International Journal of Home Science 2025; 11(1): 342-346

International Journal of Home Science

ISSN: 2395-7476
IJHS 2025; 11(1): 342-346

www.homesciencejournal.com
Received: 03-12-2024
Accepted: 07-01-2025

Pooja Devi
Research Scholar, Institute of Home Science, Bundelkhand University Jhansi, Uttar Pradesh, India

Pratibha Arya
Assistant Professor, Institute of Home Science, Bundelkhand University Jhansi, Uttar Pradesh, India

Corresponding Author:
Pooja Devi
Research Scholar, Institute of Home Science, Bundelkhand University Jhansi, Uttar Pradesh, India

Determination of major causative factors of eating disorders in urban areas (Adolescent girls)

Pooja Devi and Pratibha Arya

DOI: https://www.doi.org/10.22271/23957476.2025.v11.i1e.1793

Abstract
Eating disorders are intricate mental health issues that have a major effect on individuals. Abnormal eating habits, worries, and poor body image points of view, and symptoms including weight loss, vomiting or excessive exercise, purging behaviors, using laxatives, using diuretics, using enemas characteristics of these diseases. Anorexia nervosa (AN), bulimia nervosa (BN), and binge eating disorder (BED) are common forms of eating disorders (ED). Eating disorders (ED) can affect individuals of any age, sex, and community. This is a major problem that was earlier seen in European countries, but now it is being seen among individuals in India as well. In India, there is no awareness about individuals eating disorders. Eating disorders (ED) affect not only the physical and mental development of the individuals but also their emotional development. Individuals with eating problems experience malnutrition, which hinders their overall growth. A severe issue, eating disorders (ED) cause people to become ill, which hinders their growth. In addition, eating disorders weaken the immune system, which makes it more challenging for the affected person to fight off infections and increases the risk of developing other infectious or non-communicable diseases in the future. According to previous studies, eating disorders were seen due to many reasons in individuals, but during this study, the major factors food avoidance, medical complications, psychological factors, and body figure consciousness were seen in eating disorder-affected individuals. This study has been conducted to know the major factor of eating disorder in adolescent girls (Age 17 to 21) of Jhansi district. During this study, eating disorders due to medical complications were seen in adolescent girls of Jhansi city. Apart from this, body mass index (BMI) has also been looked at in eating disorders (ED)-affected individuals under this study. Most of the eating disorders that affect adolescent girls fall under the category of undernourished.

Keywords: Eating disorders (ED) Anorexia nervosa (AN), bulimia nervosa (BN), binge eating disorder (BED), body image disturbance (BID), Body Mass Index (BMI), body dysmorphic disorder (BDD)

Introduction
In the twenty-first century, eating disorders (ED) are a burden on society due to the length of time required to cure them, the psychological and physical disorders they are associated with, and the increasing number of people who are affected each year. These ailments have the potential to develop into hazardous chronic diseases. Additionally, certain prevalence studies show that eating disorders are not well understood and that a significant percentage of people either have eating disorders currently or are at risk of developing them in the future because of a number of risk factors (Francisca, *et al*. 2023) [26]. It is anticipated that 3.5% of women and 1.5% of men will experience an eating disorder in their entire lives (Levchenko, D. 2023.) [12]. An essential component of eating disorders, particularly in the cases of bulimia nervosa (BN) and anorexia nervosa (AN), is the body image disturbance (BID) (León 2024) [22].
The development of eating disorders in childhood, heightened neuroticism, low self-esteem, low sense of self-efficacy, genetics, internalization of the thin body ideal, and bad experiences related to food and body can all be contributing factors to eating disorders. As a result, overestimating one's weight and body type causes behaviors in eating disorders (ED) that try to attain or sustain progressive weight loss. As a result, body image disturbance (BID) contributes to recurrence and also to sustaining the disease (Carvalho *et al*. 2024) [13]. One of the most prevalent mental illnesses affecting young women is eating disorders, which can have fatal implications. Recently, binge eating disorder has been recognized as a separate condition in the well-known eating disorders (ED), specifically anorexia nervosa (AN) and bulimia nervosa (BN), with prevalence rates equivalent to bulimia nervosa (Kaur. *et al*. 2023) [17].

But in other clinical samples, "ineffectiveness" and "interoceptive knowledge" were shown to be at the core of the eating disorders (ED) networks instead of "body disappointment" and "just drive for being thin." Furthermore, network analysis has been applied to the study of depression in different groups of people. Adolescents' main symptoms in depression networks were "sadness," "hatred for oneself," "separation," "self-righteous," and "feeling such a collapse" (W Yang, *et al*. 2023) [24].

People with eating disorders have major changes in their emotions, moods, and dietary habits. Eating disorders typically cause a person to become obsessed with food and weight. Every year, millions of people suffer from eating disorders; the majority of these individuals are women between the ages of 12 and 35. The three primary categories of eating disorders are binge eating disorders (BED), bulimia nervosa (BN), and anorexia nervosa (AN) (Nivedita, N. *et al*. 2018) [18].

An extreme fear of gaining weight and binge eating are symptoms of anorexia nervosa (AN), an eating disorder. It is also connected to problems with the cardiovascular system, digestive system, blood, metabolic damage, secondary amenorrhea, and a disturbed hormonal panel. Social pressure, especially on social media, has been linked to an increase in the prevalence of eating disorders like anorexia nervosa (AN) (Esmaeeli, *et al*. 2023) [6].

It could be particularly difficult to comprehend two aspects of anorexia. The first characteristic is a significant sex-to-advantage ratio in occurrence, with females surpassing men by at least nine to one. Furthermore, the development of anorexia frequently happens around puberty (Young JK. 2024) [25].

Individuals suffering from anorexia nervosa (AN) experience weight loss and fatigue due to their excessive vigorous exercise, which is not tailored to their state of severe undernutrition and dietary restriction. Prolonged hospitalizations and less successful treatment outcomes have been linked to excessive physical exercise (Montcel, *et al*. 2023) [3]. According to several studies, a sizable fraction of women with anorexia nervosa (AN) overestimates their body size, determined by Body Mass Index (BMI), when compared to controls.

Bulimia nervosa (BN) is a severe psychological disorder marked by recurrent episodes of binge eating, which is defined as consuming large amounts of food in short periods of time, along with compensated purging behaviors, such as using laxatives and diuretics, which require oneself to vomit, fasting, and engaging in extremely strenuous exercise, that occur at least once a week for three months (Romeo 2024) [14].

In addition to raising the likelihood of obesity, suicidal ideas, depression, anxiety disorders, use of drugs, and other health problems in the future, bulimia nervosa is distinguished by a protracted duration, health problems, and functional impairment. Thus, a great deal of emphasis has been focused on identifying risk and maintenance factors for this harmful illness (Burton. 2006) [5].

The term "external regulation" describes the control of conduct by external incentives or penalties. When it comes to eating habits, external regulation refers to limiting food consumption in order to satisfy peer or society standards rather than one's own preferences. Research suggests that depending too much on outside control might lead to unhealthy eating habits and make one more susceptible to the symptoms of bulimia (Rad D. 2024) [20].

In the literature on eating disorders, the majority of mortality studies have been on anorexia nervosa (AN). According to certain writers, there is little chance of death for bulimia nervosa (BN).

Binge Eating Disorder (BED) is the practice of eating an excessive amount of food in a short period of time and continuing to eat until you reach a dissatisfied level of fullness. Continuous, uncontrolled, and impulsive eating is also referred to as "compulsive overeating". The precise causes of Binge Eating Disorder (BED) are still unknown. According to estimates, it develops as a result of social, genetic, biological, long-term, and psychological factors. Weight gain, obesity or overweight, high blood pressure, hyperlipidemia, stroke, coronary cardiovascular disease, and diabetic complications are side effects of long-term Binge Eating Disorder (BED) in some people (Mohajan, *et al*. 2023) [4]. However, binge eating can be seen in individuals regardless of weight; overweight and obese people tend to suffer from it more frequently (Baykan G.2024) [2].

It wasn't until the latter half of the 20th century when eating disorder cases in India were documented. Maybe the current rise in eating disorders cases is a result of media coverage of the "size zero" shape and the socially acceptable pressure to be thin, body shame, and be unhappy with one's appearance (Vaidyanathan, *et al*. 2019) [23].

Perfectionism is another correlation found between body dysmorphic symptoms and social media use. Excessively excessive demands for himself (Self-focused perfectionist tendencies) and a belief that others hold one to similarly superior standards (Socially mandated perfectionism) are examples of perfectionism (Andrade, *et al*. 2024) [10].

Remarkably not much study has been done on eating attitude distortions and body dissatisfaction among Indians (Gupta N, *et al*. 2017) [8].

Why some older children—those above the age of eight—especially teenagers—develop eating disorders while others do not is a mystery to us. Teenagers' concern of gaining weight or the development of harmful eating habits, however, may be influenced by a variety of variables. There may be a function for biological in nature, emotional, social, and environmental elements (Kumar, P. 2022) [11].

The current study looked at loneliness as a moderator of the relationship between affective symptoms (such as body-shaming, worry, and symptoms of depressive disorders) and binge eating in order to better understand the function of loneliness in eating disorders. It was anticipated that there would be a positive correlation between excessive eating and loneliness and emotional symptoms, with greater levels of both being positively correlated with binge eating (B. Mason. 2024) [1].

Additionally, there is proof that the COVID-19 pandemic's physical seclusion, social activity limitations, and lockdown procedures may have made mental health issues more prevalent, especially in adolescents (Michael Daly, *et al*. 2022) [16]. In addition, it is quite probable that kids and teenagers with body dysmorphic disorder (BDD) would also struggle with psychosocial issues, self-harm, and/or suicidal thoughts, as well as other mental illnesses, including anxiety and depressive disorder (Mark Moran 2024) [15].

Families that include members who suffer from anorexia nervosa frequently display traits such as being overly protective, strict, achievement-oriented, and entangled. These characteristics may impede the afflicted family member's ability to become independent and increase their reliance. Families of bulimics and anorexics also frequently place too much emphasis on nutrition, physical activity, appearance,

and weight. First-degree relatives are also more likely to have a family history of eating disorders, emotional illnesses, and alcoholism. Families of bipolars are often less regimented than those of anorexic individuals, in contrast. These families frequently experience rejection, increasing overt conflict, emotional distancing, and neglect. It is crucial to remember that these generalizations do not apply to all relatives of eating disorder sufferers and that they shouldn't be applied to stigmatize or stereotype them (Marici 2023) [21].

Methodology

This study was conducted in 2023 to look at the major causative factor of eating disorder (ED) among adolescents living in the urban area of Jhansi City. To know the major causative factor for eating disorder, data was collected from adolescent girls coming from the urban areas of Jhansi district in the university and various colleges of Jhansi City. 171 samples were taken for data collection.

In these samples, eating disorder was majored first. A major eating disorder in the respondents Eating attitude test (EAT-26) questionnaire was used. It was designed by Devid M. Graner. After data collection of the respondent, the data was coded such that according to Devid M. Graner, those respondents whose score falls between 0 to 20 will not be found to have eating disorder, and those responding whose score is more than 20 will be found to have eating disorder (ED). For data collection, 171 respondents were taken out of which 50 respondents had a score more than 20. A major causative factor of eating disorder was seen in the 50 eating disorder-affected respondents.

Anorexia test (AT) (questionnaire) designed by Doctor Vijayan Lakshmi Chouhan and Aditi Banerjee was used to major in the causative factor of eating disorder. This test also majorly determines the causative factor of eating disorder along with anorexia nervosa.

Along with the Body Mass Index (BMI) of the eating disorder affected respondent was also checked, and the Body Mass Index (BMI) of the respondent was compared with the World Health Organization (WHO) classification table.

Classification of Body Mass Index (BMI) according World Health Organisation (WHO)

Classes of Body Mass Index BMI (World Health Organisation WHO)	
Underweight	Below 18.5
Normal weight	18.5–24.9
Pre-obesity	25.0–29.9
Obesity class I	30.0–34.9
Obesity class II	35.0–39.9
Obesity class III	Above 40

Results and Discussion

Table 1- The show that result of this study in eating disorder food avoidance reasons were 76% responded under low risk and 24% responded under high risk, in medical complication reasons were 56% responded under low risk and 44% responded under high risk, apart from this psychology factor of eating disorder reasons were 80% responding under low risk and 20% responding under high risk, along with this body figure conscious reasons were 64% responded under low risk and 36% responded under high risk (Figure 1).

Table 1: Distribution of respondent according Major Causative Factor of Eating Disorder

Major Causative Factor of Eating Disorder	Low risk (less than 7 score)	High risk (greater than 7 score)	Total no. of respondent
Food Avoidance	38 (76%)	12 (24%)	
Medical complication	28 (56%)	22 (44%)	
Psychological Factor	40 (80%)	10 (20%)	50(100%)
Body figure conscious	32 (64%)	18 (36%)	

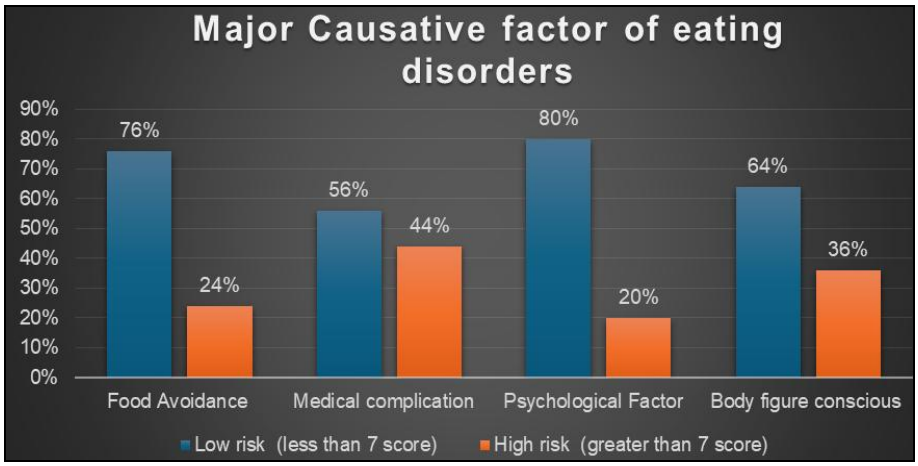

Fig 1: Graphical representation of the presence of a major causal factor of eating disorder in the eating disorder-affected respondent

Table 2 Representing data of this study, 54% of respondents affected by eating disorders had BMI less than 18.5. The BMI of 32% of respondents was between 18.5 and 24.9, and 14% respondents that their BMI was between 25 to 29.9 (figure 2).

Table 2: Classification of BMI of Eating Disorder affected Respondent

Classes of BMI (WHO)	No. Of Respondent
BMI <18.5 (Under nutrition)	27 (54%)
BMI 18.5 to 24.9 (Normal BMI)	16 (32%)
BMI 25 to 29.5 (Pre-obesity)	07 (14%)
Total	50(100%)

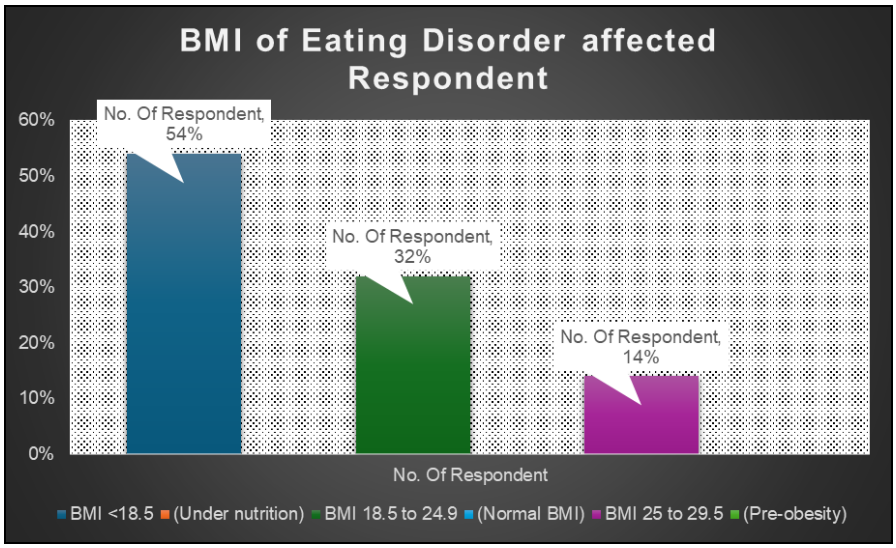

Fig 2: Graphical representation for Body Mass Index (BMI) in Eating Disorder affected respondent

Conclusion

During this study, the major causative factor of eating disorder was seen in the eating disorder affected respondent. Maximum eating disorder was seen due to medical complication and least eating disorder was seen in the respondent due to psychological factor. BMI was seen in which 54% of the respondents' BMI was less than 18.5, which came under the category of under- nutrition. Apart from this, 14% of the respondents' BMI was between 25 to 29.5, which came under the category of pre-obesity.

References

1. Mason B. Loneliness as a moderator of the association of affective symptoms and binge eating among college women. Eating Behav. 2024;54:101903. DOI: 10.1016/j.eatbeh.2024.101903.
2. Bilim Baykan G, Durak Batigun A. Reliability and validity of the Binge Eating Scale-Turkish Form. Turk J Clin Psychiatry. 2024;27:230-238. DOI: 10.5505/kpd.2024.03592.
3. Tezenas du Montcel C, *et al*. Chronic food restriction in mice and increased systemic ghrelin induce preference for running wheel activity. Psychoneuroendocrinology. 2023;155:106311.
4. Mohajan D, Mohajan HK. Binge-Eating: A Life-Threatening Eating Disorder. Paradigm Acad Press Innov Sci Technol. 2023, 2(4), ISSN 2788-7030.
5. Burton E. Evaluation of a healthy-weight treatment program for bulimia nervosa: A preliminary randomized trial. Behav Res Ther. 2006;44(12):1727-1738. DOI: 10.1016/j.brat.2005.12.008.
6. Esmaeeli ST, Rahimi Z, Saeed F, Shoib S. COVID-19 induced anorexia nervosa: A case series and brief review of literature. Clin Case Rep. 2023;11:e7534. DOI: 10.1002/ccr3.7534.
7. Sempere-Ferre F, Escrivá D, Caplliure-Llopis J, Benet I, Barrios C. Eating disorder attitudes and body self-image of urban Mediterranean adolescents. Creative Commons Attribution (CC BY) license [Internet]. Available from: https://creativecommons.org/licenses/by/4.0/.
8. Gupta N, Bhargava R, Chavan BS, Sharan P. Eating attitudes and body shape concerns among medical students in Chandigarh. Indian J Soc Psychiatry. 2017, 33(3). DOI: 10.4103/0971-9962.214605.
9. Arcelus J, Mitchell AJ, Wales J. Mortality rates in patients with anorexia nervosa and other eating disorders: A meta-analysis of 36 studies. Arch Gen Psychiatry. 2011;68(7):724-731. DOI: 10.1001/archgenpsychiatry.2011.74.
10. Andrade K, *et al*. A case report of body dysmorphic disorder in the era of social media. Ann Indian Psychiatry. 2024, 20(20).
11. Kumar P. Eating disorders in children and adolescents or youth. Int J Health Sci. 2022;6(S1):8101-8109. DOI: 10.53730/ijhs.v6nS1.6799.
12. Levchenko D. Comparative characteristics of individual psychological characteristics of patients with eating disorders. Sci Bull Mukachevo State Univ. 2023;9(4):47-56. DOI: 10.52534/msu-pp4.2023.47.
13. Carvalho MN, *et al*. Body image alterations in eating disorders patients: A systematic review of neuroimaging studies. Res Square [Internet]. 2024. Available from: https://DOI.org/10.21203/rs.3.rs-4726800/v1.
14. Romeo M, *et al*. Bulimia nervosa and depression, from the brain to the gut microbiota and back. Front Biosci Landmark. 2024;29(8):277. DOI: 10.31083/j.fbl2908277.
15. Moran M. Body dysmorphic disorder said to be significantly impairing in adolescence. Psychiatr News. 2024, 59(6). DOI: 10.1176/appi.pn.2024.06.6.12.
16. Daly M, Costigan E. Trends in eating disorder risk among U.S. college students, 2013–2021. Psychiatry Res. 2022;317:114882. DOI: 10.1016/j.psychres.2022.114882.
17. Kaur N, *et al*. Prevalence of eating disorders in male and female. Pharm Innov J. 2023;12(5):4497-4504.
18. Nivedita N, Sreenivasa G, Rao TS, Malini SS. Eating disorders: Prevalence in the student population of Mysore, South India. Indian J Psychiatry. 2018;60(4):433.
19. Cornelissen PL. Body size over-estimation in women with anorexia nervosa is not qualitatively different from female controls. Body Image. 2013;10(1):103-111. DOI: 10.1016/j.bodyim.2012.09.003.
20. Rad D, Marcu R, Dicu A, Cuc LD, Roman D, Olteanu LL, *et al*. Network analysis of bulimia and eating behavior regulation in subclinical population. Psychiatry Int. 2024;5(3):515-531. DOI: 10.3390/psychiatryint5030037.
21. Runcan R, Marici M. Eating disorders in adolescents. Int J Soc Educ Innov. 2023, 10(20). Available from: marius.marici@usm.ro.

22. Navas León S, Tajadura Jiménez A. Understanding and treating body image disturbances in eating disorders through body illusion interventions: A scoping review protocol. Syst Rev. 2024;13:24.
DOI: 10.1186/s13643-024-02458-8.
23. Vaidyanathan S, Patnaik Kuppili P, Menon V. Eating disorders: An overview of Indian research. Indian J Psychol Med. 2019;41(4):311–317.
DOI: 10.4103/IJPSYM.IJPSYM_461_18.
24. Yang W, Xiao D, Shi Y, Dong T, Xiong P. Network analysis of eating disorder and depression symptoms among university students in the late stage of COVID-19 pandemic in China. Front Nutr. 2023;10:1176076.
DOI: 10.3389/fnut.2023.1176076.
25. Young JK. Ovarian hormones and eating disorders. Front Psychol. 2024;15:1467795.
DOI: 10.3389/fpsyg.2024.1467795.
26. Francisca OO, Nelson CA, Collins CA, Opeyemi SO. Review of gully Erosion in Anambra state: Geology, causes, effects, control measures and challenges associated with its mitigation. J. Geograph., Environ. Earth Sci. Int. 2023;27(9):102-116.