

Original Article

Effectiveness of Cognitive Behavioral Therapy in Generalized Anxiety Disorder: A Case Study of 21-Year-Old Pakistani female

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Article Information

Received 5 Jan 2026

Accepted 10 Mar 2026

Available online 30
Mar 2026**Keywords:** Cognitive Behavioral Therapy, Generalized Anxiety Disorder, Functional Impairment

Abstract

This study aims to evaluate the effectiveness of Cognitive behavioral therapy (CBT) as a mode of treatment for a patient presenting with Generalized Anxiety Disorder. The therapeutic procedure began with initial history intake and baseline assessments. Beck Anxiety Inventory (BAI) and WHODAS 2.0 (12 Item) was administered to record baseline symptoms severity (BAI=29, moderate anxiety) and (WHODAS 2.0=20, moderate functional impairment) prior to therapy and were re-administered following successful termination of therapy. The therapeutic modality employed in this case was Cognitive Behavioral Therapy, an evidence-based approach for treating GAD. The therapeutic procedure lasted 12 sessions, which aimed at psychoeducation, addressing maladaptive thoughts, cognitive restructuring, and the development of healthy adaptive coping strategies. Results showed significant reduction in anxiety symptoms and improvement in functional difficulties (Post termination BAI=16, mild anxiety; WHODAS 2.0= 12, mild functional impairment). This study highlights the importance of CBT as an effective intervention for anxiety-related disorders in young adult Pakistani population particularly in academic settings.

Introduction

Mental health is an integral part of our general health, overall well-being and a basic human right. It directly influences how we feel, think and act in our daily life. It is a state of mental well-being that helps people realize their abilities, work productively and contribute to the community [18]. Mental health has an instrumental and intrinsic value in our psychological functioning. Good mental health means we can function, connect, thrive and cope with stresses of life in a better way. However, neglecting mental health can disturb our thoughts and feelings. Impairments in mental health can lead to changes in behaviors which disrupts our well-being, relationships and livelihood [9].

The following case-study focuses on one of the most prevalent mental illnesses, which is Generalized Anxiety Disorder. DSM-5-TR- defines Generalized Anxiety Disorder as excessive anxiety and persistent worry about a number of events and activities, occurring more days than not for at least six months. Individuals with Generalized anxiety disorder find the worry difficult to control, which is accompanied by cognitive, emotional and physical symptoms that causes impairments in

social, occupational or other areas of functioning [3].

Epidemiological studies indicate that Generalized anxiety disorder affects a significant portion of adults, with estimated lifetime prevalence of 3.7% and 6.4% [2, 14]. Anxiety problems, including generalized anxiety disorder is more prevalent in individuals aged 18-29 years in comparison to older adults, with women exhibiting higher rates than men [10]. Empirical evidence from around the world has also shown that anxiety symptoms and disorders more likely emerge during early adulthood [19]. Research highlights that 46.8% young adults met the criteria of generalized anxiety disorder across severity levels with higher prevalence among females [1].

Given the high prevalence and significant functional impairment associated with generalized anxiety disorder, there is a prominent need for effective psychological interventions that addresses both cognitive and behavioral aspects of anxiety. Young adulthood represents a critical development phase that is characterized by academic pressure, increasing responsibilities, uncertainty about future which further aggravates excessive worry and intensify emotional distress [19]. Neglecting the treatment can lead to

persistent impairment in daily functioning and increased risk of comorbid mental health conditions [3].

Cognitive Behavioral Therapy (CBT) is widely recognized as evidence-based treatment used for anxiety disorders, including generalized anxiety disorder. It has demonstrated effectiveness in reducing and managing the anxiety symptoms through structured cognitive and behavioral strategies [17, 7]. CBT is grounded in the cognitive model originally developed by Aaron Beck in 1967; the model helps conceptualize various emotional disorders including generalized anxiety disorder. It proposes that maladaptive thoughts patterns and behaviors are the root cause of emotional distress [4].

CBT being a structured psychological intervention consist of several core components that work collaboratively to reduce anxiety symptoms by targeting the maladaptive thoughts and behavioral processes [8]. Central element of CBT is cognitive restructuring which involves identifying, evaluating and modifying the maladaptive thoughts or beliefs that contributes to excessive worry and emotional distress along with behavioral strategies, problem solving skills and adaptive coping strategies to improve emotional regulation [16]. In addition, home-work assignments help the client learn and practice session skills, enhancing information retention and strengthening self-efficacy [12]. Cognitive-focused homework focuses on direct modification of maladaptive beliefs through thought monitoring and evaluation whereas, behavioral experiment assignments encourage the client to test predictions, gather experiential evidence and develop a sense of mastery. These repeated practices promote greater sense of internal control [6] Empirical evidence shows that greater consistent homework engagement is associated with greater symptoms reduction [13]. Another research reveals that completing homework markedly heightened clients' sense of confidence that they can cope with their anxiety symptoms independently in an effective way [11].

Meta-analytical reviews have demonstrated that CBT for anxiety related disorders is significantly effective at both post-treatment and follow-up when compared to behavioral therapy and cognitive therapy alone. CBT combines both cognitive and behavioral elements, which proves to be more efficient at both post-treatment and follow-up [5].

CBT has been successfully applied to young adult with generalized anxiety disorder across diverse cultural contexts. In Pakistan, a 20-session CBT course was demonstrated on young Pakistani female who presented with anxiety. The therapeutic treatment integrated standard cognitive restructuring, psychoeducation and thought-substitution techniques. Post-treatment assessment documented marked reduction in automatic thoughts, anxiety symptoms and functional impairment [15].

Case History

The present case study presents a 21-year-old, single, Pakistani female university student who lives with her parents and siblings in a joint family. She is the middle child and reports close attachment to her mother and elder sister, whom she

identifies as her primary sources of support. She presented with the complaints of persistent anxiety, excessive worry, emotional exhaustion and overwhelm, headaches, sleep disturbance, difficulty relaxing, irritability, fatigue, muscle tension and difficulty coping with academic stress. She reported that these symptoms are increasing progressively over the past year, with prominent worsening since previous month due to increased academic overload and burden. The symptoms were present on most days and had begun to interfere in her daily functioning significantly. From a medical perspective, the client. reported no history of chronic medical illness or neurological conditions. She denied any history of psychiatric hospitalization; substance use or psychotropic medication use. She reported no suicidal ideation. The primary precipitating factors for current episode were academic deadlines, internalized perfectionist expectations, difficulty in managing performance-related stress. She described her tendency toward chronic worry and overthinking since her adolescence which had previously intensified during academic stress. Overtime, the anxiety symptoms became more persistent and less responsive to her usual coping strategies. Behaviorally, she reported social withdrawal, emotional eating, avoidance of demanding tasks, irregular sleep cycle, reduced engagement in activities that once were enjoyable. This was her first time seeking professional psychological help, after her symptoms had become unbearable and she was no longer able to manage them on her own effectively.

Method

The objective of the present case study is to evaluate the effectiveness of cognitive behavioral therapy (CBT) in reducing and managing the symptoms of generalized anxiety disorder, improving emotional regulation and coping skills. It was hypothesized that CBT will lead to reduction in anxiety symptoms, excessive worry, functional impairment and enhance client's abilities to manage stressful situations more effectively.

❖ Research design

A single-case study design was employed to examine the effectiveness of CBT in treating the symptoms of generalized anxiety disorder in a Pakistani young female. This research design allows for in-depth analysis of client's symptoms, presenting complaints, therapeutic procedure and treatment progress in informed clinical context.

❖ Instruments

Assessment was conducted using standardized self-report measures and a comprehensive clinical Interview. Beck anxiety inventory was used to assess the severity of anxiety symptoms at baseline and post-therapy. World Health Organization Disability Assessment Schedule 2.0 (WHODAS 2.0, 12-Item) was used to assess functional impairment at baseline and post-therapy. The client also provided qualitative feedback regarding the progress in their symptoms before therapy, during therapy and post-therapy.

Procedure

The therapeutic procedure began with initial intake sessions, during which a comprehensive clinical interview along with mental status examination was conducted to understand the client's presenting problems, personal history, psychosocial background and current functioning. Standardized assessment measures including the BAI and WHODAS 2.0 (12-Item) was administered to assess baseline of symptom severity and functional impairment. Following the assessment, the client was introduced with the structured course of Cognitive Behavioral Therapy (CBT) which was conducted on weekly basis. The following intervention focused on psychoeducation, cognitive restructuring, behavioral strategies, problem-solving skills and development of adaptive coping skills to manage excessive worry and anxiety symptoms. The therapy was conducted over 12 sessions.

Result

The results of BAI pre-test and post-test showed significant improvement in the client's anxiety symptoms. Similarly, the results of WHODAS 2.0 (12-Item) pre-test and post-test also showed positive progress in functional impairment. The participant's score on BAI (Beck Anxiety Inventory) at baseline was 29 which falls under moderate anxiety range. Post-test (after 12 sessions of CBT): After 12 sessions of structured course of cognitive behavioral therapy, the participant's score on BAI was 16, placing her in mild/low anxiety category. This marked a noticeable reduction in the severity of anxiety symptoms. Whereas, the participant's score on WHODAS 2.0 (12-Item) at baseline was 20 indicating moderate functional limitations particularly in cognition and participation domains. Post-testing score of the client on WHODAS 12.0 was 12, putting her in mild functional impairment category. This shows substantial improvement in functional limitations.

In addition to quantitative analysis, the client reported feeling more balanced, confident, less anxious, calm with improved decision-making skills and healthy coping strategies. These subjective reports further support the objective findings from standardized assessment measures, reinforcing the effectiveness of CBT in treating the generalized anxiety disorder.

Limitations and Suggestions

The study utilizes a single-case design, which allows for in-depth evaluation of therapeutic progress and change however limits the generalization of the findings on larger population. Also, the findings are most likely relevant to young adult university students experiencing academic-related stress and anxiety within similar sociocultural and family context. Further studies may benefit from employing larger sample size and evaluate the effectiveness of CBT across diverse population and clinical representations.

Implications

This study is crucial as it examines the effectiveness of Cognitive behavioral therapy (CBT) in reducing anxiety-related symptoms and functional impairment in a young adult. It further evaluates the usefulness of a structured CBT approach in improving the coping skills and emotional regulation. Given the increasing prevalence of anxiety symptoms and academic related stress in young adults especially within university settings of Pakistan, the findings highlight the importance of culturally tailored CBT as a relevant and accessible intervention for such population.

Conclusion

The findings of this study indicated that CBT can be an effective therapeutic modality for reducing anxiety symptoms, improving emotional regulation and developing healthy adaptive coping skills in young adults in Pakistan. Through the use of structured evidence-based and culturally adapted cognitive and behavioral strategies, the client demonstrated substantial improvement in managing anxiety symptoms, excessive worry, stress and significant functional difficulties. The study provides valuable insights into the practical application of CBT for practitioners and others in the field of clinical psychology.

Conflict of Interest: NIL

Funding Sources: NIL

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Declarations:

Authors' Contribution:

- ^{a-b}Conceptualization, data collection, interpretation, drafting of the manuscript and intellectual revisions
- The authors agree to take responsibility for every facet of the work, making sure that any concerns about its integrity or veracity are thoroughly examined and addressed

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