

# The Factors Impacting Binge-Eating Disorder Severity

## A Literature Review on Effects on Binge-Eating Disorder

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### ABSTRACT

Eating disorders have become more prevalent in recent years, while society has concurrently adopted higher standards for physical, especially bodily figure. This paper summarized the factors impacting the symptom severity, the significance of the disorder's impact and potential treatments for binge-eating disorders. We founded that binge-eating disorder symptoms can be affected by personal genetic or self-perception and identity issues, but also by social expectations and pressure. These findings are significant in adding further in-depth understandings to the disorders and further developing more fitting diagnostic and treatment methods for the disorder.

**Keywords:** *Binge-eating Disorder, Social factors, Internal factors, Treatment.*

## 1. INTRODUCTION

Binge-eating disorder (BED) is a type of eating disorder, defining individuals who suffer from severe distress and dysfunction due to behaviors of binge-eating, but lacking the characteristic cleansing mechanisms of the similar bulimia. (DSM-5) As of 2022, the DSM-5 Diagnostic Criteria for BED is as follows: "Eating, in a discrete period of time (for example, within any two-hour period), an amount of food that is definitely larger than most people would eat in a similar period of time under similar circumstances." Individuals with BED commonly suffer from inability to control their eating, psychological distress regarding their eating behaviors, especially depression, disgust, shame or guilt regarding their own binge-eating. They also likely suffer from physical dysfunctions such as discomfort caused by overeating, gastroenterological issues, and especially obesity. The lack of compensatory purging makes it especially likely that binge-eaters will be obese. Furthermore, BED also disturbs individuals' social life, patients are likely to binge eat alone or in secret, and the behavior becomes a source of shame. Patients also commonly suffer from lack of self-esteem. [1]

In recent researches, BED was confirmed to be a type of eating disorder heavily associated with obesity. Statistics have shown that BED has recently seen a substantial increase in prevalence, in positive correlation with the world's rising prevalence of obesity. [2]

Previous researches have looked in-depth into the epidemiology and genetics of BED; the relations between BED and depression and psychopathy; the significant correlation between BED and obesity; the nature of body image disturbance in patients with BED; and have compared the gender dispersion of BED to the similar bulimia. Previous researchers have not looked very deep into the impacts of social factors such as aesthetic judgments or cultural expectations regarding body shape. Therefore, this paper reviewed the psychological and biological factors impacting the symptom severity of binge-eating disorder, as well as the severity of the disorder, and its potential treatments.

## 2. FACTORS

This paper will now continue to explore and discuss the possible factors affecting the severity of BED, the factors have been divided into two aspects: the internal individual or genetic causes, and the external social pressure or expectation factors.

### 2.1 Biology and Genetics

From a evolutionary viewpoint, previous researches have conducted researches, and have concluded that dopamine and  $\mu$ -opioid receptor genes are involved in the formation process of this disorder. Researchers have tentatively concluded that people who are more responsive to the pleasure-seeking properties of eating,

and those who gain more pleasure from eating sweet or fatty food, are more susceptible to BED.

It is speculated that, from an evolutionary point of view, these genes exist as a sort of energy harvesting and storing strategy for difficult evolutionary periods where food sources are sporadic and scarce, so that each time food, especially food containing fat or sugar, which are high value energy sources, is found, an amount as large as possible is ingested to store the energy away. However, as we have developed past such food source hardship for most parts of our society, such a gene may become obsolete and function as a detriment instead. Thus, individuals carrying such a gene may be innately more likely to develop BED. [3]

## **2.2 Body Image**

Body image refers to the individuals' self-perception, thoughts and feelings of their own body's aesthetics or sexual attractiveness. As BED is a disorder highly correlated with obesity, it is logical to assume that there exist a degree of correlation between body image and BED, as obesity is often a major cause of body image dissatisfaction. The discrepancy between a desired body and body image may be a cause or trigger to the depressive or self-esteem affecting symptoms of BED.

A previous research has proven this assumption correct, and further elaborated on the correlations between body image dissatisfaction and BED severity. It is shown that changes in body dissatisfaction was significantly correlated with the symptom severity of psychological effects of BED, such as depression, as well as the individual's self-esteem. On the other hand, the individual's own perception and self-evaluation of body was only correlated with self-esteem. Furthermore, the self-esteem of the individual is only significantly correlated to concerns over body shape, but not body weight.[4]

## **2.3 Identity Crisis**

Previous researchers have explained eating disorders as the abstract disorders of embodiment and identity. It is caused by the individual alienating themselves from their own flesh, or their own physical stature, leading to them losing the ability to constitute a sense of "self" and their own identity. It is difficult for individuals with eating disorders to accept that there is a difference between being a physical body and "having" a body. Their attempts at interpreting the two concepts as a single one would lead to them objectifying themselves, which then leads to disorders like bulimia and binge eating.[5]

## **2.4 External Social Factors**

As mentioned before, BED can have severe adverse effects on an individual's social life. The self-esteem and

shame factors are the two major significant impacts to the individual's social interactions. What has been scarcely researched before, however, is how these social interactions and other social factors affect BED severity in return.

This paper will now continue to explore and discuss possible factors impacting BED from a sociological perspective.

## **2.5 Social Expectations**

Socially accepted standards of expected body figure, especially concerning the aspects of aesthetics and/or sexual attractiveness. Individuals are likely to feel stress when their own body image, or external body perception and evaluations, either acquired through direct feedback or through assumption, are in mismatch with the social body image standards. Either due to conformity or due to needs of recognition from others, individuals measure themselves with these social standards, and discrepancy are likely to create a similar effect to that coming from self-expectations or more severe.

Furthermore, the perception of desirable body shape of the opposite sex differs significantly between the two genders. The cross-gender expectations for a major part of expectations coming from others, especially the sexual attractiveness aspect. It is worth noting that there exist a mismatch between the perceived expectation from the other gender and the actual expectation. Previous researches have shown that men believed women liked heavier body figures than women actually reported liking, while conversely women believed men liked thinner body figures than men reported liking. The research have also shown that women are more likely to be discontent with their body image and attempt to lose weight while men are more likely to be content with their own body image and try to maintain their body figure. This is likely related to increased likelihood of eating disorders such as bulimia and anorexia in women, but its effects on BED remains to be further explored and explained.[6]

## **2.6 Social Pressure**

Similar to conformity and seeking recognition, there exist a multitude of external pressure factors that causes individuals to experience distress and disrupt normal eating behaviors. The external pressures, especially ones resulted from social comparison and peer pressure.

Social comparisons occur when different individuals are viewed, gazed and compared with one another with the aim of putting one as "superior" and another as "inferior". Constantly being in a competitive mindset for body figures is a risk factor for eating disorders, as it could lead to alienation and objectification of one's own body as a tool or an object to compete against others with. As mentioned above, these can promote individuals to

perform risky and detrimental eating behaviors to accomplish goals such as losing weight or maintaining a thinner shape. Though this factor may affect the BED differently, as the afflicted individuals are suggested to be more susceptible to the pleasure seeking hedonistic side of eating.

Peer pressure is a different stress factor that likely has a more significant impact on the depressive or psychopathic psychological symptoms on BED, as well as creating guilt for the individual. In the case of BED, both the individual's physical appearance, due to their very likely obesity, and their personal eating behaviors deviate from what is considered normal or fitting to the social standards among peers, and therefore are likely to become peer pressure stress points, where the individual feel guilt, disgust and unease with their own body and their own eating behaviors.

As with many other psychological disorders, eating disorders are likely to significantly rise in severity under continuous social pressure. With the current social-based pressure against the obese can be described

### **2.7 Cultural Factors**

Last but not least, the cultural background that the BED patients are found in are equally important. The differences in ideal body shapes and the strength of requirements to meet such standards must be examined and compared cross-culturally.

The significance of cultural factors on different aspects of have been discussed in previous researches. A previous paper concluded that the effects of social factors on eating disorders as a whole could be divided into two categories: The effects that cultural differences have on the previously mentioned social factors, and the effects of cultural changes and developments on eating disorder severity. The main social factors at function are the values regarding aesthetics, and any changes within or across cultures would affect an individual's vulnerability to eating disorders of all kinds. Furthermore, across different cultures, males were reported to be significantly less apparently affected than women. The paper then concluded that eating disorders ought to be classified as culture-based, if not outright culturally bound, which further demonstrated and recognized the importance of cultural factors to all eating disorders.[7]

In respect to the cultural differences of preferred aesthetic standards across cultures, previous researches have looked into and discussed the different ideal female body shapes. A research comparing Kenyans and British samples have shown that Kenyans had a much higher preferences and acceptance for larger figures while the British favored smaller figures, to the point where the British would develop anorexia in order to gain a smaller figure. The Kenyan Asian British samples in the experiment have also demonstrated more similar

preferences to the British group in their perceptions. The results support that social and cultural factors play dominant roles in the perception of one's own and others' body shapes, and therefore an important factor in determining or at least impacting BED. [8]

### **2.8 Combination and Interaction of the External and the Internal**

In a holistic view, the two different types of factors should not be evaluated separately. It is highly likely that many of the factors interact with each other or are even interchangeable. In fact, many external factors will go through a process of internalization, whether automatically by the person's own unconscious process, such as adapting to the requirement of gaining a slim body by learning through critical periods in childhood, or prolonged exposure to social standards; or by intentionally reinforcing by outside social and cultural forces such as magazines and posters promoting a certain approved figure found in certain individuals like models, using the great influence and recognition of the person with such a body figure to encourage others to mimic, and the external factors eventually become internal factors that the individuals themselves feel obliged to follow and respect.

## **3. IMPACTS**

This paper will now continue to discuss the impacts BED has on the life of patients.

### **3.1 Physical Health Risks**

The specific symptomatology of BED makes it so that patients afflicted engage in binge eating behaviors, but do not perform any sort of compensatory purging after a binge. This can lead to physical distress or even damage in gastrointestinal systems due to the large amounts of food ingested in a short interval.

Obesity, while not necessarily a symptom of BED, is still at heightened risk due to the specific type of eating behavior the patients engage in. With obesity, the risk of cardiovascular and cerebrovascular diseases are also heightened.

### **3.2 Social Dysfunctions**

BED, as a type of eating disorder, is also a psychological risk and detrimental to the patient's social functions. Typically, the patients develop depressive moods and severe decrease in their own self-esteem, showing great guilt and disgust in their own binge eating behaviors.

The behavioral pattern of BED patients can be interpreted as a sort of addiction towards food, and therefore share the property of addictive behaviors,

especially the withdrawal symptoms, which can severely hamper a person's ability to properly function socially.[8]

Severe depressive mood disorder and/or lack of self-esteem can also impact the person's social interaction capabilities to a severe extent.

#### **4. TREATMENTS**

Reviewing three previous papers discussing the therapy strategies and pharmacological applications for BED, it is shown that drug uses and behavioral therapies are important in treatments of ED, and ED patients would greatly benefit from receiving individualized treatments.

One paper has demonstrated the efficacy of using antidepressants appetite suppressants in treating BED using a placebo-controlled experiments. [9]

The second paper conducted a qualitative review of treatment studies of BED have demonstrated limited effectiveness for self-help strategies and substantial effectiveness for cognitive behavioral therapy (CBT) and interpersonal therapy (IPT). The researches have also found that CBT and IPT may each be more effective than behavior weight loss therapy (BWL) for reducing binge eating over the long term. Combining with antidepressant drugs, which can be used in treating short-term binge behaviors.

The second paper also demonstrated that while many patients with BED seek and receive obesity surgeries just like ordinary obese patients do, studies suggest that patients with BED are more likely to have post-operation complications, less weight loss, and more weight regain. This evidence promotes that BED patients should receive personalized treatments.[10]

The third paper compared two modern approved psychological treatment methods, the Behavioral weight loss treatment (BWL) and guided self-help based on cognitive behavior therapy (CBTgsh). Both methods were shown to be effective in binge-eating reduction, although in the long-term effects, specifically demonstrated in a follow-up experiment with a two-year time-lapse, the CBTgsh method is proven to be more effective than BWL.[11]

#### **5. CONCLUSIONS**

BED is a late addition to the DSM system under the eating disorders. It is similar to bulimia, save the lack of compensatory mechanisms. BED symptoms can involve adverse psychological and physical effects. There are two main types of likely affecting factors for the severity of BED symptoms, the internal personal factors, and the external social factors. Genetics, self-perceptions and self-identification issues are the main internal affecting factors, while external factors include social expectations, social pressure and cultural differences. The two types of

factors are sometimes interchangeable when social factors are internalized.

The severity of BED symptoms mainly on psychological depression and behavioral disorders, and as such the treatment methods mainly consist of pharmacology and behavioral therapy, relying on antidepressants, appetite suppressants and therapies like CBT or IPT to care for the patients and counter the aforementioned adverse effects.

With the previous researches having looked into the biological aspects of BED; the relations between BED and depression; the significant correlation between BED and obesity; the nature of body image disturbance in patients with BED; and gender differences in BED, future researchers could look further into the similarities between BED and addictions that has been pointed out. Future researchers should also continue the neurological, genetic and evolutionary studies regarding the mechanisms of BED, preferably gaining an in-depth biological understanding. Last and most importantly, future researchers need to expand upon the interaction between social factors regarding body figure and BED symptom severity on a cross-cultural scale.

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