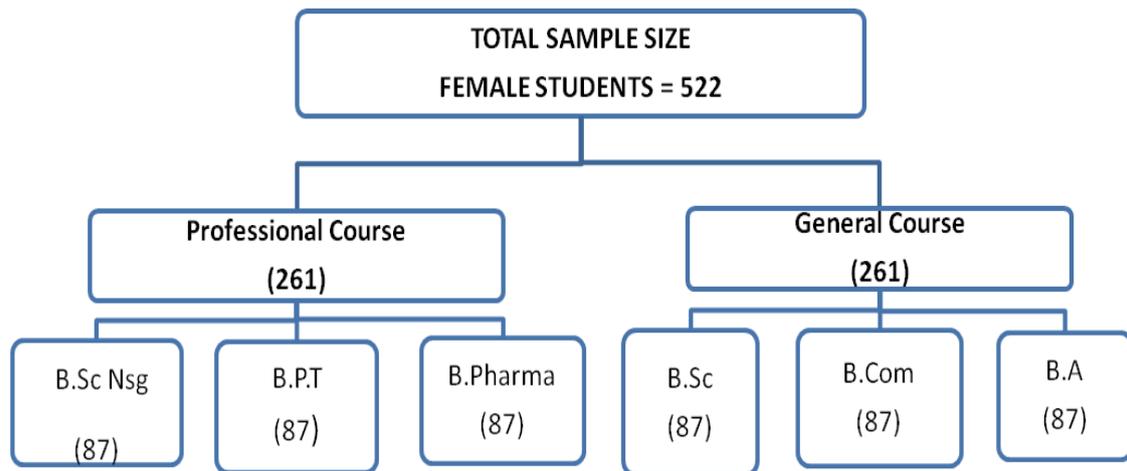


Figure3.1-Schematic representation of sampling technique

The tool used for data collection was personal variables; eating behavior scale was used to assess prevalence of eating behaviour, Sorenson self esteem test was used to assess self esteem among female students. Bio physiological measurement and Paper pencil technique was used for data collection and data obtained were analyzed using both descriptive and inferential statistics.

## MEASURES

**Selected personal variables:** It consisted of 13 items regarding selected personal variables Age, course of study, year of study, religion, types of family, family income, place of residence, mother education status, father education status, mother occupation, father occupation, source of information, body mass index.

**Eating behaviour scale:** Eating behaviour scale was used to assess eating behaviour. It consist 25 questions by which we assess the eating behaviour of female students of general and professional courses. Level of eating behavior is comprised of Good eating behavior (0-25), Mild non eating behavior (26-50), Moderate non eating behavior (51-75), Severe non eating behavior (above75). Minimum score was 25 and maximum score was 100. Reliability was calculated by Cronbach alpha (.80)

**Sorenson self esteem test:** A Sorensen self esteem test was developed to assess the self

esteem of female students. It consist 50 questions by which we assess the self esteem of female students of general and professional courses. Level of self esteem is comprised of fairly good self esteem (0-4), Mild low self esteem (5-10), moderately low self esteem (11-18), severely low self esteem (19-50). Minimum score was 0 and maximum score was 50. Reliability was calculated by KR20 (.83)

## Procedure:

Ethical approval was taken from the institutional ethical committee for conducting the study. Formal administrative approval was obtained from the principal of college of Bachelor of Science in Nursing, Bachelor of Pharmacy, Bachelor of Physiotherapy and Santana Dharma College, Ambala to conduct the study. Permission was taken from class coordinators. The subjects were informed regarding the objectives of the study and written consent was taken after assuring the samples about the confidentiality of the data. Eating behavior scale, Personal variables Performa was administered. Height and weight were recorded at the end phase Time taken to collect data was collected in 10-15 minutes for each year of general and professional courses.

**Statistical analysis:** The data were analyzed using appropriate statistical software and results were presented in narratives and tables. Descriptive and

inferential statistics was used to analyze the data.

## RESULT

In general courses out of 261 female students majority of them were in the age group of 18-20 years i.e. 234(89.6%) and in professional courses, out of 261 female students 134(51.2%) were in also the age group of 18-20 years. In general course out of 261 female students majority of them belong to Hindu religion i.e. 200(76.5%) and in professional courses out of 261 female students majority of them also belongs to Hindu religion i.e. 149(56.9%). In general courses majority of female students i.e. 155(59.6%) were from nuclear family whereas majority of female students i.e. 183(70.4%) of professional courses belonged to nuclear family.

In general courses out of 261 female students majority of female student mother i.e. 70(26.9%) were senior secondary educated, whereas in professional courses majority of female students mother i.e. 65(25%) were graduated. In general courses out of 261 female students majority of female student father i.e.87 (33.5%) were

senior secondary educated, whereas in professional courses majority of female students father i.e. 87(33.5%) were graduated.

In general courses majority of female students i.e. 133(51.2%) were getting information regarding eating behaviour from radio/ television, and in professional courses majority of female students i.e. 115(44.2%) were getting information from regarding eating behaviour from newspaper/ magazines.

In general courses majority of female students i.e. 116(44.6%) were having normal BMI and in professional courses majority of female students mother i.e. 137(52.7%) were also having normal BMI.

Female students of professional courses i.e. 164(62.7%) were having mild non-eating behaviour; whereas female students of general courses i.e. 205(78.5%) were also having mild non-eating behaviour. (216) 82.7% female students of general course have severely low self esteem whereas (128) 48.8% female students of professional course have severely low self esteem.

TABLE- 1 Mean, Standard deviation, Mean difference and standard error and t-value of eating behaviour among female students of General and Professional courses.

N=522

FEMALE STUDENTS	Mean ± S.D	M <sub>D</sub>	Standard Error	df	t- value
Professional courses (n=261)	46.2±11.1	4.2	0.24	518	17.5*
General courses (n=261)	42± 0.59				

df(520) t= 1.96 \*Significant

The data presented in table 1 indicates that mean eating behaviour of general courses (42) and professional courses mean (46.2) were having the mean difference of 4.2. The computed t-value=

17.5 shows significant difference between the eating behaviour among female students of general and professional courses, which was found to be statistically significant i.e. t=1.96.

TABLE-2 Mean, Standard deviation, Mean difference and standard error and t-value of self esteem among female students of General and Professional courses.

N=522

FEMALE STUDENTS	Mean ± S.D	M <sub>D</sub>	Standard error	df	t- value
General Courses ( n=261)	25±7.2	6.2	0.31	518	22.5*
Professional courses (n=261)	18.8± 9.3				

df(520) t= 1.96 \*Significant

The data presented in table 2 indicates that mean self esteem of general

courses (25) and professional courses mean (18) were having the mean difference of 6.2.

The computed t-value=22.5 shows significant difference between the self esteem among female students of general and professional courses, which was found to be statistically significant i.e. t= 1.96.

Table – 3 Co-relation between eating behaviour and self esteem of female students of professional courses N=522

	Eating Behaviour
Self Esteem	r value = 0.075 (p value=0.108)

df(520)

Finding in table 3 shows that the coefficient of correlation between eating behaviour and self esteem of female students of professional courses was 0.075 showing a mild positive non significant correlation between eating behaviour and self esteem and it was statistically non significant at 0.05 level of significance. This concludes that with high self esteem; there is high eating behaviour in professional courses.

Table – 4 Co-relation between eating behaviour and self esteem of female students of general courses. N=522

	Eating Behaviour
Self Esteem	r value = 0.47* (p value=0.001)

df(520)

Finding in table 4 shows that the coefficient of correlation between eating behaviour and self esteem of female students of general courses was 0.47 showing a moderate positive correlation between eating behaviour and self esteem and it was statistically significant at 0.05 level of significance. This concludes that with high self esteem; there is high eating behaviour in general courses.

Among general courses the computed chi-square value between the selected variables, religion (30.9), type of family (11.2), father education status (21.2), mother occupation (19.03) and BMI (49.6) were found to be statistically significant at 0.05 level of significance.

Among professional courses the computed chi-square values of selected personal variable religion (15.52), mother education (21.1) and mother occupation (18.2) showing association of eating behaviour

among female students of professional courses was statistically significant at 0.05 level of significance.

Among general courses personal variables, religion (40.8), family type (26.3), family income (26.3), mother education (36.7), mother occupation (53.8), father occupation (23.2), source of information (22.3) and BMI (24.1) shows association of self esteem among the female students of general courses were found to be statistically significant at 0.05 level of significance.

Among professional courses personal variables, religion (25.2) and family type (11.1) shows association of self esteem among the female students of professional courses were found to be statistically significant at 0.05 level of significance.

## DISCUSSION

The present study findings were consistent with the findings of N. Baber et.al (2002) who conducted a cross sectional survey study to determine the proportion of eating behaviour among medical and nursing students. A total of 180 female students were interviewed. To assess the eating behaviour EAT 26 (eating attitude test) is used. The total proportion of eating behaviour among female student was 21.7%. Conclusion of this study was proportion of female nursing students is much higher as compared to female medical students. [5]

A descriptive study was resealed personality heterogeneity in female adolescent in patient with eating disorder. Million adolescent clinical involuntary personality data form adolescent girl with disturbed eating who were psychiatrically hospitalized were analyzed. And result group were compared in eating and co morbid psychopathology. Three subgroups by elevated eating and mood psychopathology as well as impulsivity, aggression and substance uses and high function group and relatively high self esteem. In our study the result was found

that the female students of professional courses were having more eating behaviour as compared to female students of general courses. Female students of professional courses were having high self esteem as compared to general courses. [6]

## CONCLUSION

Thus, it was found that the female students of professional courses were having more eating behaviour as compared to female students of general courses. Based on the finding of the study recommended that study can be conducted to assess the prevalence of eating behaviour among adolescents, comparative study can be conducted to assess the eating behaviour among medical and nursing students and to assess the impact of mass media on eating behaviour in female students.

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