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The Effectiveness of Cognitive Behavioral Therapy on Resilience and Perceived Stress in Depressed Adolescents

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A B S T R A C T

Objective: The present study aimed to determine the effectiveness of cognitive behavioral therapy on resilience and perceived stress in adolescents with depression.

Methods and Materials: This study employed a quasi-experimental design with a pretest–posttest control group structure. The statistical population consisted of adolescents with depressive disorder who were referred to counseling centers in Tehran during 2026. A total of 28 participants were selected through convenience sampling and randomly assigned into an experimental group (n=14) and a control group (n=14). Data collection was conducted using the Connor–Davidson Resilience Scale (CD-RISC) and the Perceived Stress Scale (PSS). The experimental group received cognitive behavioral therapy in eight 90-minute sessions, whereas the control group received no psychological intervention during the study period. Data were analyzed using descriptive statistics, Levene's test, and analysis of covariance (ANCOVA).

Findings: The findings demonstrated significant differences between the experimental and control groups in posttest scores of resilience and perceived stress after controlling for pretest scores. ANCOVA results indicated that cognitive behavioral therapy significantly increased resilience among depressed adolescents ($F=16.854$, $p<0.001$, $\eta^2=0.621$). In addition, cognitive behavioral therapy significantly reduced perceived stress in the experimental group compared with the control group ($F=14.348$, $p<0.001$, $\eta^2=0.589$). The results confirmed that participation in cognitive behavioral therapy sessions led to improved psychological adjustment and reduced stress perception among adolescents with depressive symptoms.

Conclusion: The results of the present study suggest that cognitive behavioral therapy is an effective intervention for enhancing resilience and decreasing perceived stress in depressed adolescents.

Keywords: *Cognitive Behavioral Therapy, Resilience, Perceived Stress, Depression, Adolescents.*

1. Introduction

Depression is one of the most prevalent psychological disorders among adolescents and is considered a major public health concern worldwide. Adolescence is characterized by rapid biological, emotional, social, and cognitive changes, making individuals in this developmental stage particularly vulnerable to emotional disturbances and psychological disorders. Depression during adolescence is associated with persistent sadness, loss of interest in activities, cognitive dysfunction, sleep disturbances, social withdrawal, and academic impairment, all of which negatively influence psychosocial functioning and quality of life (Arvaneh & Badroud, 2022; Halgin & Whitbourne, 2015). Recent evidence indicates that the prevalence of depressive symptoms among adolescents has increased considerably in recent years due to multiple psychological and environmental stressors, including academic pressure, family conflicts, social isolation, technological overexposure, and economic instability (Moradzadeh & Najafi, 2022; Vesal & Rahimi, 2021). Depression in adolescence not only impairs emotional well-being but also predicts long-term psychological vulnerability, interpersonal difficulties, substance abuse, and suicidal ideation in adulthood (Ahmadi, 2022; Anand et al., 2019).

Researchers have emphasized that depression in adolescents is closely associated with maladaptive cognitive patterns, impaired emotional regulation, and ineffective coping mechanisms. Adolescents with depressive symptoms often demonstrate distorted cognitive schemas, negative automatic thoughts, pessimistic interpretations of life events, and heightened emotional sensitivity toward stressors (Dong et al., 2010; Granero et al., 2017). Such individuals frequently perceive daily experiences as threatening and uncontrollable, which intensifies emotional distress and psychological dysfunction. Exposure to chronic stressors during adolescence has been identified as a significant predictor of depressive symptoms and related emotional problems (Heinze et al., 2017). Moreover, traumatic childhood experiences and emotional neglect may increase vulnerability to depressive disorders through dysregulation of stress-response systems and impaired cognitive processing (Carpenter et al., 2011; Moradzadeh & Najafi, 2022).

One of the most important psychological constructs associated with mental health in adolescents is resilience. Resilience refers to the ability to adapt positively and recover effectively in the face of adversity, stress, and psychological challenges. Individuals with high resilience are better able to regulate emotions, maintain adaptive functioning, and cope with stressful life events (Haghayegh, 2020). In adolescent populations, resilience has been recognized as a protective factor against emotional disorders, including anxiety and depression. Adolescents with higher resilience tend to demonstrate greater emotional stability, improved interpersonal relationships, enhanced self-esteem, and more effective coping strategies (Khabbaz et al., 2018). In contrast, low resilience is associated with hopelessness, emotional dysregulation, social withdrawal, and vulnerability to psychological distress.

Previous studies have shown that resilience can reduce the negative effects of stressful experiences and facilitate psychological adjustment among adolescents with emotional problems. Educational and therapeutic interventions designed to strengthen resilience have demonstrated beneficial outcomes in improving emotional well-being and reducing depressive symptoms (Yamamoto et al., 2017). Cognitive-behavioral approaches, in particular, have been shown to improve resilience by helping individuals identify dysfunctional thoughts, challenge maladaptive beliefs, and replace ineffective coping strategies with adaptive responses (Salehi et al., 2021; Shafiei & Barhemat, 2020). Resilience is therefore considered an important target for therapeutic interventions in adolescents experiencing depression and emotional instability.

Another psychological factor closely associated with depression is perceived stress. Perceived stress refers to an individual's subjective evaluation of life situations as stressful, overwhelming, and beyond personal control. Unlike objective stressors, perceived stress emphasizes cognitive appraisal and emotional interpretation of stressful events (Klatzkin et al., 2019). Adolescents with depressive symptoms often report elevated levels of perceived stress due to heightened sensitivity to environmental demands and reduced coping resources. Chronic perceived stress can negatively influence emotional functioning, cognitive performance, sleep quality, and physical health (Ashdown-Franks et al., 2018). Furthermore, high levels of stress perception contribute to the maintenance and exacerbation of depressive symptoms through activation of maladaptive cognitive and physiological responses (Errisuriz et al., 2016).

Research findings indicate that perceived stress among adolescents is influenced by multiple interpersonal and environmental factors, including exposure to violence, family dysfunction, social media use, and academic pressure

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(Heinze et al., 2017; Vesal & Rahimi, 2021). Adolescents who experience high levels of stress often display increased emotional reactivity, reduced concentration, irritability, and decreased motivation. These emotional and behavioral consequences can impair academic performance and interpersonal functioning. In addition, prolonged stress exposure may weaken resilience and increase susceptibility to depressive disorders (Klatzkin et al., 2019). Therefore, reducing perceived stress and improving coping mechanisms are considered essential components of psychological interventions targeting depressed adolescents.

Among evidence-based psychological treatments, cognitive behavioral therapy has received substantial empirical support for the treatment of depression and related emotional disorders. Cognitive behavioral therapy is a structured, goal-oriented, and time-limited psychotherapeutic approach that focuses on identifying and modifying maladaptive cognitions and dysfunctional behaviors (Hall et al., 2016). The theoretical foundation of cognitive behavioral therapy suggests that emotional problems are largely influenced by distorted patterns of thinking and maladaptive interpretations of experiences. By changing dysfunctional thoughts and behavioral responses, individuals can improve emotional regulation and psychological functioning (Kafinia & Farhadi, 2019).

Cognitive behavioral therapy has been widely applied in clinical and nonclinical populations and has demonstrated effectiveness in reducing depression, anxiety, obsessive-compulsive symptoms, and stress-related disorders (Belotto-Silva et al., 2012; Hall et al., 2016). The intervention typically includes cognitive restructuring, behavioral activation, problem-solving training, emotional regulation techniques, and stress management strategies. Through these techniques, individuals learn to challenge irrational beliefs, identify cognitive distortions, and develop adaptive coping skills. Adolescents receiving cognitive behavioral therapy often report improvements in self-awareness, emotional control, social functioning, and psychological flexibility (Granero et al., 2017).

Recent developments in the field of psychotherapy have further highlighted the effectiveness of cognitive behavioral interventions in treating depressive disorders across various populations. Studies conducted in recent years have demonstrated that cognitive behavioral therapy significantly improves cognitive flexibility, distress tolerance, emotional regulation, and adaptive functioning among patients with major depressive disorder (Allahmoradi et al., 2026; Yaghoubi et al., 2026; Yaqubi et al., 2026). In addition, online and internet-based forms of cognitive behavioral therapy have shown promising outcomes in reducing depressive symptoms and improving quality of life among university students and postnatal women (Prasartpornsirichoke et al., 2025; Roberge et al., 2025). Family-based cognitive therapeutic approaches have also been associated with improved family functioning and reduced behavioral problems among individuals with depression (Wang et al., 2025). These findings suggest that cognitive behavioral therapy is a flexible and effective intervention capable of addressing diverse emotional and psychological problems in different populations.

Several studies conducted in Iran have also supported the effectiveness of cognitive behavioral interventions in improving resilience and reducing psychological distress. Positive cognitive behavioral therapy has been shown to enhance resilience and self-esteem in adolescents with depressive symptoms (Beigi et al., 2018). Similarly, cognitive behavioral play therapy has improved resilience and academic well-being among students with learning disorders (Shafiei & Barhemat, 2020). Other studies have reported that cognitive behavioral interventions improve communication skills, emotional adjustment, and coping abilities among adolescents and young adults (Kafinia & Farhadi, 2019). Furthermore, interventions targeting stress management and self-compassion have demonstrated significant reductions in perceived stress and emotional exhaustion (Bashiri, 2020). These findings collectively indicate that cognitive behavioral approaches are highly effective in promoting psychological well-being and adaptive functioning.

Despite the growing body of literature supporting the effectiveness of cognitive behavioral therapy, relatively limited research has specifically examined its simultaneous effects on resilience and perceived stress among depressed adolescents in counseling settings. Adolescence is a critical developmental period during which effective psychological interventions can prevent long-term emotional and behavioral problems. Given the increasing prevalence of depressive symptoms among adolescents and the importance of strengthening protective psychological factors, further investigation into therapeutic approaches targeting resilience and stress reduction appears necessary. In addition, cultural and contextual differences may influence treatment outcomes, highlighting the importance of conducting research within specific sociocultural settings.

Considering the theoretical and empirical importance of resilience and perceived stress in adolescent depression, as

well as the growing evidence supporting cognitive behavioral therapy as an effective intervention for emotional disorders, the present study aimed to investigate the effectiveness of cognitive behavioral therapy on resilience and perceived stress among depressed adolescents.

2. Methods and Materials

2.1. Study Design and Participants

This study was conducted using a quasi-experimental pretest–posttest design with an experimental group and a control group. The statistical population included adolescents diagnosed with depressive disorder who were referred to counseling centers in Tehran in 2026. Using convenience sampling, 28 eligible adolescents were selected and assigned to two groups, including 14 participants in the experimental group and 14 participants in the control group. Before the intervention, both groups completed the pretest measures of resilience and perceived stress. The experimental group then received cognitive behavioral therapy, while the control group received no intervention during the same period. After completion of the intervention, both groups were reassessed using the same instruments.

2.2. Measures

Connor–Davidson Resilience Scale. The Connor–Davidson Resilience Scale was used to measure resilience. This scale was developed by Connor and Davidson in 2003 and consists of 25 items scored on a five-point Likert scale ranging from 0 to 4. The total score is obtained by summing all items, with higher scores indicating greater resilience. The scale assesses the individual's ability to cope with pressure, adversity, and threatening situations. Previous studies have confirmed the validity and reliability of this instrument through factor analysis, convergent and divergent validity, test–retest reliability, and Cronbach's alpha.

Perceived Stress Scale. The Perceived Stress Scale developed by Cohen in 1983 was used to assess perceived stress. In this study, the 14-item version was applied. Items are scored on a five-point Likert scale ranging from 0 to 4, and the total score ranges from 0 to 56. Higher scores indicate higher levels of perceived stress. The scale evaluates the extent to which individuals perceive life situations as stressful, uncontrollable, and overwhelming. Previous research has confirmed its face, content, and construct validity, and its reliability has been supported through Cronbach's alpha coefficients.

2.3. Intervention

The experimental group received cognitive behavioral therapy in eight 90-minute sessions. The intervention focused on identifying maladaptive thoughts, recognizing the relationship between thoughts, emotions, and behaviors, challenging negative automatic thoughts, restructuring irrational beliefs, improving problem-solving skills, strengthening adaptive coping strategies, and reducing stress-related cognitive distortions. Participants were also trained to monitor their emotions and behaviors, practice cognitive restructuring, use relaxation and stress-management techniques, and complete therapeutic assignments between sessions. The control group did not receive any psychological intervention during the treatment period.

2.4. Data Analysis

Data were analyzed using descriptive and inferential statistical methods. Mean and standard deviation were used to describe resilience and perceived stress scores in the pretest and posttest stages. Before conducting the main inferential analysis, Levene's test was used to examine the assumption of homogeneity of variances. Analysis of covariance was then applied to compare posttest scores between the experimental and control groups while controlling for pretest scores. The level of statistical significance was set at 0.05.

3. Findings and Results

The demographic findings showed that the participants were adolescents aged between 14 and 18 years, with a mean age of 16.21 years (SD = 1.17). In the experimental group, 8 participants (57.1%) were female and 6 participants (42.9%) were male, while in the control group, 7 participants (50.0%) were female and 7 participants (50.0%) were male. Most participants were studying at the secondary school level and all had been referred to counseling centers due to symptoms associated with depressive disorder.

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Table 1

Mean and Standard Deviation of Resilience and Perceived Stress Scores in the Experimental and Control Groups

Research Variable	Group	N	Pretest Mean ± SD	Posttest Mean ± SD
Resilience	Experimental	14	47.45 ± 5.41	57.81 ± 6.86
	Control	14	45.31 ± 5.35	46.98 ± 5.35
Perceived Stress	Experimental	14	32.68 ± 6.83	23.69 ± 5.74
	Control	14	31.35 ± 5.47	30.56 ± 5.31

As shown in Table 1, the mean resilience score in the experimental group increased from the pretest stage to the posttest stage, whereas only a slight change was observed in the control group. In contrast, the mean perceived stress score in the experimental group decreased noticeably after the intervention, while the control group demonstrated minimal changes between the pretest and posttest stages. These findings suggest that cognitive behavioral therapy improved resilience and reduced perceived stress among depressed adolescents.

Before conducting the analysis of covariance, the assumptions of the test were examined. Levene's test was used to assess the homogeneity of variances for resilience and perceived stress scores. The results indicated that the significance levels for all variables in both the pretest and posttest stages were greater than 0.05, confirming that the assumption of homogeneity of variances was satisfied. In addition, the distributions of the study variables were approximately normal, and no violation of statistical assumptions was observed. Therefore, the use of ANCOVA for hypothesis testing was considered appropriate.

Based on the themes extracted from mothers' lived experiences and a review of the research literature on parent–adolescent interaction and anxiety disorders, the parent–adolescent relationship training program was designed as eight 90-minute group sessions for mothers. Table 2 presents the educational content and session structure of the program. Each session included specific objectives, educational content based on the extracted themes, implementation methods and techniques, and special considerations. To enhance effectiveness, the session structure was designed so that each key content area, depending on its scope and need for practice, was repeated and deepened across two consecutive sessions, allowing mothers sufficient opportunity for practical rehearsal and feedback.

Table 2

Results of Analysis of Covariance for Posttest Scores of Resilience and Perceived Stress

Dependent Variable	Sum of Squares	df	F	p	Effect Size (η^2)	Statistical Power
Resilience	936.418	1	16.854	0.001	0.621	0.663
Perceived Stress	799.417	1	14.348	0.001	0.589	0.574

The results presented in Table 2 demonstrated significant differences between the experimental and control groups in posttest scores of resilience and perceived stress after controlling for pretest scores. Cognitive behavioral therapy had a significant positive effect on resilience among depressed adolescents ($F = 16.854$, $p = 0.001$, $\eta^2 = 0.621$). Furthermore, the intervention significantly reduced perceived stress in the experimental group compared with the control group ($F = 14.348$, $p = 0.001$, $\eta^2 = 0.589$). Therefore, the findings supported the effectiveness of cognitive behavioral therapy in improving resilience and decreasing perceived stress in adolescents with depression.

4. Discussion

The present study aimed to investigate the effectiveness of cognitive behavioral therapy on resilience and perceived stress among depressed adolescents. The findings demonstrated that cognitive behavioral therapy significantly increased resilience and reduced perceived stress in the experimental group compared with the control group. These findings indicate that cognitive behavioral therapy can serve as an effective psychological intervention for improving emotional adjustment and adaptive functioning among adolescents with depressive symptoms.

The first finding of the study revealed that cognitive behavioral therapy significantly improved resilience in

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depressed adolescents. The results are consistent with previous studies that reported the effectiveness of cognitive behavioral interventions in strengthening resilience and adaptive coping abilities among adolescents and individuals with emotional disorders (Beigi et al., 2018; Salehi et al., 2021; Shafiei & Barhemat, 2020; Yamamoto et al., 2017). Similarly, recent studies comparing cognitive behavioral therapy with other third-wave approaches have shown that cognitive behavioral therapy significantly improves distress tolerance, cognitive flexibility, and emotional adjustment in patients with major depression (Allahmoradi et al., 2026; Yaghoubi et al., 2026; Yaqubi et al., 2026). The alignment of the present findings with earlier research highlights the important role of cognitive restructuring and behavioral modification in strengthening resilience among psychologically vulnerable adolescents.

One possible explanation for this finding is that cognitive behavioral therapy helps adolescents identify maladaptive thought patterns and replace them with more realistic and adaptive cognitions. Adolescents with depression often experience negative automatic thoughts, self-defeating beliefs, and pessimistic interpretations of stressful events, which weaken their ability to cope effectively with life challenges (Halgin & Whitbourne, 2015; Moradzadeh & Najafi, 2022). Through cognitive restructuring techniques, participants learn to challenge distorted cognitions and reinterpret stressful situations more adaptively. This process improves emotional regulation, enhances self-confidence, and strengthens problem-solving skills, all of which contribute to increased resilience.

Another explanation for the effectiveness of cognitive behavioral therapy in enhancing resilience relates to the behavioral components of the intervention. Behavioral activation, goal setting, and coping-skills training encourage adolescents to engage in constructive activities and adaptive social interactions. As adolescents experience greater success in managing emotional and interpersonal difficulties, they gradually develop a stronger sense of competence and psychological empowerment. Previous studies have emphasized that resilience is closely associated with social support, coping strategies, and adaptive emotional functioning (Haghayegh, 2020; Khabbaz et al., 2018). Cognitive behavioral therapy appears to strengthen these protective mechanisms by promoting effective coping responses and reducing maladaptive behavioral patterns.

The findings also support the theoretical assumptions underlying cognitive behavioral therapy, which propose that emotional problems are maintained by dysfunctional patterns of thinking and maladaptive behavioral responses (Dong et al., 2010). By modifying cognitive distortions and promoting adaptive coping strategies, cognitive behavioral therapy enables adolescents to respond more effectively to stressful situations and psychological challenges. The improvement in resilience observed in the present study suggests that cognitive behavioral interventions may not only reduce symptoms of depression but also strengthen positive psychological resources that protect adolescents from future emotional difficulties.

The second major finding of the study indicated that cognitive behavioral therapy significantly reduced perceived stress among depressed adolescents. This finding is consistent with previous research demonstrating the effectiveness of cognitive behavioral interventions in reducing stress, anxiety, and emotional distress (Bashiri, 2020; Hall et al., 2016; Prasartpornsirichoke et al., 2025). Moreover, studies investigating the relationship between stress perception and psychological functioning have shown that maladaptive cognitive appraisals contribute significantly to elevated stress responses and emotional instability (Errisuriz et al., 2016; Klatzkin et al., 2019). The results of the present study suggest that cognitive behavioral therapy effectively modifies these maladaptive appraisals and reduces the psychological burden associated with stressful experiences.

One explanation for the reduction in perceived stress is that cognitive behavioral therapy teaches adolescents how to reinterpret stressful situations and manage emotional reactions more effectively. Adolescents with depression often perceive ordinary life events as overwhelming, uncontrollable, or threatening due to cognitive distortions such as catastrophizing, overgeneralization, and negative self-evaluation (Halgin & Whitbourne, 2015). Cognitive behavioral therapy helps individuals identify these distorted thought patterns and replace them with balanced and realistic interpretations. As a result, stressful situations are perceived as more manageable, which decreases emotional tension and psychological distress.

Additionally, cognitive behavioral therapy includes stress-management strategies such as relaxation training, emotional monitoring, problem-solving skills, and coping-skills enhancement. These techniques provide adolescents with practical tools for managing daily stressors and reducing emotional reactivity. Previous studies have demonstrated that stress perception is closely associated with emotional vulnerability, sedentary behavior, and exposure to adverse environmental conditions (Ashdown-

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Franks et al., 2018; Heinze et al., 2017). By improving coping resources and emotional awareness, cognitive behavioral therapy reduces the impact of these stressors on adolescents' psychological functioning.

The present findings may also be interpreted in light of the relationship between depression and stress-response systems. Adolescents with depressive symptoms frequently experience dysregulation in physiological and psychological stress mechanisms, which intensifies emotional distress and maladaptive coping behaviors (Carpenter et al., 2011). Cognitive behavioral therapy appears to reduce stress-related vulnerability by improving emotional control and promoting cognitive flexibility. Recent research has shown that cognitive behavioral approaches can improve distress tolerance and adaptive functioning among individuals with depressive disorders (Allahmoradi et al., 2026; Yaghoubi et al., 2026). Therefore, the reduction in perceived stress observed in the present study may reflect improvements in both cognitive and emotional regulation processes.

Another important point concerns the developmental sensitivity of adolescence. Adolescents are particularly susceptible to social pressures, academic stress, emotional conflicts, and identity-related concerns. The increasing influence of social media, peer relationships, and academic expectations may intensify stress experiences and depressive symptoms during this period (Vesal & Rahimi, 2021). Cognitive behavioral therapy provides adolescents with structured psychological support and equips them with skills necessary for emotional adaptation. Through therapeutic exercises and cognitive training, adolescents become more capable of recognizing emotional triggers, regulating negative emotions, and responding adaptively to challenging situations.

The effectiveness of cognitive behavioral therapy observed in the present study is also supported by evidence from internet-based and family-based cognitive interventions. Online cognitive behavioral therapy has demonstrated positive outcomes in reducing depression and improving quality of life among students experiencing psychological distress (Prasartpornsirichoke et al., 2025). Similarly, family cognitive therapy has improved family functioning and emotional adjustment among individuals with major depression (Wang et al., 2025). These findings suggest that cognitive behavioral principles can be successfully applied across different therapeutic formats and populations, reinforcing the generalizability and effectiveness of this intervention.

Furthermore, the findings of the present study support the growing body of evidence emphasizing the role of cognitive behavioral therapy in improving psychological flexibility and adaptive emotional functioning. Studies have shown that cognitive behavioral interventions are effective not only in treating depression but also in addressing associated problems such as internet addiction, compulsive behaviors, anxiety disorders, and emotional dysregulation (Belotto-Silva et al., 2012; Granero et al., 2017; Kafinia & Farhadi, 2019). This broad effectiveness may be attributed to the transdiagnostic nature of cognitive behavioral therapy, which targets underlying cognitive and behavioral processes common to many psychological disorders.

The current findings are also important from a preventive perspective. Adolescents with low resilience and high perceived stress are at greater risk for chronic depression, social withdrawal, academic difficulties, and maladaptive coping behaviors, including substance use (Anand et al., 2019). Early psychological interventions that strengthen resilience and reduce stress perception may therefore prevent the progression of emotional disorders and improve long-term psychological outcomes. Cognitive behavioral therapy appears to be particularly valuable in this regard because it combines symptom reduction with skill development and psychological empowerment.

5. Conclusion

Overall, the results of the present study demonstrate that cognitive behavioral therapy is an effective intervention for improving resilience and reducing perceived stress among depressed adolescents. The intervention appears to operate through multiple cognitive, emotional, and behavioral mechanisms, including cognitive restructuring, emotional regulation, stress management, and adaptive coping enhancement. These findings highlight the importance of implementing evidence-based psychological interventions for adolescents experiencing depressive symptoms and emotional vulnerability.

6. Limitations & Suggestions

One of the limitations of the present study was the relatively small sample size, which may limit the generalizability of the findings to broader adolescent populations. In addition, participants were selected through convenience sampling from counseling centers in a single city, which may reduce the representativeness of the sample. Another limitation was the absence of a follow-up phase to

evaluate the long-term stability of treatment effects. The study also relied on self-report questionnaires, which may have been influenced by response bias or social desirability.

Future research is recommended to investigate the long-term effectiveness of cognitive behavioral therapy through follow-up assessments conducted several months after intervention completion. Researchers are also encouraged to compare cognitive behavioral therapy with other therapeutic approaches, such as mindfulness-based interventions, dialectical behavior therapy, and acceptance and commitment therapy, among adolescents with depression. Conducting studies with larger and more diverse samples from different cultural and educational contexts may provide a deeper understanding of treatment effectiveness. Furthermore, future studies may examine the mediating role of factors such as family functioning, emotional regulation, and social support in the relationship between cognitive behavioral therapy, resilience, and perceived stress.

The findings of the present study have important practical implications for psychologists, counselors, educators, and mental health professionals working with adolescents. Cognitive behavioral therapy can be implemented in schools, counseling centers, and mental health clinics as an effective intervention for reducing emotional distress and improving adaptive functioning among adolescents with depressive symptoms. Educational programs focusing on cognitive restructuring, stress management, and coping-skills training may help adolescents strengthen resilience and manage psychological challenges more effectively. In addition, parents, teachers, and mental health practitioners should collaborate to identify adolescents at risk for depression and provide timely psychological support aimed at promoting emotional well-being and healthy psychological development.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors equally contributed to this article.

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