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Research Paper

Is Binge Eating Related to Stress? : A Correlational Study

Sanjeebani Majumdar[1]*

ABSTRACT

Binge Eating is the process when a person consumes more food than they need, usually in a shorter period of time, even if they are not hungry. When people come into contact with anything or scenario that causes them stress, they are more likely to binge. The aim of this study is to find out the way Binge Eating and Stress are co-related. 100 participants were chosen for this study where two scales where administered on them, i.e., Binge Eating Scale (BES) and Perceived Stress Scale (PSS). For the calculation, inferential statistical analysis i.e., Pearson's correlation was used where a positive score of r = 0.274 was obtained. Hence, it is can be said that Binge Eating positively related to stress.

Keywords: *Binge Eating, Perceived Stress*

Binge is a term used to describe a period of excessive eating and drinking. It was originally used in English in the mid-1800s to imply 'to soak.' The term 'binge' was coined around the time of World War I to describe excessive eating or drinking. Binge eating is a process in which a person eats a lot of food in a short amount of time. During this procedure, the person loses control over himself. A binge eater consumes 5,000 to 15,000 calories in one sitting or eats excessively throughout the day. Binge eating is defined by the American Psychological Association (APA) as eating unusually large amounts of food in a short period of time while feeling out of control whether the binge eating took place during the day or at night This eating disorder is marked by excessive food desires that can strike at any time.

Binge Eating Disorder (BED) patients are embarrassed by their compulsive eating behaviours and keep them hidden. Binge eating is typically associated with a negative body image and sufferers often use food to cope with stress and low confidence. Obese or overweight people with binge eating disorders are common. Genetics, cognitive patterns, changes in brain structure, psychiatric comorbidities, and subjective thoughts about our body shape and weight, as well as cultural and societal concerns in our environment, are all factors that contribute to binge eating disorder. In the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition, published in May 2013, the American Psychiatric Association (APA) identified binge eating disorder as a unique eating disorder (DSM-V). A person must binge eat at least once a week for three months to be diagnosed with binge eating disorder. The person will sense a loss of control over their food during these periods. Binge-eating episodes are associated with three (or more) of the symptoms listed, such as

[1]Graduate in Applied Psychology, Amity University, Kolkata, West Bengal, India
*Corresponding Author

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eating much more quickly than usual, eating until uncomfortably full, eating large amounts of food even when not physically hungry, eating alone because of embarrassment about how much one is eating, feeling disgusted with oneself, depressed or very guilty afterward (Cowden, 2020).

Herman et. al (2016) conducted a study to look into the evidence for binge eating disorder (BED) using the DSM 5 diagnostic criteria. Keywords such as "binge eating disorder," DSM 5, DSM 4, guilt, shame, embarrassment, quantity, psychological, behaviour and "shape and weight concerns" were used in a PubMed search restricted to titles and abstracts of English language reviews, meta-analyses, clinical trials, randomised controlled trials, journal articles, and letters using human participants. The duration/frequency criterion for BED is supported by evidence, as is the primary importance of loss of control and severe discomfort in diagnosing persons with BED. Although overvaluation of shape/weight is not a diagnostic criterion, its link to the severity of BED psychopathology may help to identify a distinct subset of people with BED. Psychiatric (e.g., mood, obsessive–compulsive, and impulsive disorders) and medical (e.g., gastrointestinal problems, metabolic syndrome, and type 2 diabetes) comorbidities and behavioural characteristics are common in people with BED (eg, overconsumption of calories outside of a binge eating episode and emotional eating). Future revisions of the BED diagnostic criteria should examine the inclusion of BED subtypes, maybe based on an overvaluation of shape/weight, as well as an evidence-based re-evaluation of severity criteria.

This eating problem has yet to be identified by medical studies. However, the majority of doctors think that eating disorders are caused by a combination of biological, psychological, and social factors. Genetics appears to play a role in eating problems, both biologically and psychologically. People who binge eat or have other eating disorders are more likely to come from families who have a history of eating disorders, addiction, or other psychiatric illnesses including anxiety, depression, OCD or ADHD. Many people who binge eat have a long history of turbulence. Many people who binge eat do so as a way to cope with the discomfort they are experiencing. In social influence, many persons who suffer from eating disorders are selfconscious, have low self-esteem, are overweight, and have been bullied. Bullying can lead to emotions of self-loathing, melancholy, and isolation. The habits that contribute to binge eating and other eating disorders can become coping techniques over time. These folks have a habit of using unhealthy habits to relax or relieve stress.

People who need help controlling their binge eating tendencies have several options. CBT (cognitive-behavioural therapy) teaches people how to keep track of their food intake and change unhealthy eating habits, as well as how to change how they react in stressful situations. Interpersonal psychotherapy (IPT) assists people in examining their relationships with friends and family and making changes in problematic areas that may be causing binge eating. Some people may benefit from drug therapy, such as stimulant medicines or antidepressants. Other options include dialectical behaviour therapy (DBT), which helps people regulate their emotions, drug therapy with topiramate, an anti-seizure medication; exercise, which can be used alone or in combination with cognitive behavioural therapy and self-help strategies, such as self-help books, videos and support groups.

REVIEW OF LITERATURE

In recent times, after the COVID-19 global pandemic, there has been an observable increase in the amount of food consumption by people especially the kids, adolescents and the population who has sedentary lifestyles. From the past 2 years, apart from the frontline

workers who were bound stay out of house like food suppliers, municipal workers, police officers, navy officers, army officers, most of the people were confined within the four walls of their house to slow down the spread of the corona virus. The anxiety and distress of staying indoors, unable to socialize with dear ones, no outdoor entertainment, societal panic work and study pressure are some of the instances which pushed people to develop various mental disorders like Obsessive Compulsive Disorder, Generalized Anxiety Disorder, Bulimia Nervosa, Binge Eating Disorder, Internet Gaming Disorder ultimately leading people to find their solace on these three things, namely, Online Gaming, Binge Watching and Binge Eating. These stuff helped them to stay calm for sometime but gradually has made most of them addictive, obese and lazy. Since there was no other option left, they were forced to employ unhealthy behaviours to stay distracted from experiencing the unwanted physical and psychological situation. These are the instances which has prompted me to do further research in finding out the relationship associated between Binge Eating and Stress. Perceived Stress, Parental Stress and Parenting During COVID-19 Lockdown: A Preliminary Study, by Sahithya et al. (2020), looked at the stress experienced by parents during COVID-19 lockdown. The study was cross-sectional in nature and was done in April 2020 utilising an online survey approach. The Parental Stress Scale and the Perceived Stress Scale were used to assess the 196 individuals. The findings provide preliminary statistics on the impact of the COVID 19 pandemic on Indian households. To support my idea and findings, there are some published works on the two variables, i.e., Binge Eating and Perceived Stress illustrated below.

Binge Eating

Abbott et. al (2019) aimed to develop and test a psychological model for binge eating that incorporated the main variables identified in the literature to drive binge eating behaviour, specifically core low self-esteem, negative affect, difficulty with emotional regulation, restricted eating, and beliefs about eating in their paper, Processes and pathways to binge eating: development of an integrated cognitive and behavioural model of binge eating. A total of 760 people took part in the study. All of the factors had substantial bivariate associations, according to the findings.

A study was designed by Shaden et. al (2017) for their paper, Guided self help group therapy for women with binge eating disorder. For 12 weeks, 27 female BED patients aged 18 to 45 were enrolled in guided self-help group treatment. To quantify eating pathology, the frequency of binge eating episodes, and self-esteem, a pre- and post-psychometric examination was conducted. Patients had fewer binge eating episodes, were less concerned about their body weight and form, had a lower BMI, and had less psychological discomfort, but their self-esteem remained same. This demonstrated that guided self-help therapy can reduce the intensity of depression.

In their publication, The Binge Eating Genetics Initiative (BEGIN): study protocol, Cynthania et. al (2020) conducted a multipronged examination of the interplay of genetic, gut microbiome, and behavioural components in bulimia nervosa and binge-eating disorder. The app Recovery was used to collect saliva samples for genotyping, faecal sampling for microbiota characterization, and recording of 30 days of passive data and behavioural phenotyping related to eating disorders from 1000 people who met current diagnostic criteria for bulimia nervosa or binge-eating disorder.

In the study, What's driving the binge in binge eating disorder: A prospective examination of precursors and repercussions, conducted by Kenardy et.al (2006) administered Ecological

Momentary Assessment (EMA) to 33 females with BED. They were forced to wear a handheld computer for seven days and were asked to report on their present emotions, hunger, and binge status. Negative mood and hunger were shown to be significantly higher at prebinge than at nonbinge times, with negative mood being even higher at postbinge.

Stunkard et. al (2005) in their paper, Binge Eating Disorder and Night Eating Syndrome: A Comparative Study of Disordered Eating, compared eating patterns, disordered eating, eating disorder features and depressive symptoms in people with binge eating disorder and night eating syndrome, as well as an overweight control group without BED or NES. It was found that depressive symptoms were higher in the BED and NES groups than in the control group.

Geliebter et. al (2007) assessed the status of the literature addressing clinically significant binge eating in bariatric surgery patients in their paper, Binge eating in the bariatric surgery population: A review of the literature. They conducted a PubMed and Medline search, followed by a reference list search of the publications found. Patients with pre-surgical BE were shown to be more likely to retain the eating disorder. When consuming little amounts of food after surgery, many persons who binge ate previous to surgery report feeling out of control.

Parks et. al (2017) attempted to present an overview of the research findings on emotion regulation in Binge Eating Disorder in their work, Emotion Regulation in Binge Eating Disorder: A Review. Negative emotions and inappropriate emotion management mechanisms have been discovered to play a role in the start and maintenance of binge eating in BED. Poor mood appears to precede binge-eating episodes, and binge eating may be an attempt to manage this emotional distress, as suggested by BED theoretical models.

Schmidt et. al (2019) sought to give a complete Meta-analysis of the efficacy of psychological and medical therapies for binge-eating disorder in their work, Meta analysis of the efficacy of psychological and medical treatments for binge-eating disorder. Psychotherapy, structured self-help treatment, and pharmacology have all been shown to aid people with BED. More high-quality research on BED therapies is needed, with an emphasis on long-term maintenance of therapeutic improvements, comparative efficacy, treatment mechanisms, and complex care models.

Hutson et. al (2016) in their paper, The neurobiological basis of binge eating disorder, found that people with BED have higher impulsivity, compulsion and altered reward sensitivity, as well as increased attentional biases toward food and poor cognitive performance.

Carlos et. al (2016) reviews the evidence for mechanisms that are both shared i.e., reward dysfunction, impulsivity and unique for addiction i.e., withdrawal, tolerance and eating disorder i.e., dietary restraint, weight concern frameworks in their paper, Shared and unique mechanisms underlying binge eating disorder and addictive disorders. Food addiction and BED show significant phenotypic overlap, such as lack of control over consumption and persistent use despite negative effects, according to the researchers.

Perceived Stress

The effect of hypnosis on perceived stress in women with preeclampsia, was investigated by Feyzi et. al (2022). This randomised clinical research had 80 pregnant women with preeclampsia who were hospitalised in two different hospitals for 28-32 weeks (40

participants in each group). First, two sets of people completed the Cohen Perceived Stress Questionnaire. The intervention group was then given three half hour hypnosis sessions separated by three days, with each session lasting three nights. Routine care was provided to the control group. The Perceived Stress Questionnaire was then completed by both groups two weeks after the intervention. The findings revealed that felt stress after the intervention was considerably lower in the intervention group, indicating a significant difference between the two groups.

Hampel and Petermann (2006) investigated age and gender impacts on perceived interpersonal stress, dealing with interpersonal stressors and psychological adjustment among early and middle adolescents in their study, Perceived stress, coping and adjustment in adolescents. 286 Austrian adolescents aged 10 to 14 years old, in grades 5 to 7, were enrolled in the study. The researchers looked at self-reported data on stress, coping and emotional and behavioural issues. Fifth graders scored lower on maladaptive coping techniques and externalising problems than sixth and seventh graders and reported more adaptive coping strategies. As a result, it was determined that problem focused and emotion focused coping were related to emotional and behavioural problems, whereas perceived stress and maladaptive coping were related to adjustment problems.

In their study, The Impact of Perceived Stress and Stress Variables on Academic Performance of Pre-Diploma Science Students: A Malaysian Study, Chong et. al (2009) examined the relationship between stress factors such as health, social, and academic stress and academic performance. The findings show that students were under moderate stress on average and none of the stress factors had a substantial impact on their academic performance. There is a considerable variation in perceived stress between the beginning and middle of the semester, but not between the middle and end of the semester. However, there is a link between felt stress at the conclusion of the semester and academic success. The analysis indicated how the university examined, as well as other institutions with similar structures, may manage student stress to improve academic performance.

Edwards et. al (2012) wanted to investigate the effectiveness of a yoga-based intervention for reducing felt stress and back pain at work in their study, Yoga for reducing perceived stress and back pain at work. The Perceived Stress Scale, Roland Morris Disability Questionnaire, and Positive and Negative Affect Scale were used to assess baseline and end-of-program self-reported stress, back pain, and psychological well-being. The findings suggest that a yoga intervention in the workplace can lower perceived stress and back discomfort while also improving psychological well-being.

In their work, The Relationship Among Perceived Stress, Symptoms and Inflammation in Persons with Inflammatory Bowel Disease, John et. al (2015) sought to explain the link between perceived stress and gastrointestinal inflammation. A population-based registry of people with known IBD was used to enrol 478 participants. The Manitoba IBD Index (MIBDI) and Harvey Bradshaw Index (HBI) for Crohn's disease (CD) and the Powell Tuck Index (PTI) for ulcerative colitis, were used to assess symptomatic disease activity (UC). Cohen's Perceived Stress Scale was used to assess perceived stress (CPSS). Fecal calprotectin (FCAL) was used to quantify intestinal inflammation. The relationship between intestinal inflammation, perceived stress and disease was studied using logistic regressions. The findings showed that in CD, symptomatic disease activity was unrelated to intestinal inflammation, while in UC, it was only weakly connected.

The stress-buffering role of mindfulness including dimensions of observing, describing, acting with awareness, non-judging, and non-reactivity in the relationship between perceived stress and psychological adjustment was investigated by Bergin and Pakenham (2016) in their paper, The Stress-Buffering Role of Mindfulness in the Relationship Between Perceived Stress and Psychological Adjustment. The ability to narrate events was found to be particularly essential in reducing the effects of stress on depression and anxiety, as did the ability to notice internal and exterior experiences in reducing the effects of stress on depression and life satisfaction.

Rose et. al (2016) conducted a study on, Perceived Stress amongst University Academics, where they sought to investigate academic stress among university academics, i.e., those who are employed full-time or part-time, hourly paid, and who may be lecturers, tutors, instructors, or researchers working for universities in various countries around the world. Stress in the educational environment does not appear to have decreased, and it is an important component for organisations and individuals to discover positive strategies to cope well and protect feelings of well-being.

The distinct roles of perceived stress in the link between older adults' physical activity and physical health was investigated by Miller et. al (2012) in their study, The different roles of perceived stress in the association between older adults' physical activity and physical health. Physical activity was found to predict a 2 year reduction in perceived stress and a 4 year prevention of physical health complaints among participants with high but not low baseline levels of perceived stress. Furthermore, the interaction effect on changes in physical symptoms over four years was mediated by changes in perceived stress over two years.

In their work, Study on Serum Cortisol and Perceived Stress Scale in the Police Constables, Walvekar et. al (2015) sought to investigate the relationship between perceived stress and Serum Cortisol, as well as stress as an occupational risk factor that could lead to metabolic syndrome. Serum Cortisol was found to have a favourable relationship with the perceived stress scale, blood glucose and HbA1c. When compared to controls, biochemical parameters in police constables were found to be higher. It was shown that 38 percent of the 108 police officers tested positive for cardiometabolic syndrome.

Fiocco et. al (2015) investigated whether stress levels and diet self-efficacy are linked to harmful eating behaviours in young adults in their work, A study of diet self-efficacy and food consumption in students with high and low perceived stress. In this cohort, the findings show an interaction between perceived stress and diet self-efficacy on fat intake, as well as a main effect for diet self-efficacy on sodium intake. Low levels of perceived stress and good diet self-efficacy were linked to the lowest fat and sodium intake in students.

In their work, Schiffrin et. al (2008), Are you both stressed and happy? The Relationship Between Happiness and Perceived Stress, is being investigated to see if the similar inverse relationship exists between perceived stress and happiness, researchers looked at 100 college students. The results show that there were substantial linear correlations between happiness and perceived stress, showing that these two variables had an inverse connection.

In their paper, A developmental framework of binge-eating disorder based on paediatric loss of control eating, Schvey et al. (2020) presented a broad developmental framework of binge eating disorder and proposed areas of future research to determine which youths with loss of control eating are at risk for persistent and exacerbated behaviour that may lead to binge

eating disorder and adult obesity. The findings imply that loss of control eating, which is common, is linked to excess weight gain and could be a precursor to binge eating disorder.

Binge Eating and Perceived Scale

Vallejo (2015) hypothesised that stress levels mediated the association between sleep quality and eating disorders in her study, Sleep Quality, Stress, and Eating Disorders: A Correlational Study. Sleep quality did not appear to be linked to eating problems, according to the findings. Stress levels, on the other hand, were strongly linked to eating problems.

Chow et. al (2014) investigated whether eating dysregulation moderated the relationship between stress and emotional eating in their study, Stress and emotional eating: The mediating role of eating dysregulation. Eating dysregulation moderated the link between stress and emotional eating, according to the findings. Stress was linked to a decreased ability to respond to internal hunger and satiety cues, which was linked to more emotional eating.

Schulz et. al (2011) wanted to evaluate the microstructural eating behaviour of obese patients with and without binge eating disorder (BED) after stress induction in the laboratory in their study, Stress-induced laboratory eating behaviour in obese women with binge eating disorder. The experiment included seventy-one female participants. It was discovered that BED patients' stress-induced eating behaviour is characterised by a higher drive to eat (as seen by a fast beginning eating rate) and a lack of satiety sense (indicated by less deceleration of eating rate).

In their paper, Combined dieting and stress evoke exaggerated responses to opioids in bingeeating rats, Jason et. al (2005) developed an animal model of binge eating in which rats consume twice the normal amount of palatable food due to a history of caloric restriction combined with footshock stress (R + S). By comparing rats' anorectic and orexigenic responses to naloxone and butorphanol, respectively, and testing the ability of butorphanol to elicit binge eating of chow when palatable food was absent, the authors investigated whether alterations in opioid regulation of feeding are involved in binge eating. The R + S rats displayed enhanced responses to mu/kappa opioid-receptor blockage and activation, with naloxone lowering binge feeding to control levels and butorphanol not triggering chow binge eating.

Hedin et. al (2010) focused on appetite reduction in their study, Caloric Restriction Experience Reprograms Stress and Orexigenic Pathways and Promotes Binge Eating, but little is known about the role of stress during dieting in long-term behavioural adjustment. We looked at physiological and behavioural stress parameters in a mouse model of moderate calorie restriction, which results in a 10 to 15 percent weight loss equivalent to human dieting. The findings show that moderate caloric restriction causes reprogramming of major brain circuits involved in stress responsivity and orexigenic drives. In humans, such alterations are likely to diminish treatment success by encouraging weight-gain habits, suggesting that stress management during dieting may be advantageous in long-term maintenance.

MATERIALS AND METHODS

Objective: To find out the way Binge Eating and Stress are related to each other.

Sample size: 100 participants aged between 18-30 years

Tools used: Binge Eating Scale and Perceived Stress Scale

Description of the tools

i) Binge Eating Scale

The Binge Eating Scale is a sixteen-item questionnaire that is used to determine whether or not someone has binge eating disorder. J. Gormally et al. created it in 1982 with the goal of helping obese people. The questions are based on both behavioural features for example, the amount of food ingested and emotional, cognitive responses for example, guilt or shame. Each question contains three to four different responses, each with its own numerical value. The range of possible scores is 0-46:
Non-binging: less than 17
Moderate binging: 18-26
Severe binging: 27 and greater

ii) Perceived Stress Scale

The Perceived Stress Scale (PSS) is a 10 psychological tool that assesses stress perception. Cohen, Kamarck and Mermelstein created the scale in 1983. It is a metric for how stressful certain situations are in one's life. The items were chosen to reflect how unexpected, unmanageable, and overburdened respondents' lives are. The PSS asks about feelings and ideas from the previous month. In each scenario, respondents are asked how frequently they felt a particular emotion because daily problems, large events, and changes in coping resources should all influence levels of assessed stress, the PSS's predictive validity is projected to decline dramatically after a few months. PSS scores are calculated by inverting responses to the four positively stated items (items 4, 5, 7 and 8) and then totaling across all scale items (e.g., 0 = 4, 1 = 3, 2 = 2, 3 = 1 and 4 = 0).

Procedure

The complete number of participants in this research study was 100 (87 females and 13 males). The participants were introduced and the surveys were circulated using Google Forms for administration. The instructions were presented at the start of the questionnaire, so there was the option of volunteering for the research project. The participant's name, age, sex, educational qualification and socio demographic were recorded as preliminary information. The Binge Eating Scale was completed first, followed by the Perceived Stress Scale. They were thanked for their help and cooperation after the project was completed.

The research title "Is Binge Eating Related to Stress: A Correlational Study" was introduced, followed by literature assessments of a large number of published studies after 2005. The data was calculated and the mean and correlation were discovered in the results. After that, the discussion and conclusion were written. Finally, the research's strengths, limitations and the future direction were added.

RESULTS

Table 1 Mean Scores

Gender	Binge Eating Scale	Perceived Stress Scale
Male	9.31	17.54
Female	10.43	20.01

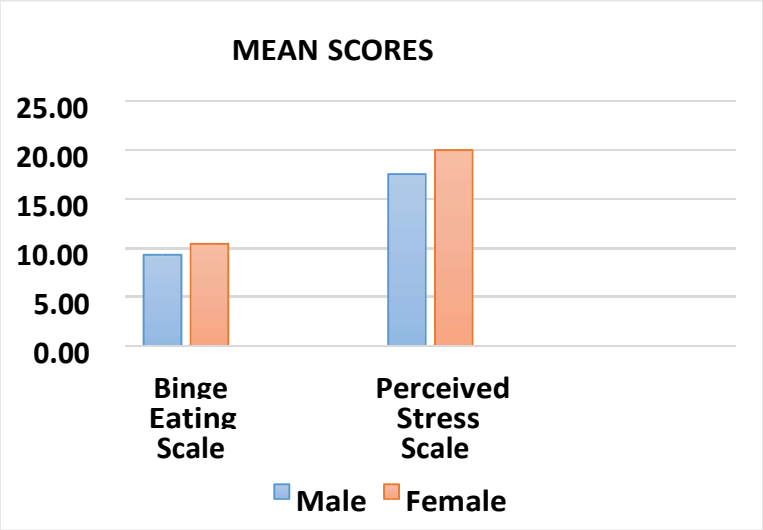

Table 2

Domains	Correlation (r)
Binge Eating Scale	0.274*
Perceived Stress Scale	

**Significant at 0.05 level.*

DISCUSSION

Any entirely unconstrained action is considered a binge. Binge behaviour is used to represent the consumption of substances like alcohol or food as well as shopping, gaming, viewing, gambling or anything that is addictive. Binge Eating is the act of eating an enormous amount of food in a short period of time, sometimes without control. People can binge on any sort of food, but high-fat and high carbohydrate foods are commonly chosen, both because of their forbidden restrictive nature, especially for people concerned about their weight and because of the concern they generate when consumed. Genetics, dieting and body image concerns, psychological concerns, family history, social isolation and hormonal imbalance are some of the causes of binge eating. Psychotherapy, which includes practical techniques and develop healthy attitudes toward food and weight, as well as approaches for changing how a person handles difficult situations, is one of the few treatment options for Binge Eating Disorder. Medications such as Lisdexamfetamine (Vyvanse), which has been approved by the FDA, can also be used to treat binge eating disorder. Nutrition counselling, in which a specialist assists in the restoration of regular eating patterns and teaches about nutrition and a balanced diet, is also available.

In their study, Rapid response to treatment for binge eating disorder, Carlos et al (2006) looked at rapid response in 108 patients with BED who were randomly assigned to one of four 16week treatments: fluoxetine, placebo, cognitive-behavioural therapy (CBT) plus fluoxetine, or CBT plus placebo. Participants with a rapid reaction were shown to be more likely to achieve binge-eating remission, have higher changes in eating-disorder psychopathology and lose more weight than those participants with a non rapid reaction.

Mitchell et al. (2015) looked at the efficacy and safety of lisdexamfetamine dimesylate, a dextroamphetamine prodrug, for treating moderate to severe BED in their paper titled, Efficacy and Safety of Lisdexamfetamine for Treatment of Adults with Moderate to Severe BingeEating Disorder: A Randomized Clinical Trial. They conducted a placebo-controlled,

randomised, double-blind, parallel-group, forced dose titration clinical trial at 30 sites. Participants were given either lisdexamfetamine dimesylate (30, 50, or 70 mg/d) or placebo (1:1:1:1). The doses were titrated over three weeks and then maintained for eight weeks. Participants were monitored for an average of 7 days after the final dose. The 50- and 70-mg/d treatment groups were found to be more effective than the placebo group in terms of BE days, BE cessation and BE reduction.

The goal of this research project was to determine the relationship between perceived stress and binge eating. Two scale instruments, the Binge Eating Scale (BES) and the Perceived Stress Scale (PSS) were employed in this study.

Expanding binge eating assessment: Validity and screening utility of the Binge Eating Scale in women from the general community was the subject of a study by Gouveia et. al (2015) for the BES. It investigated at the Binge Eating Scale's (BES) factor structure, psychometric characteristics, and screening utility in a large sample of female college students and women from the general community in Portugal. With a sensitivity of 81.8 percent and a specificity of 97.8%, the BES performed remarkably well (96.7 percent) in differentiating clinically relevant cases of binge eating. The findings support the BES's validity and utility in assessing and screening binge eating in women from the general population.

Jordan et. al (2020) investigated how negative and positive emotional eating interact with the ease of activation, intensity, and duration of emotional reactivity to predict increased binge eating in their paper, Negative and Positive emotional eating uniquely interact with the ease of activation, intensity and duration of emotional reactivity to predict increased binge eating. When the duration of negative emotional reactivity was 1 standard deviation above average, increased negative emotional eating was associated with increased binge eating (p.001), but when the duration of negative emotional reactivity was 1 standard deviation below average, increased negative emotional eating was associated with decreased binge eating (p.001). When the intensity (p.01) and activation (p.05) of positive emotional reactivity were both 1 standard deviation above average, higher positive emotional eating was associated with increased binge eating.

For the PSS, Teodor (2015) used the Perceived Stress Scale as a Predictor of Professional Behavior and Aspects of Wellbeing, in his paper to investigate the link between occupational stress and organisational behaviour, including wellbeing, workplace satisfaction, desire to leave the organisation, workplace frustration, and absenteeism. The findings demonstrated that stress has a substantial relationship with workplace satisfaction, implying that as stress levels rise, so does workplace contentment.

Evans et al. (2016) examined self-reported weight loss and regain, as well as method use, in their work, Regaining weight for emotional reasons: link with behavioural self-regulation and weight loss strategy use. To evaluate the association between strategy use and emotion regulation, regression analyses (controlled for age, gender, and binge eating status) were utilised. Over and above the influence of binge eating, it was discovered that difficulty with emotion management is linked to less successful weight loss maintenance.

In their publication, Perceived Stress in a Gender Perspective: A Survey in a Population of Unemployed Subjects of Southern Italy, Costa et. al (2021) explored gender variations in felt stress and health status among a sample of respondents moving from unemployment to work. We detected PSS values in the general population of wealthy countries that matched

our findings. The data reveal that female gender is associated with higher stress levels, emphasising the significance of specific and well-designed interventions in health promotion programmes, especially to lower stress in more disturbed persons.

The total scores of the 13 male and 87 female participants together were calculated separately for each domain, BES and PSS, after which a positive correlation score of r = 0.274 was discovered. The significance of the score at the 0.05 level was then checked using the statistical handbook. After that, the scores of the male and the female participants were separated and the total mean scores for each sex were calculated and represented in both tabular and graphical form given above. Thus, it shows that Binge Eating is positively related to Stress.

Numerous studies have indicated that any type of addiction or bingeing has a severe impact on the human mind and body in the form of tension, anxiety, unpredictable behaviour, and various disorders. The below mentioned are some examples of such studies.

Sun et. al (2021) investigated the links between binge-watching activity and depression, social interaction anxiety and loneliness risks among adults in Taiwan in their study, Associations of Problematic Binge-Watching with Depression, Social Interaction Anxiety and Loneliness. A self-administered questionnaire containing four scales: the Center for Epidemiologic Studied Depression Scale, the Chinese version of the Social Interaction Anxiety Scale, the UCLA Loneliness Scale and the Problematic Series Watching Scale was used to collect data from 1488 participants in a cross-sectional online survey. Problematic binge-watching has been linked to an increased risk of depression, social interaction anxiety and loneliness among adults in Taiwan.

The Anxiety of the Pandemic: Binge-watching, Splurging, Sexting, Hooking Up and Masturbating among College Students, by Thomas et. al (2021), looked at the impact of specific COVID-19-related strains on a variety of changes in student behaviour, including binge-watching streaming services, splurging on online shipping, sexting, hooking up with random people, and masturbating. Specific sources of stress were found to be directly directly linked to binge-watching, online shopping, hooking up with random people, and masturbating, while anxiety was found to be directly linked to increased binge watching, online shopping and sexting. It has been demonstrated that the global pandemic not only causes anxiety and disrupts academic life, but also has far-reaching implications for a variety of behaviours.

In their paper, What is the relationship between obsessive compulsive disorder and eating disorders?, Altman et. al attempted to better understand the link between EDs and OCD by methodically examining epidemiological, longitudinal, and family research using Klein and Riso's (1993) and others' five comorbidity models. The overwhelming evidence from these research implies that OCD and ED coexist due to a shared etiological link.

In the research study, Minority Stress, Body Shame and Binge Eating Among Lesbian Women: Social Anxiety as a Linking Mechanism, Lewis et. al (2016) looked at social anxiety and body shame as sequential mediators of the association between minority stress and binge eating among young adult lesbian women. In the association between minority stress, body shame, and binge eating, social anxiety was assumed to be a key component. Lesbian women's body satisfaction and eating habits may be significantly affected by oppressive social conditions produced by minority stress, according to the research.

In her study, Obesogenic Behaviour and Binge Eating Disorder in an Elderly Female with Schizophrenia, Veeraraghavan (2021) described a case of schizophrenia in a patient whose psychotic symptoms were under control but whose eating habits were concerning, prompting consultation. According to the findings, asking about eating habits is more reliable than asking about the amount of food ingested.

In their paper, Binge eating among young adults: association with sociodemographic factors, nutritional intake, dietary n-6: n-3 ratio and impulsivity, Rached et. al (2021) aimed to compare nutritional intake in the presence or absence of BE, with a particular focus on dietary n-6:n-3 ratio, to assess the association between BE and impulsivity and the mediating effect of BMI on this association on 450 university students. BE was found to be substantially linked with a higher BMI, higher total energy consumption, and higher negative and positive urgency levels. Participants with a high dietary n-6:n-3 ratio were 1335 times more likely to present with a BE than those with a lower value (P = 0017).

CONCLUSION

According to the findings of the study, binge eating is positively linked to stress. As we encounter ourselves in stressful situations, we tend to consume more food to temporarily relieve ourselves.

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Conflict of Interest

The author(s) declared no conflict of interest.

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