

# Examining Studies on the Effectiveness of Cognitive Behavioral Therapy in Treating Eating Disorders: A Look at Both Western and Asian Studies

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**Abstract:** This paper explores the effectiveness of cognitive behavioral therapy (CBT) in the treatment of eating disorders, looking at the findings of the past three years by examining Western and Asian studies. Eating disorders (EDs), as a global health problem, cover a range of serious mental health conditions marked by abnormal eating patterns, unhealthy food-related behaviors, and intense or obsessive obsession with weight and body shape. The purpose of this article is to discuss the effectiveness of cognitive behavioral therapy in the treatment of eating disorders. The article reviews the relevant Western and Asian studies and reviews a research result in the past three years. The result shows a more comprehensive assessment of clinical impairment, eating disorder symptoms, and anxiety symptoms in the context of the CBT-E intervention. However, there are limitations to the certainty of results in this literature due to differences between studies in design, follow-up period, sample size, and patient diagnosis and age. Future studies should further discuss the effects of treatment in different cultural contexts to more accurately understand the potential impact of treatment.

**Keywords:** Cognitive behavioral therapy (CBT); Eating disorders; Anorexia nervosa; Bulimia nervosa

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## 1. Introduction

Nowadays, eating disorders (EDs for short) are a significant and escalating global health issue that encompasses a range of severe mental health conditions marked by abnormal eating patterns, unhealthy behaviors linked to food, and intense distress or preoccupation with body weight and shape<sup>[1-2]</sup>. Some researchers have shown that people suffering from EDs experience extreme emotions, attitudes, and behaviors around eating and weight. In addition, if not treated appropriately, eating disorders can have significant psychological, physical, and social consequences, and can be life-threatening. In specific, according to the Diagnostic and Statistical Manual of

Mental Disorders, Fifth Edition (DSM-5) there are three spectrums of eating disorders which are anorexia nervosa, bulimia nervosa, and binge eating disorders [3].

According to related research data in Western countries, especially in the United States, there is a trend of diagnosis increasing of EDs for both men and women. In terms of anorexia nervosa, the lifetime prevalence of anorexia nervosa is 0.6%, with 0.3% of men and 0.9% of women being affected. In addition, the prevalence of bulimia is 1.0%, with 0.5% of men and 1.5% of women being affected. So, it can be seen there is a surging demand of the EDs treatment, and the validity and reliability of the treatments need to be paid more attention to and be tested by professionals [4].

The cognitive behavioral treatment for bulimia nervosa (CBT-BN) was first mentioned in 1981. Fairburn proposed that CBT is an evidence-based treatment for eating disorders, specifically designed to address the cognitive and behavioral aspects that maintain some conditions, it has been widely applied and supported. Compared to medication and other psychotherapies, CBT has been found a more effective treatment approach for eating disorders, except for anorexia nervosa. While anorexia nervosa may pose greater challenges for treatment and research compared to bulimia nervosa, extensive psychotherapeutic studies have been conducted on it have revealed that CBT-E holds the potential as a viable therapy option for both adults and adolescents suffering from anorexia nervosa in outpatient settings in China. In addition, a new version of CBT, known as enhanced cognitive-behavioral therapy (CBT-E), also addresses psychopathological processes in eating disorders in general or certain subgroups of ED patients [5].

With the recognition and treatment of eating disorders increasing in Asian societies as well, some research is being conducted to determine the applicability and effectiveness of CBT used in Asia. In 2020, Chisato Ohara et al. conducted a randomized controlled trial comparing CBT-E which is the enhanced version of CBT to treatment as usual (TAU) for bulimia nervosa in Japan. Participants will be randomly assigned to either CBT-E or TAU groups. It can be seen that this study has provided valuable information about the effectiveness of CBT-E for bulimia nervosa in Japan. This literature review aims to examine the studies on the effectiveness of CBT in eating disorder treatment in both Western and Eastern populations in the past three years [6].

## **2. CBT and anorexia nervosa (AN)**

Anorexia nervosa (AN) typically involves having a low body weight, restricting food intake, experiencing a distorted body image, being afraid of weight gain, and desiring thinness above all else. Hence, one of the concerns for patients experiencing AN is weight loss, so CBT for AN focuses on nutrition therapy and weight gain. Compared to TAU, patients assigned to the CBT-E treatment group show a higher number of regaining weight. Some studies are showing the effectiveness of CBT-E for severe and extreme AN. At the end of the treatment, twenty patients showed considerable weight gain and significantly reduced scores for clinical impairment. Effectiveness and effect duration are more advanced for severely ill adult and adolescent patients with AN, according to a study on CBT-E in adolescents and adults. The BMI of the patients receiving inpatient care was more than 18.5 kg/m<sup>2</sup> [7].

## **3. CBT and binge eating disorder (BED)/bulimia nervosa (BN)**

Symptoms of BN, including dietary restraint, excessive exercise, and purging behaviors, are understood to stem directly from the core psychopathology, in that they are conceptualized as behavioral attempts to control

weight and shape. The overvaluation of shape and weight has been termed the “core psychopathology” of BN [8]. Furthermore, how people on a BN diet behave highlights binge eating. Similar to patients with BN, people with BED syndrome also experience episodes of binge eating but they do not participate in compensatory behaviors like self-inflicted vomiting, abusing laxatives, diuretics, or diet pills, fasting, or excessive exercise. Such patients are common among the obese in weight control programs [9].

#### **4. CBT in Western and Asian countries**

To explain the difference between CBT and CBT-E used in Western and Asian countries is collectivism and individualism. Group or family CBT is more common in collectivist Asian countries, like China. However, the majority of the research that this study located for Western nations concentrated more on individual changes. In China, two studies explored the feasibility and efficacy of group cognitive behavior therapy (G-CBT) adapted from enhanced cognitive behavior therapy for eating disorders (CBT-E) in Chinese AN patients. Both G-CBT and IOT groups showed significant improvement in eating pathology and associated psychopathology ( $P < .001$ ) throughout treatment, but no significant difference in symptom improvement was found between the two groups ( $P > .05$ ). Over the final two months of treatment, G-CBT produced additional significant improvement in ED psychopathology; its overall therapeutic effect was influenced by baseline weight and early symptom improvement. Preliminary findings from this open-label trial suggest that G-CBT adapted from CBT-E is feasible in an outpatient setting and as effective as IOT in facilitating weight regain and reducing psychopathology in Chinese AN patients [10].

#### **5. Discussion**

CBT-Enhanced (CBT-E) is a specific form of CBT suitable for the full range of eating disorder diagnoses. It is a transdiagnostic treatment suitable for the full range of eating disorders (EDs). The goal of this study is to examine the last four years of CBT-E use for eating disorders, assess the treatment’s efficacy in various contexts, examine how CBT-E is applied in Asian nations, and offer workable suggestions for CBT-E’s continued successful application [11].

The present review actualizes the literature on CBT-E for EDs in both Western and Eastern countries. In the 15 studies, this study found that the therapeutic effect of CBT-E was reflected in many dimensions, and it yielded statistically comparable results in changes in BMI, recovery of anxiety and depression, significant gains in self-esteem, remission rates, reduced binge eating and purifying behaviors, and improved severity of core psychopathology. Better treatment effects and a longer maintenance period are two of CBT-E’s advantages over general treatment measures [12].

It is worth noting that CBT-E is not widely used in Asian countries, and this review makes an analysis of the obtained application of CBT-E in China and Japan. This study concludes that CBT-E is also accepted by Asian patients and considered beneficial. It was relatively statistically significant in remission of EDs, psychopathology level, family functioning, and treatment satisfaction.

The strength of this study is that it summarizes and supports the effectiveness of CBT-E and the main outcome measures through the review of the relevant literature in recent years and analyzes the application in Asia. This provides a possible reference for the application of CBT-E in Asian countries [13].

One of the limitations of the current study is due to the time limitation, as the review’s narrow focus on

studies conducted between 2020 and 2023 means that it ignores compelling research, and its discussion of CBT-E's applicability and efficacy in treating eating disorders is constrained.

Secondly, the study only studied CBT-E, while there are many other dimensions of CBT treatment for ED. In addition, even for CBT-E, because of the effect of the pandemic period which started in 2019, the research within the time frame is not sufficient as in other years. Besides, there is also online CBT-E intervention on CBT-E and other CBT-E, so the results obtained in the study will be affected, and future research on the application of CBT in broader dimensions is needed<sup>[14]</sup>.

In addition, since this study has only found 3 studies on the application of CBT-E in Asian countries, because of the small body of literature that has been published, both the analysis of the application and impact of CBT-E in Asia and the findings may not apply to other regions.

Besides, most of the articles mentioned in the review used females as the sample, so some studies cannot be generalized to represent the public. This is also an urgent problem for future studies<sup>[15]</sup>.

Besides, investigators can avoid limited sample size whenever possible, extending the study population to a wider population, for example, more male patients. For Asian countries, more studies on CBT-E for eating disorders are needed to support its effectiveness. Researchers can try to explore the possibility of CBT-E as an effective means of promotion in Asian countries.

## Disclosure statement

The author declares no conflict of interest.

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