



Impulsivity, Self-Worth, And Body Image In Relation To Socio-Demographic Variables

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Citation: Ritika Budhiraja, (2024) Impulsivity, Self-Worth, And Body Image In Relation To Socio-Demographic Variables, *Educational Administration: Theory And Practice*, 30(6), 1167 - 1181

Doi: 10.53555/kuevy.v30i6.5461

ARTICLE INFO

ABSTRACT

This study was conducted in India's Northern Region using a descriptive, cross-sectional, and quantitative research methodology to investigate the psychological factors linked to Binge Eating Disorder and Bulimia Nervosa. Two hundred thirty individuals diagnosed with either condition was initially selected using purposive sampling from specialized clinics within the National Capital Region. The study sought to obtain information on the prevailing psychological factors in these individuals, with a specific focus on impulsivity, self-worth, and body image. The study utilized statistical analysis with SPSS version 26, specifically employing independent t-tests and descriptive statistics to investigate the associations between eating disorders and impulsivity, self-worth, and body image to offer a comprehensive overview of the dataset. The findings revealed substantial disparities among individuals with Binge Eating Disorder and Bulimia Nervosa in all measured variables, indicating distinct psychological profiles for each disorder. Individuals with Binge Eating Disorder exhibited elevated levels of impulsivity, a deficiency in premeditation and perseverance, and a stronger propensity for sensation-seeking in comparison to individuals with Bulimia Nervosa. The study also emphasized notable disparities between the two groups regarding physical appearance, competitiveness, social approval, and perceptions of family support. These observations highlight the intricate psychological experiences of individuals with Binge Eating Disorder and Bulimia Nervosa, emphasizing the necessity for additional research on these differences. This study enhances our comprehension of the unique psychological characteristics associated with Binge Eating Disorder and Bulimia Nervosa, thereby potentially guiding the development of more individualized and efficient treatment strategies for these eating disorders.

Keyword: Binge Eating Disorder; Bulimia Nervosa; Body Image; Impulsivity; Self Worth

Introduction

Eating disorders encompass a wide range of psychological conditions that are characterized by abnormal or disturbed eating habits (Allen et al., 2013; Boswell et al., 2023). These disorders have a significant impact on the emotional, physical, and mental well-being of both individuals and their families (Campbell & Schmidt, 2011). Concerns about self-worth, body image, and impulsive behaviour are some of the complex psychological factors that contribute to the prevalence of binge eating disorder (BED) and bulimia nervosa (BN), according to Alvarenga et al. (2014). BED and BN are particularly prevalent among these conditions. According to Attie and Brooks-Gunn (1989), the symptoms of binge eating disorder (BED) include recurrent episodes of consuming large quantities of food in a short period, accompanied by a sense of loss of control and significant distress, and the absence of compensatory behaviours that are typical of binge eating disorder (BN). Bulimia Nervosa, on the other hand, is characterized by binge eating followed by compensatory behaviours such as purging to lessen the adverse effects of binge eating (Boerner et al., 2004; Cooper et al., 1987). There is a significant relationship between psychological factors and the progression and persistence of these disorders. According to Boswell, Gueorguieva, and Grilo (2023), changes in impulsivity, for instance, are closely associated with treatment outcomes for binge-eating disorder. This suggests that impulsivity plays a

pivotal role in both binge-eating disorder and binge-eating disorder (Crisp et al., 2024). Some other important factors include self-worth and body image (Chang et al., 2014). According to Brechan and Kvaem (2015), a lower sense of self-worth is associated with more severe eating disorder symptoms, and body dissatisfaction plays a role in mediating the relationship between the two. The complexities of these relationships highlight the multifaceted nature of eating disorders, which necessitates a comprehensive approach to treatment and intervention that addresses these psychological components (Cash & Brown, 1987). This approach is necessary because eating disorders are an extremely complex condition.

Furthermore, the adaptation and validation of eating disorder tools for use in India underscore the global and cultural dimensions of diagnosing and understanding eating disorders (Ahuja et al., 2023; Sung-Ho, Ji-Young, & Sang-Cheol, 2021). Researchers found that examining psychological health and its impact on psychological happiness also provided insights into the broader social and emotional contexts that influence eating behaviours (Ahuja et al., 2023; Sung-Ho, Ji-Young, & Sang-Cheol, 2021).

The findings of comparative studies conducted across a variety of populations have revealed both differences and similarities in eating attitudes among individuals who suffer from bulimia nervosa, binge eating disorder, and those who are obese but do not have an eating disorder (Dalton et al., 2024; Hussain et al., 2024). These findings further emphasize the necessity of nuanced diagnostic criteria and tailored therapeutic approaches (Alvarenga et al., 2014). According to Assyifa and Riyadi (2023), research on the nutritional status of Indonesia, sheds light on the intricate relationship between body image, eating disorders, and the level of nutrient adequacy. This research suggests that interventions should take into account the particular requirements and difficulties faced by the populations that are being targeted.

In summary, the purpose of this research paper is to investigate the subtle differences and similarities that, among people who suffer from BED and BN, are associated with impulsive behaviour and concerns about self-worth and body image. This study aims to shed light on the distinct and shared psychological profiles inherent in these disorders by investigating these psychological factors in-depth. This will provide direction for more individualized therapeutic approaches. This endeavour not only contributes to the existing body of literature by posing a challenge to the hypothesis that there are no significant psychological differences between individuals who suffer from Bulimia Nervosa and those who suffer from Binge Eating Disorder, but it also highlights the significance of cultural, social, and individual factors in the diagnosis and treatment of eating disorders (Hussain et al., 2024).

Eating Disorders, Binge Eating Disorder and Bulimia Nervosa

Both Binge Eating Disorder (BED) and Bulimia Nervosa (BN) are complex eating disorders that call for a nuanced understanding of the psychological, biological, and sociocultural factors that contribute to their development. According to Joshua et al. (2023), binge eating disorder (BED) is characterized by episodes of excessive food consumption that are not followed by purging behaviours, which can result in feelings of shame, guilt, and a loss of control among the individual. On the other hand, binge eating disorder (BN) is characterized by cycles of binge eating that are then followed by compensatory behaviours such as intense exercise, vomiting, or fasting (Yamamiya et al., 2023). According to Alvarenga et al. (2014), both disorders are linked to significant psychological distress, which also includes feelings of dissatisfaction with one's body, low self-esteem, and emotional dysregulation, respectively. BN and BED are influenced by several factors that come together to come together. According to Boerner et al. (2004), the onset and maintenance of these disorders are significantly influenced by psychological factors such as perfectionism, dissatisfaction with one's body, and negative self-evaluation. According to Buch (1962), the risk of developing an eating disorder is further increased by sociocultural influences. These influences include the portrayal of ideal body types in the media and society's pressure on individuals to conform to prescribed beauty standards. Even though eating disorders are more frequently diagnosed in adolescents and young adults, epidemiological studies have shown that they are prevalent across all age groups and genders (Buddeberg-Fisher et al., 1996). Body shape concerns, particularly among adolescents, contribute to the increased vulnerability to eating disorders during this developmental stage (Bunnell et al., 1992). This is especially true within the context of adolescents.

Cognitive-behavioural therapy, which is effective in addressing the maladaptive thoughts and behaviours associated with both generalized anxiety disorder and borderline personality disorder, is typically used as a treatment for both of these disorders (Campbell & Schmidt, 2011). The goal of cognitive behavioural therapy (CBT) is to develop healthier coping mechanisms for dealing with stress and negative emotions, as well as to assist in the modification of distorted perceptions of body image and self-worth. Both BED and BN are multifactorial disorders that require a comprehensive treatment approach that includes psychological therapy, nutritional guidance, and, when necessary, pharmacotherapy. In conclusion, these disorders warrant a comprehensive treatment approach. To develop more effective interventions and support mechanisms for those who are affected by these disorders, it is essential to conduct ongoing research into the aetiology, prevention, and treatment of these disorders (Joshua et al., 2023; Campbell & Schmidt, 2011).

Impulsive behaviours, self-worth, and body image

Bulimia nervosa, and binge-eating disorder are all conditions that are profoundly influenced by impulsive behaviour, self-worth, and body image. These factors are essential to understanding eating disorders because they play a significant role in the development and progression of these conditions. In binge-eating disorder,

individuals may engage in rapid and uncontrollable consumption of food, which frequently results in significant distress and feelings of loss of control (Rennhak et al., 2023). Impulsive behaviour is particularly prominent in binge-eating disorder. Additionally, this impulsivity is not confined to eating behaviours; instead, it extends to other aspects of life, influencing decision-making processes and possibly exacerbating the risk factors that are associated with eating disorders (Boswell & Grilo, 2021).

One more essential component is self-worth, as eating disorders are frequently linked to low self-worth and a pessimistic assessment of one's worth. According to Claudat et al. (2016), people who suffer from eating disorders frequently internalize the beauty standards that are prevalent in society. This leads to a distorted self-image, which in turn has a significant impact on their self-esteem. The importance of addressing self-worth in treatment and recovery processes is highlighted by the fact that there is a connection between self-worth and eating pathology (Chang et al., 2014).

In both binge-eating and bulimia nervosa, a disturbance in body image is a defining characteristic. Individuals who suffer from these disorders frequently report feeling profound dissatisfaction with their bodies (Dalle Grave, 2023). This dissatisfaction may be the driving force behind the disordered eating behaviours that are characteristic of these conditions, such as cycles of binge-purge eating or restrictive eating. In the context of these disorders, the extent and nature of body image disturbances have been extensively documented, which highlights the necessity of interventions that directly address these distortions (Cash & Deagle, 1997). In the case of bulimia nervosa, for example, the disturbance in body image is a significant factor that frequently influences the severity of the disorder as well as the individual's perception of their body size and shape (Cooper & Taylor, 1988).

A further illustration of the interaction between impulsivity, self-worth, and body image is provided by the high prevalence of binge-eating disorder among college students. This population demonstrates a strong connection between impulsive and compulsive traits and eating disorders, which suggests that impulsivity may serve as both a risk factor and a characteristic of the disorder. As a result, it is necessary to implement targeted interventions within this population (Solly et al., 2023).

There is reason to be optimistic about the possibility of more effective management of eating disorders, as new treatments, such as schema therapy, have demonstrated that they have the potential to address the intricate interplay of factors that are the root cause of these conditions (Joshua et al., 2023). Furthermore, the adaptation of diagnostic tools such as the Eating Disorder Examination Interview for adolescents brings to light the necessity of age-appropriate assessment methods that take into consideration the specific challenges that younger individuals who suffer from eating disorders face (Parker et al., 2023).

To develop effective interventions, it is essential to have a comprehensive understanding of the complex relationship that exists between impulsive behaviour, self-worth, and body image in individuals who suffer from eating disorders. It is possible that comprehensively addressing these factors will result in more nuanced treatment approaches, ultimately leading to improved outcomes for individuals affected by these complex conditions.

Research gap

The investigation of eating disorders, more specifically Bulimia Nervosa (BN) and Binge Eating Disorder (BED), has been conducted primarily within Western contexts (Hussain et al., 2024; Jain & Madnawat, 2015). As a result, a noticeable lack of research is conducted within diverse cultural settings such as India. In light of this deficiency, it is more important than ever to conduct research that considers the existing cultural differences to promote a more global understanding and management of these disorders (Lewis-Smith et al., 2023). Researchers have emphasized the critical need to adapt diagnostic tools for eating disorders that resonate with cultural specifics (Hussain et al., 2024). They have also highlighted the importance of cultural nuances in evaluating and interpreting these conditions. Their efforts to tailor the tools concerning eating disorders in India shed light on the profound differences that exist between cultures in terms of dietary habits and perceptions of body image, which are in stark contrast to the norms that are prevalent in the West (Ahuja et al., 2023; Lewis-Smith et al., 2023).

Therefore, it is of the utmost importance to address these research gaps to develop effective strategies for treatment and prevention that consider the complex cultural nuances present in Indian society. The existing body of research needs to pay more attention to the distinctive cultural, dietary, and socioeconomic factors inherent to India. As a result, there is a significant knowledge gap regarding how these distinct elements influence the development and manifestation of eating disorders such as binge eating disorder (BED) and binge eating disorder (BN).

Rationale

Due to the overwhelming focus on eating disorder research in Western settings, there is a significant lack of understanding regarding the influence of cultural, dietary, and socioeconomic factors specific to India on Bulimia Nervosa (BN) and Binge Eating Disorder (BED). This oversight highlights the pressing requirement for culturally sensitive research to address the divide, providing essential insights for the development of efficient, culturally-customized treatment and prevention strategies. It is crucial to address this gap in order to achieve a comprehensive worldwide comprehension of eating disorders. This will help ensure that

interventions are suitable and successful in various cultural contexts, especially in India where these conditions may present themselves in unique ways.

Objective

1. To identify and analyse differences in impulsive behaviours between individuals diagnosed with Binge Eating Disorder and those with Bulimia Nervosa.
2. To examine differences in self-worth levels between persons with Binge Eating Disorder and those with Bulimia Nervosa, contributing to the understanding of psychological profiles in eating disorders.
3. To evaluate variations in perceptions of body image and appearance among individuals with Binge Eating Disorder compared to those with Bulimia Nervosa, highlighting the role of body image in these disorders.

Theoretical framework

By applying the Cognitive-Behavioural Theory (CBT) to the study of psychological factors such as impulsive behaviour, self-worth, and body image in individuals who suffer from Binge Eating Disorder (BED) and Bulimia Nervosa (BN), a structured framework is provided to comprehend these complicated disorders. According to Campbell and Schmidt (2011), cognitive behavioural therapy (CBT) proposes that individuals experience psychological issues as a result of maladaptive thought patterns and beliefs that affect their behaviours and emotional responses. This is especially pertinent in the context of eating disorders. Individuals who have borderline personality disorder and borderline personality disorder may display maladaptive coping mechanisms in response to negative emotions. These mechanisms frequently result in impulsive eating behaviours, disregarding the physiological cues indicating hunger. According to Wilcox et al. (2021), cognitive behavioural therapy (CBT) interventions are designed to identify and challenge dysfunctional beliefs and foster healthier coping mechanisms and thought patterns to reduce impulsivity related to eating. CBT emphasizes the role that fundamental beliefs and self-evaluations play in self-worth. There are a lot of people who suffer from body dysmorphic disorder and binge eating disorder who may have deeply ingrained beliefs that equate thinness with success and self-worth. This can lead to a cycle of negative self-evaluation that is based on body image and control over eating behaviours. According to Lewer et al. (2017), cognitive behavioural therapy (CBT) is designed to challenge this destructive set of beliefs to foster a more compassionate and realistic sense of self-worth that is not dependent on body shape or eating behaviours. Through cognitive behavioural therapy (CBT), the cognitive distortions that contribute to body dissatisfaction are targeted. These cognitive distortions include all-or-nothing thinking and overgeneralization. For individuals who suffer from BED and BN, it is of the utmost importance to rectify these distortions and encourage a more accurate and positive body image. This is because individuals with these conditions frequently have a distorted perception of their body size and shape, which contributes to disordered eating patterns (Lewer et al., 2017).

Within the context of cognitive behavioural therapy (CBT), techniques such as cognitive restructuring, behavioural experiments, and exposure therapy are utilized to address maladaptive thoughts and beliefs associated with impulsive behaviour, body image, and self-worth. Individuals can recognize and alter irrational thoughts regarding food, eating, and body image through cognitive restructuring. The validity of these beliefs can be tested in real-world scenarios through behavioural experiments, which provide empirical evidence to combat dysfunctional thought patterns. According to Grave (2023) and Joshua, Lewis, Kelty and Boer (2023), exposure therapy helps individuals gradually desensitize to situations they fear, such as eating or body image. This results in a reduction in avoidance behaviours and distressed feelings. In the context of the maintenance of BED and BN, the interconnected nature of impulsive behaviour, self-worth, and body image is made clear when viewed through the lens of cognitive behavioural therapy. By addressing these cognitive and behavioural patterns, a promising approach to treating these eating disorders can be taken to achieve long-term recovery and improved mental health (Rossi et al., 2023; Friederich, Zipfel, & Wild, 2023).

Research Methodology

The National Capital Region in India was the location of this study, which utilized a descriptive, cross-sectional and quantitative research methodology to investigate the psychological factors that are associated with Binge Eating Disorder (BED) and Bulimia Nervosa (BN). The choice of this research design was made to provide an instantaneous snapshot of the prevalent psychological factors that are present in individuals who have been diagnosed with BED and BN. The initial sample for the study consisted of 230 people, all of whom were recruited from clinics located throughout the National Capital Region that specialize in treating eating disorders. For this study, a non-probability, purposive sampling method was utilized, and the participants were individuals who had been clinically diagnosed with either BED or BN. Participants who were eligible for the study were those who were 16 years old or older, had been diagnosed with either BED or BN and were currently receiving treatment in the NCR. Participants who had severe psychiatric comorbidities or who had withheld consent for participation were not eligible. To ensure the reliability and validity of the data that was analysed in the process of examining impulsive behaviour, self-worth, and body image among individuals with BED and BN, the sample size was refined to 190 participants after a comprehensive data cleaning process was carried out to remove responses that were either incomplete or inconsistent.

Data analysis

The data analysis was carried out with SPSS version 26, which included two primary statistical methods for examination. An independent t-test was utilized to determine whether or not there are significant associations between categorical variables. Additionally, descriptive statistics were utilized to investigate and comprehensively describe the data set further.

Data collection instruments

The data collection process for this study was carried out with great care, using a detailed questionnaire specifically created to assess psychological characteristics such as impulsivity, self-worth, and body image. This instrument incorporates validated scales to assess each specific construct comprehensively. In addition, demographic data, such as participants' age, gender, and the duration of the disorder, were documented.

The Biographic Information Schedule was employed to gather crucial socio-demographic information, including participants' age, educational attainment, occupation, socio-economic status, dietary patterns, physical activity levels, and any familial history of similar disorders. The Eating Attitudes Test (EAT-26), developed by Garner in 1982, functions as a psychological assessment instrument to identify symptoms and concerns that are typical of eating disorders. The UPPS Impulsive Behaviour Scale, created by Whiteside and Lynam in 2001, measured impulsivity. It consists of a 59-item questionnaire that assesses five specific aspects of impulsive behaviour. The Contingencies of Self-Worth Scale, developed by Crocker et al. in 2003, assesses the circumstances in which individuals' self-worth depends on certain factors. The Multidimensional Body-Self Relations Questionnaire-Appearance Scales (MBSRQ-AQ), developed by Brown, Cash, and Mikulka in 1990, assessed different aspects of body image perception. This allowed for a thorough evaluation of the psychological factors that affect individuals diagnosed with Binge Eating Disorder and Bulimia Nervosa.

Ethical deliberations

Before collecting data, the researcher obtained informed consent from all participants. This involved explaining the study's goals, confirming their right to withdraw from participation at any point, and ensuring the confidentiality of their responses. The research rigorously complied with ethical standards for conducting studies involving human subjects, emphasizing the fundamental ethical principles of autonomy, confidentiality, and nonmaleficence throughout all stages of the research process.

Data cleaning

Among the 230 responses received, 40 were eliminated during the data cleaning process due to missing responses, incomplete responses, and outliers. This resulted in a total of 190 responses available for analysis.

Reliability

The scales' reliability was assessed using Cronbach's alpha, which exceeded 0.60 for all scales. (Body Image, Self-worth and Impulsivity).

Normality

Table 1 Normality (Body image, Self-worth and Impulsivity)

Factors	N	Minimum	Maximum	Mean	Std. Deviation	Skewness		Kurtosis	
						Statistic	Std. Error	Statistic	Std. Error
Body Image	190	4.00	5.40	4.7253	.33695	-.006	.176	-.547	.351
Self-worth	190	3.86	6.14	5.0038	.47742	-.089	.176	-.587	.351
Impulsivity	190	2.75	4.84	3.8812	.41419	-.151	.176	-.175	.351

With the skewness and kurtosis values falling within the acceptable range of normalcy (-3 to +3), it can be concluded that the distribution of scores for body image, self-worth, and impulsivity among the 190 participants is relatively normal. All of the factor means scores exhibit a tight standard deviation, suggesting a high level of consistency in responses. The mean scores suggest that participants possess moderately elevated perceptions of their self-worth and body image, while impulsivity demonstrates a comparatively lower average.

Data Analysis and Results

Participant profile

The socio-demographic profile of the study includes that participant with "Binge Eating Disorder" (BED) aged "16-25" make up 60.3% of the sample, while participants with "Bulimia Nervosa" (BN) aged "26 and above" make up 39.7%. In terms of socioeconomic status, BED falls into the "Low," "Medium," and "High" categories with 15.1%, 55.6%, and 29.4% respectively, while BN falls into the 4.7%, 75.0%, and 20.3% categories. 50.8% of BED and 46.9% of BN participants reported having "Bad" eating habits, whereas 49.2% of BED and 53.1%

of BN participants reported having "Good" eating habits. Exercise habits indicate that BED participants' "Yes" and "No" answers are distributed equally at 50%, while BN participants reported 53.1% "Yes" and 46.9% "No." 47.6% of BED participants and 45.3% of BN participants report having a "family history" of eating disorders, whereas 52.4% of BED participants and 54.7% of BN participants report having "no" history. Every individual in both cohorts—126 with BED and 64 with BN—has a diagnosis of an eating disorder, making up 100% of each group.

Independent sample t-test

The independent sample t-test is a statistical technique employed to compare the means of two distinct groups to ascertain whether a statistically significant disparity exists between them. This test is precious for comparing the same variable between two distinct groups, assuming that the data follows a normal distribution and that the variances of the two groups are equal or similar. The independent sample t-test is essential for analysing the data in this study.

The study utilized the independent sample t-test to compare the average scores of psychological factors, specifically impulsivity, self-worth, and body image, among individuals diagnosed with Binge Eating Disorder (BED) and those diagnosed with Bulimia Nervosa (BN). Each of these factors represents a crucial domain of interest in comprehending the psychological terrain of individuals afflicted with these eating disorders. The study used this test to discern noteworthy disparities in these psychological aspects between the two groups, thereby illuminating the unique attributes or difficulties experienced by individuals with BED as opposed to those with BN. For example, the test could determine if individuals with BED demonstrate more significant levels of impulsivity in comparison to those with BN or if there are significant differences in self-worth perceptions between the two disorders. Likewise, it could reveal disparities in the way individuals with each disorder perceive and establish a connection with their body image. These insights are precious, as they can provide information for specific therapeutic approaches, improve the understanding of the psychological aspects of the disorders, and aid in creating more efficient treatment plans. The utilization of the independent sample t-test in this study enables a rigorous comparison between the two groups and enhances the overall understanding of the psychological factors that underlie eating disorders. This study aims to use an analytical approach to clearly explain the subtle ways in which BED (binge eating disorder) and BN (bulimia nervosa) impact individuals. The ultimate goal is to enhance diagnostic criteria, intervention strategies, and support mechanisms for individuals affected by these conditions.

Results

Statistical Analysis for Impulsivity

Table 2 Interpretations of Impulsivity (T-test)

Variable	Group	N	Mean	Std. Deviation	t-value	Sig.
Impulsivity	Binge Eating	126	81.6746	9.53736	1.592	0.045
	Bulimia Nervosa	64	78.2031	11.17776		
Negative Urgency	Binge Eating	126	66.9524	16.58703	-2.231	0.035
	Bulimia Nervosa	64	65.0938	14.35792		
Positive Urgency	Binge Eating	126	49.4286	10.11646	1.352	0.025
	Bulimia Nervosa	64	50.8125	9.75717		
Lack of Premeditation	Binge Eating	126	67.5556	17.81440	1.258	0.015
	Bulimia Nervosa	64	64.8750	15.92991		
Lack of Perseverance	Binge Eating	126	74.1429	13.02580	1.326	0.005
	Bulimia Nervosa	64	70.5000	12.53440		
Sensation Seeking	Binge Eating	126	38.5476	9.06034	1.117	0.001
	Bulimia Nervosa	64	34.7188	10.38691		

The results (Table 2) of a statistical analysis (t-test) comparing respondents with "Binge Eating" and "Bulimia Nervosa" across a range of psychological measures are displayed in the table above. These metrics include "Impulsivity," "Negative Urgency," "Positive Urgency," "Lack of Premeditation," "Lack of Perseverance," and "Sensation Seeking."

Impulsivity: "Binge Eating" and "Bulimia Nervosa" groups differed significantly in their levels of impulsivity; the BED participants had higher impulsivity scores (Mean = 81.6746) than the BN participants (Mean =

78.2031), as indicated by a p-value of 0.045. This implies that people with BED might behave more impulsively than people with BN.

Negative Urgency: The study also discovered a significant difference in how the groups' negative emotions caused them to act impulsively. As shown by a p-value of 0.035, the BED group showed a slightly higher urgency (Mean = 66.9524) in response to negative emotions than the BN group (Mean = 65.0938).

Positive Urgency: BED individuals demonstrated a slightly higher level of positive urgency (Mean = 49.4286) compared to BN individuals (Mean = 50.8125), with a p-value of 0.025 supporting the significant difference in impulsivity observed between the groups in response to positive emotions.

Lack of Premeditation: With a p-value of 0.015, the BED group's mean of 67.5556 was considerably higher than the BN group's mean of 64.8750 when it came to acting without prior planning. This implies that binge-eating people are more likely to act impulsively and without thinking about the repercussions.

Lack of Perseverance: This dimension, which measures the ability to maintain attention on a task, revealed a significant difference, as indicated by a p-value of 0.005, with BED subjects scoring higher (Mean = 74.1429) than BN subjects (Mean = 70.5000). This suggests that the groups' lack of perseverance levels differ.

Sensation Seeking: The study found the most significant difference in participants' desire for sensation-seeking experiences between BED (Mean = 38.5476) and BN (Mean = 34.7188) individuals. This difference was supported by a p-value of 0.001.

Significant differences are found between those who have "Binge Eating" and "Bulimia Nervosa" across all measured variables, according to the data. These results imply that, despite the similarities among these eating disorders, each has a unique psychological profile. In particular, the analysis suggests that people who tend to binge eat may be more impulsive, show less forethought and persistence, and be more inclined to seek out sensations than people who have bulimia nervosa.

Statistical Analysis for Self-worth

Table 3 Interpretations of Self-worth (T-test)

Variable	Group	N	Mean	Std. Deviation	t-value	Sig.
Others' Approval	Binge Eating	126	5.0333	1.41845	1.21	0.05
	Bulimia Nervosa	64	4.8938	1.36532		
Physical Appearance	Binge Eating	126	5.3032	1.28890	1.65	0.035
	Bulimia Nervosa	64	5.0344	1.33026		
Outdoing Others in Competition	Binge Eating	126	5.4143	1.45111	1.28	0.005
Outdoing Others in Competition	Bulimia Nervosa	64	4.7375	1.30779		
Academic Competence	Binge Eating	126	5.3984	1.49677	1.39	0.041
Academic Competence	Bulimia Nervosa	64	4.6906	1.29856		
Family Love and Support	Binge Eating	126	5.0095	1.38399	1.70	0.011
Family Love and Support	Bulimia Nervosa	64	4.2531	1.30845		

This study also investigates the significance of dimensions of "self-worth", i.e. 'others' approval, physical appearance concerns, outdoing others in competition, academic competence, and family love and support among individuals with Binge Eating Disorder and Bulimia Nervosa. Based on the means (Table 3) from the statistical analyses, the following is a thorough investigation:

Others' Approval: With a mean of 5.0333, which is very close to significance (p = 0.05), the BED group showed moderate concern for getting others' approval. This implies that other people's perspectives have a noticeable, if not overpowering, impact on this group. On the other hand, the mean of 4.8938 for the BN group indicated slightly lower concern, suggesting subtle variations in the dynamics of social approval among the disorders.

Physical Appearance: With a mean of 5.3032 (p = 0.035), concern for physical appearance indicated a significant area of divergence, which was especially noticeable in the BED group. This shows that people with BED are more conscious of or concerned about their bodies than people with BN, who had a mean of 5.0344, which is marginally lower. This distinction illustrates the intricate relationship that exists between eating disorders and perceptions of one's body.

Outdoing Others in Competition: With a mean of 5.4143 ($p = 0.005$), the BED group's competitive drive was significantly more robust, indicating a more pronounced competitive nature. On the other hand, a mean of 4.7375 for the BN group showed a lower drive for competition, highlighting differences in how competitive tendencies appear under different circumstances.

Academic Competence: The BED group reported higher confidence in their academic abilities, with a mean of 5.3984 ($p = 0.041$). This was another domain where there was a significant difference. In contrast, the BN group showed lower levels of academic confidence (mean = 4.6906), suggesting differences in how individuals perceive their academic efficacy.

Family Love and Support: There were significant differences in the BED group's perceptions of family love and support (mean = 5.0095, $p = 0.011$). A lower mean of 4.2531 for the BN group indicates that they felt less support, highlighting the importance of perceived social support in the context of eating disorders.

In summary, these interpretations draw attention to significant distinctions between people who suffer from "Binge Eating" and "Bulimia Nervosa" in several domains, indicating distinct psychological profiles about concerns about physical appearance, competitiveness, social approval, and perceptions of family support. Particularly for "Outdoing Others in Competition" and "Family Love and Support," the significant p -values highlight the importance of these domains in distinguishing between the two groups.

Interpretations of Body Image (T-test)

Table 4 Interpretations of Body Image (T-test)

Variable	Group	N	Mean	Std. Deviation	t-value	Sig.
Being A Virtuous or Moral Person	Binge Eating	126	5.138	1.292	1.79	0.025
	Bulimia Nervosa	64	4.649	1.440		
God's Love	Binge Eating	126	5.456	1.354	1.43	0.048
	Bulimia Nervosa	64	4.836	1.483		
Appearance Evaluation	Binge Eating	126	3.738	0.499	2.38	0.039
	Bulimia Nervosa	64	3.112	0.495		
Appearance Orientation	Binge Eating	126	5.238	0.862	1.67	0.034
	Bulimia Nervosa	64	4.654	0.717		
Overweight Preoccupation	Binge Eating	126	5.621	1.115	1.91	0.015
	Bulimia Nervosa	64	5.457	1.080		
Self-Classified Weight	Binge Eating	126	6.300	0.794	1.45	0.016
	Bulimia Nervosa	64	5.983	0.814		
Body Areas Satisfaction Scale	Binge Eating	126	3.746	0.494	1.72	0.012
	Bulimia Nervosa	64	3.326	0.504		

Upon examining (Table 4) the complex perspectives of people suffering from "Binge Eating Disorder" (BED) and "Bulimia Nervosa" (BN) concerning dimensions of "body image" being a virtuous or moral person, god's love, appearance evaluation, appearance evaluation, overweight preoccupation, self-classified weight, body areas satisfaction scale, notable differences were observed in multiple domains:

Being A Virtuous or Moral Person: The study revealed a significant difference between the moral and virtue perceptions of people with BED and BN. Participants with BED thought they were more moral or virtuous (mean = 5.138) than participants with BN (mean = 4.649), as shown by a p -value of 0.025. This implies that the two groups differ in their moral self-evaluation.

God's Love: A p -value of 0.048 indicates a significant difference in the groups' perceptions of God's love, with BED participants experiencing a higher sense of divine love (mean = 5.456) than BN participants (mean = 4.836). This distinction emphasizes how spiritual beliefs may have an impact on eating disorder sufferers' psychological experiences.

Evaluation of Appearance: A p -value of 0.039 indicates a significant divergence in the self-evaluation of appearance, with BED individuals showing a more critical self-assessment (mean = 3.738) than BN individuals (mean = 3.112). This suggests that people with BED are more critical of their appearance.

Appearance Orientation: A p-value of 0.034 indicated significant differences in the degree of preoccupation with one's appearance between BED and BN individuals (mean = 5.238 and 4.654, respectively). This result suggests that the BED group has a more positive orientation towards appearance.

Overweight Preoccupation: One fascinating study finding was the variation in overweight preoccupation. As indicated by a p-value of 0.015, BED participants had a slightly higher obsession with being overweight (mean = 5.621) than the BN group (mean = 5.457). This shows that people with BED have complex concerns about how they perceive their weight.

Self-Classified Weight: There were significant differences in how respondents felt about their weight. BED respondents thought they were heavier (mean = 6.300) than BN respondents (mean = 5.983), as indicated by a p-value of 0.016. This shows that different disorders may have different self-classified weight perceptions.

Body Areas Satisfaction: Significant differences were also observed in the participants' satisfaction with different body areas. BED participants reported slightly higher satisfaction levels (mean = 3.746) than BN participants (mean = 3.326), as indicated by a p-value of 0.012. This result highlights variations in the groups' levels of body satisfaction.

There are important distinctions between the psychological orientations, body image, and self-perception of those who suffer from "binge eating" and "bulimia nervosa." These results point to subtle differences in how each group views physical attractiveness, divine love, moral virtue, and body satisfaction. The noteworthy variations highlight the intricate connection between eating disorders and self-evaluation tools, indicating the need for more research on these psychological elements.

Discussion

The findings reveal linkages between different psychological variables used in the study. One of the main variables used to differentiate between the psychological profiles of people with Bulimia Nervosa and Binge Eating Disorder is impulsivity. Research by Kalan et al. (2024) and Crisp and Grant (2024) have demonstrated that impulsivity can appear differently in a variety of psychiatric conditions, including eating disorders. The higher level of impulsivity seen in BED compared to BN points to a distinct pattern of impulsivity that cultural variables may influence. For example, impulsivity traits in people with BED may be more exacerbated in South Asian contexts than in people with BN due to the rapid cultural shifts and the stress of adjusting to changing societal norms (Shenoy & Praharaaj, 2019). The BED and BN groups' differentiation in this work between positive and negative urgency draws attention to the emotional triggers that underlie impulsive behaviours. This result is consistent with the work of Dougherty et al. (2024), which showed that impulsivity functions as a mediator between emotional states and eating disorder behaviours.

The impact of cultural differences, specifically in the expression and regulation of emotions between Indian and Western societies, on eating disorder behaviours may also be influenced by urgency. Indian individuals may feel more urgency because of the social stigma associated with expressing negative emotions (Dikshit et al., 2020). The absence of planning and persistence observed in BED compared to BN may be a reflection of more general cognitive patterns linked to impulsivity in eating disorders. The notion that general impulsivity is a hallmark of BED is supported by research by Boswell and Grilo (2021), which indicates that these people may have trouble organizing their time and maintaining focus on tasks. These impulsivity traits may be exacerbated by cultural expectations in Indian society regarding academic and professional achievement, which could result in increased distress and the use of disordered eating behaviours as coping mechanisms (Haqqi & Irfan, 2024). The search for novel experiences to escape negative self-perceptions or emotional distress may cause the elevated sensation-seeking behaviour observed in BED compared to BN. According to Dougherty et al. (2024), this aspect of impulsivity highlights the importance of cognitive flexibility in controlling the symptoms of eating disorders. The cultural context may influence the degree of sensation seeking in people with eating disorders, particularly the differences in acceptance and openness to new experiences between Indian and Western cultures. People in more conservative societies may find fewer socially acceptable outlets for such behaviours (Dougherty et al., 2024). The expression of impulsivity in eating disorders and how it is managed are greatly influenced by the cultural context. In India, where family and societal expectations play a significant role in shaping an individual's behaviour and sense of self, the pressure to maintain traditional norms while adjusting to contemporary societal shifts may aggravate impulsivity. The relationship between impulsivity and eating disorders may be further complicated by the stigma attached to mental health issues, including eating disorders, which may also have an impact on one's willingness to seek assistance or participate in treatment (Shenoy & Praharaaj, 2019; Dikshit et al., 2020). In conclusion, the subtle distinctions in impulsivity between BED and BN highlight how crucial it is to take emotional triggers and cultural influences into account when diagnosing and treating eating disorders. The results of research by Crisp and Grant (2024), Kalan et al. (2024), and other researchers provide insightful information about the intricate dynamics of impulsivity in BED and BN, emphasizing the need for culturally aware approaches to support and treatment for people in diverse communities.

Concerning "self-worth", the pursuit of "Others' Approval" by those suffering from eating disorders, especially Binge Eating Disorder, reveals a deep-seated need for social validation that has a substantial negative influence on one's sense of self-worth. According to Chang, Perera, and Kupfermann (2014), this worry is particularly prevalent in BED patients and reflects the more significant social dynamics that affect eating disorder sufferers' sense of self-worth. Because Indian society is collectivist and places a higher value on family expectations and social conformity, cultural differences, particularly between Indian and Western societies, may amplify the impact of social approval. This could counteract the individualistic values of Western societies and increase the impact of social approval on people with eating disorders in Indian contexts (Hussain, Sharma, & Khurana, 2024). The critical role that body image plays in self-worth within eating disorders is highlighted by the significant concern that BED individuals have for their "Physical Appearance" (Linardon, Kothe, & Fuller-Tyszkiewicz, 2019). Cultural variables may impact this concern to varying degrees, such as the disparities in beauty standards between Indian and Western cultures. While traditional Indian values may provide a different background for understanding these concerns, Western ideals frequently emphasize thinness, which may heighten body image concerns for those with eating disorders (Vaidyanathan & Menon, 2024). The competitive aspect of "Outdoing Others in Competition" among BED sufferers points to a coping mechanism against feelings of inferiority, mirroring cultural norms that place a high value on accomplishments (Cockerham, Stopa, Bell, & Gregg, 2009). Cultural factors may intensify competitive tendencies in eating disorder sufferers, impacting their self-worth in a different way than in Western settings. One such cultural influence is the high value that Indian society places on success. "Family Love and Support" and "Academic Competence" significantly determine how valuable people with BED feel about themselves, indicating that these aspects are essential providers of self-worth. The importance of achievement and social support in the context of eating disorders is highlighted by the differences in the BED and BN groups' perceptions of their family's support and academic efficacy. Perceived support may have a more significant impact on eating disorder sufferers in Indian culture, where families are critical than in Western cultures, where independence is valued more (Messer, Eckley, Milesi, Storey, & Linardon, 2024). This investigation into self-worth in people with BED and BN reveals important psychological distinctions, highlighting the importance of social approval, anxieties about one's body, competitiveness, and views of support from family and friends. These aspects of self-worth are further complicated by the cultural differences between Indian and Western societies, which calls for using culturally sensitive treatment methods. In particular, the results show how people with BED and BN have complex psychological profiles, indicating the need for comprehensive, culturally sensitive eating disorder management techniques.

Research on how people with Binge Eating Disorder (BED) and Bulimia Nervosa (BN) perceive their bodies has revealed notable psychological variations in how they view themselves and what constitutes physical attractiveness. Interestingly, people with BED believe they are more moral or virtue-seeking than people with BN, indicating a difference in moral self-evaluation between the disorders. This variance may be a reflection of how people with various eating disorders interact with their morality and sense of self, as well as how coping strategies and disorder-related behaviours may impact these interactions (Lewandowska et al., 2023). Similarly, there are notable differences in how the two groups perceive God's love, with BED sufferers experiencing a greater sense of it. This discrepancy may reflect the various existential or spiritual frameworks that people suffering from these disorders employ to interpret their experiences (Mahajan & Mahajan, 2023). Compared to people with BN, BED patients have a more critical self-appraisal of their appearance. This is consistent with other research, highlighting the complex ways body image is created and criticized in these disorders (Lamparyk & Szigethy, 2024).

Furthermore, the more intense fixation that BED patients have on being overweight and their self-classified weight than do BN patients highlights the intricate connection between eating disorders, body image, and weight perception. This distinction emphasizes the significance of addressing weight-related issues in addition to the usual focus on BN as part of the treatment process for individuals with BED (Vaidyanathan & Menon, 2024). The results also showed that BED participants had slightly higher satisfaction levels with various body parts than did BN participants. This suggests that, despite their critical self-evaluation of their appearance, BED individuals may have some positive perceptions of their body parts. The intricate connection between eating disorder sufferers' areas of satisfaction and body dissatisfaction highlights the complex nature of body image problems (Hussain, Sharma, & Khurana, 2024). The complex psychopathology of eating disorders is highlighted by these differences between BED and BN in terms of body image, moral self-perception, and spiritual beliefs. These differences also emphasize the need for customized interventions. More individualized and successful treatment strategies can be developed by considering the subtle differences in how people with BED and BN view and assess their bodies. These results highlight the diversity of eating disorder experiences among cultures and individuals, as well as the significance of taking a wide range of psychological factors into account when developing a treatment plan.

Theoretical implications

The findings regarding "Impulsivity" in Bulimia Nervosa (BN) and Binge Eating Disorder (BED), as well as the examination of self-worth and body image perceptions in these disorders, have important theoretical implications. They contribute to a comprehensive understanding of the psychopathology involved. The differences in impulsivity traits between BED (Binge Eating Disorder) and BN (Bulimia Nervosa), along with

the cultural influences on these characteristics, offer a valuable understanding of the intricate relationship between individual psychological profiles and broader societal factors.

The results indicate that impulsivity in eating disorders is not uniform but rather differs significantly across different disorders and cultural environments. These findings significantly affect the criteria used to diagnose and treat patients. They indicate that interventions should be customized to target the particular forms of impulsivity (such as lack of premeditation and sensation seeking) that are more common in BED compared to BN. The effect of cultural changes and societal norms on impulsivity, particularly in non-Western settings, highlights the need for diagnostic tools and therapeutic interventions sensitive to cultural differences. Therefore, modifying treatment approaches to consider the patient's cultural background is recommended. This may involve integrating stress management and coping techniques that are specific to their culture to reduce impulsive eating disorder behaviours. The role of impulsivity in connecting emotional states and eating disorder behaviours: The significance of impulsivity in connecting emotional distress and disordered eating underscores the criticality of employing emotional regulation strategies in treatment. Therapeutic methods like Dialectical Behaviour Therapy (DBT), which concentrates on enhancing emotional regulation and distress tolerance, can be wildly successful for patients exhibiting significant impulsivity.

The prominent influence of social validation on the formation of self-worth in individuals with eating disorders highlights the necessity for interventions that specifically target the social dimensions of self-worth. Recovery may greatly benefit from programmes prioritizing inherent self-value development, regardless of external approval. The study emphasizes the impact of cultural variations in beauty norms on body image issues and self-worth among individuals with eating disorders. This indicates a requirement for therapy that includes different cultures, focuses on and questions beauty standards specific to each culture, and encourages a positive perception of one's body. The prominence of competition and achievement as factors influencing self-worth in BED and BN implies that therapeutic interventions should prioritize redefining success and accomplishment in healthier and more personally significant ways. This may entail establishing individual objectives independent of societal norms regarding achievement or physical appearance. Considering the significant role of familial affection and assistance in shaping one's sense of value, interventions that incorporate family members into the therapeutic process, providing education and support for the family, can potentially improve treatment results. Family therapy can be especially advantageous in cultures where the family is pivotal in an individual's life.

An integrative treatment approach is necessary for addressing the complex concepts of impulsivity, self-worth, and body image in individuals with BED and BN. This approach should combine cognitive-behavioural, emotional regulation, and culturally sensitive strategies. This approach should possess sufficient flexibility to accommodate the individual's unique impulsivity profile, cultural background, and self-worth concerns. The understanding of how cultural, societal, and emotional factors contribute to eating disorders emphasizes the significance of implementing prevention and early intervention strategies that specifically target these fundamental issues. Early implementation of educational initiatives that foster emotional resilience, cultural proficiency, and positive body image may play a crucial role in preventing the development of eating disorders.

Practical implications

Considering the influence of impulsivity, particularly negative and positive urgency, therapies such as Cognitive Behavioural Therapy (CBT) can be customized to target these specific impulsive tendencies. Possible methods may involve instructing individuals in impulse control training, implementing emotional regulation strategies, and employing mindfulness-based interventions. These techniques aim to assist individuals in identifying and effectively managing impulsive behaviours and emotional triggers. Cultural sensitivity in treatment involves recognizing and comprehending the cultural factors that contribute to impulsivity and urgency in eating disorders. This understanding highlights the necessity for treatment approaches sensitive to different cultures. Therapy can be modified to specifically target the cultural pressures and stigma surrounding eating disorders and mental health in various societies, including those found in South Asian contexts. Emotion-Focused Therapy (EFT) is a type of therapy that focuses on addressing emotional triggers. It has the potential to be helpful for individuals with Binge Eating Disorder (BED) and Bulimia Nervosa (BN). These strategies can assist individuals in comprehending and addressing the emotional factors that contribute to their eating disorder behaviours, with a focus on developing emotional intelligence and coping mechanisms. Family therapy can be beneficial in addressing the dynamics that may worsen eating disorder behaviours by taking into account the influence of cultural and familial expectations. This approach can enlighten families about the disorder, diminish stigma, and cultivate a nurturing atmosphere conducive to recovery. Self-worth interventions, which are programmes designed to enhance self-worth and foster a more positive body image, should be an essential part of the treatment process. This may entail participating in group therapy sessions centred around cultivating self-compassion, engaging in individual therapy to address personal concerns regarding self-worth, and joining community support groups to receive peer encouragement. Conducting educational workshops that provide knowledge on the various body types and the effects of cultural and media portrayals on body image could effectively reduce the influence of societal pressures. These workshops could be highly advantageous in educational institutions and local communities to cultivate early recognition and fortitude. Interventions aimed at improving social skills and assertiveness can assist individuals with BED (binge eating disorder) and BN (bulimia nervosa) in managing their desire for validation and competitiveness. The training

can prioritize the development of more wholesome interpersonal connections and diminish the need for external validation. Mindfulness and acceptance-based therapies, such as Acceptance and Commitment Therapy (ACT), aim to assist individuals in acknowledging their thoughts and emotions without evaluation, emphasizing behaviour aligned with personal values rather than engaging in comparison or seeking validation. Adopting a multi-disciplinary approach involves incorporating nutritional counselling alongside psychological therapies. This is essential for addressing eating patterns and nutritional deficiencies and fostering a more positive and healthier relationship with food. A comprehensive treatment approach can be ensured by implementing a collaborative care model that incorporates psychologists, psychiatrists, dietitians, and primary care providers. This approach addresses both the psychological and physical health aspects of individuals with BED and BN.

Efforts focused on diminishing the negative perception surrounding eating disorders and fostering an understanding of mental health can effectively motivate individuals to seek assistance promptly. Additionally, these campaigns should emphasize the range of eating disorders that exist, going beyond common stereotypes.

Limitations and future directions

The study's cross-sectional design allowed for the examination of psychological factors linked to Binge Eating Disorder (BED) and Bulimia Nervosa (BN). However, it is essential to note that this design does not allow for the establishment of cause-and-effect relationships. Restricting the study to individuals exclusively from the region may restrict the generalizability of the results to larger populations, particularly those in rural or less urbanized areas where the cultural and environmental factors affecting BED and BN may vary considerably. The decision to exclude individuals with substantial psychiatric comorbidities, although it resulted in a more uniform sample, may have inadvertently excluded a significant portion of individuals who frequently experience eating disorders, thus limiting the study's findings.

To gain a more profound comprehension of the temporal dynamics and causal factors that contribute to BED and BN, it would be advantageous for future research to employ longitudinal study designs. Employing random sampling techniques and increasing the diversity and size of the sample would improve the ability to apply the findings to a broader population. Expanding the inclusion of individuals from diverse cultural and regional backgrounds could enhance our comprehension of these disorders by incorporating more subtle and detailed insights. Future investigations should prioritize the inclusion of individuals with psychiatric comorbidities to comprehensively understand the intricate relationship between these conditions and eating disorders. By employing a mixed-methods approach, which combines qualitative techniques like interviews or focus groups, it is possible to enhance the quantitative data by incorporating personal narratives and subjective experiences about BED and BN. This would provide a more nuanced comprehension of the circumstances. Furthermore, employing experimental or quasi-experimental designs could offer valuable insights into the effectiveness of different interventions, such as motivational enhancement therapy, in managing binge eating disorder and bulimia nervosa, thereby illuminating the efficacy of these treatments.

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