

Reduce Anxiety Symptoms In A Sample Of Adolescents With Learning Difficulties Using Cognitive Behavioral Therapy

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Abstract: This study aimed to identify the effectiveness of CBT in reducing symptoms of anxiety in a sample of adolescents with learning disabilities. To achieve the objectives of the study, the tool was prepared, which was represented by the anxiety scale, and it was confirmed that the scale had validity and consistency indications appropriate for its application to the individuals of the study sample, and a training program based on CBT was built. Where the researcher applied the study tools to a sample consisting of (8) students, they were chosen intentionally. Data were statistically processed by extraction of mean and standard deviations, and the unscientific Wilcoxon Signed Ranks Test was used. The results showed that there were statistically significant differences on pre and post measurement in reducing symptoms in favor of post measurement, which indicates the effectiveness of the training program. In light of the results, I made some recommendations.

Keywords: teenager, learning difficulties, anxiety symptoms, cognitive-behavior therapy.

Introduction: Adolescent students with learning disabilities are characterized by a specific deficiency in social interaction and communication in terms of starting or maintaining it with others, and adolescent children often have external emotional problems (such as aggression and hyperactivity) and internal problems (such as anxiety and depression) (Levy & Hyman), 2015). Concerns about anxiety are among the most common problems for adolescent students with learning disabilities common at school level. Although the statistical data did not indicate available rates about the prevalence of anxiety disorders accurately, but there is a recent comprehensive review about estimates of weak anxiety in these children ranging from (11% to 84%) upon close examination, and anxiety was referred to as a separate disease On

learning difficulties nimmo-Smith et al., 2020; White et al., 2010)

For adolescents diagnosed with adolescence, learning disabilities can be very dangerous. This is because of the development of emotional problems or the aggravation of anxiety problems, especially social anxiety from the developmental side, which makes it a relatively common disorder during adolescence. According to the available apparent research, certain types of anxiety (such as social anxiety, panic disorder) often appear during adolescence to some extent and this depends to a large extent on the symptoms shown, but longitudinal studies are needed to clearly show these symptoms. mazefsky & White, 2014) These symptoms may worsen during adolescence, when the social environment becomes more complex and the adolescent becomes more aware of the disorder, and there is evidence emerging from a

relationship between social vulnerability and anxiety in adolescents with learning difficulties, although the nature of this relationship is not clear. Totally, it might react Physiological deficits caused by hyperactivity to predict the development of their social anxiety, which indicates the potential biological and psychosocial foundations in the relationship between anxiety and social disability associated with learning difficulties, and social anxiety can lead to fewer opportunities to practice social skills, and increase the severity of social disability Which is essential for these disorders, which leads the teenager to avoid his peers due to previous social difficulties, and then finds it difficult to implement the acquired skills successfully (White et al., 2010).

Based on existing research on treating problems that occur, such as symptoms of anxiety, mood disorder and obsessive-compulsive disorder, the prevailing psycho-social approach is cognitive-behavioral therapy, which is considered one of the best effective non-drug therapeutic methods that includes improving the regulation of feelings associated with emotional difficulties by treating impotence Organizing emotions through exercises that include how to deal with feelings, cognitive restructuring, and appropriate strategies for managing emotions that have an impact on education. Which in turn deals with the individual's thoughts, feelings and actions, as well as the interactions between these three areas to bring about the required changes. Therapeutic sessions are usually performed individually and in practice, and usually range between (12-16) sessions in the adolescent's natural environment, and the therapist and teenager work cooperatively to explore how to reduce problems caused by anxiety disorder and avoidance behaviors that contribute to making the perception wrong, and adjusted This treatment was recently used for students Adolescents with learning disabilities and results from a preliminary trial showed improvement in their emotional susceptibility

and effective regulation (Luxford, Hadwin & Kovshoff, 2017; Mazefsky & White, 2014; White et al., 2010)

In addition to the effect of CBT on reducing symptoms of anxiety, more research has discovered its broader effect on attention and behavior, and many frameworks indicate that increased anxiety is associated with poor attention control to discover environmental risk, and recent studies have found that CBT can have Effect Positive on reducing biases and poor control usually associated with the effect of anxiety, and additional evidence suggests that CBT can reduce anxiety and negative thoughts regarding changes in their behavior more broadly, as anxiety symptoms decrease, as well as improve their social performance (Kuroda et al., 2013 ;Fenn & Byrne, 2013).The problem of the study and its questions: Consistent with the modern trend towards caring for children with special needs, this requires us to prepare them from all sides, including knowledge and functional ones, in order to achieve goals in all fields. As most of the studies focused on addressing the social and communication aspects of adolescents with learning difficulties because of the importance they constitute in the learning process and the acquisition of experiences and skills for students, this study came to focus on developing and improving these aspects through a program based on cognitive behavioral therapy, which is less used with this is Category - due to what needs to be applied to above-average mental capabilities .To reduce the symptoms of anxiety, which greatly affects the interaction and communication of this group, and by referring to the characteristics of these people, we find that they have varying capabilities and high levels in different fields, in addition to problems represented by the inability to control positions in different environments and the inability to generalize what they can acquire Skills in those environments The different aspects, as well as the inability to isolate the side stimuli and focus on a

specific stimulus, which in most cases leads to not taking advantage of the different educational and training situations. Upon reviewing previous studies, we find that (Weiss et al., 2018) study indicated the effectiveness of CBT in reducing anxiety as children who received this treatment improved their ability to manage their feelings and emotions, in addition to an improvement in mental health problems in general, and from Here comes the problem of the study in including aspects Cognitive therapy .The study seeks to identify the effectiveness of CBT in reducing anxiety symptoms among a sample of adolescents with learning disabilities in Jordan. The study tries to answer the following questions:

Study Questions: What is the effectiveness of CBT in reducing symptoms of anxiety in a sample of adolescents with learning disabilities D in Jordan?

Objectives of the study:

Test the efficacy and investigation of the effectiveness of CBT in reducing anxiety symptoms in adolescents with learning disabilities.

Build a tool to measure anxiety symptoms and apply it to teenagers with learning disabilities.

Importance of the study: This study contributes in directing treatment programs to include cognitive therapies in the treatment of adolescents with learning difficulties, and the use of CBD-based activities to reduce symptoms of anxiety.

Pave the way for researchers to conduct research and studies that highlight the importance of CBT for adolescents with learning disabilities.

Researchers are provided with recent previous studies related to CBT and its effect in treating anxiety.

Terminology of study:

Cognitive behavioral therapy: It is defined as a form of psychotherapy that focuses on modifying dysfunctional feelings, behaviors and ideas through interrogating negative or illogical beliefs, and depends on the idea that ideas and

perceptions affect behavior, which is considered the first line of treatment, or alternative treatment for many problems Mental Such as anxiety, depression, stress, emotions, etc. in children and adolescents with a high-performance autism spectrum disorder. Therapeutic sessions are effectively performed online, as well as face-to-face in a small group or individual treatment (Wong et al., 2018; Moree and Thompson, 2010) Procedurally, it is defined as training sessions that are applied in a systematic and planned manner within a time period that aims to reduce symptoms of anxiety by applying a set of activities, procedures and exercises that are chosen according to cognitive behavioral therapy and appropriate for children with autism spectrum disorder .The training program consists of (12) sessions , And the duration of each(30) minutes for each child individually over a period of (12) weeks. It is provided at one session per week, and it is repeated twice during the same week to ensure training stability and learning of the targeted skill.

Adolescents with Learning Disabilities: They are adolescents diagnosed with learning disabilities and display symptoms of anxiety that are clearly and noticeable.

Anxiety symptoms: These are the characteristics of anxiety, such as discomfort, stress, and physical changes (blue-eyed, 2010).

Procedurally, it is defined as the total score obtained by the examiner on the anxiety symptom scale for study purposes.

The limits of the study

Human frontiers: represented by the study participants (adolescents with learning difficulties).

Temporal limits: This study was conducted during the second semester of the academic year 2019/2020.

Spatial limits: This study was conducted on students enrolled in public schools in Ajloun Governorate and have learning difficulties.

Theoretical framework and previous studies:

Cognitive behavioral therapy: The emergence of cognitive behavioral therapy by the founding psychiatrist Aaron Beck (1964) began to explore more forms of experimental therapy and is based on the cognitive model of mental illness, as the cognitive model assumes that people's emotions and behaviors are influenced by their perceptions of events, and not the situation in itself is what determines what people feel, but rather the way they explain it. CBT has roots in rational emotional behavior therapy. This treatment is suitable for people of all ages, including children, teenagers, and adults. Evidence indicated that CBT can treat many conditions, such as severe depression disorder, anxiety disorders, post-traumatic stress disorder, eating disorders, obsessive-compulsive disorders, and many other conditions in addition to being a preferred method of treatment among practitioners and institutions alike (Fenn & Byrne, 2013; Wong, Kwok, Low, Man & Ip, 2018). Regardless of the type of behavioral cognitive therapeutic interventions used, they usually focus on content, function, and way of thinking. It indicates what the individual thinks and does today, and how he looks at things around him differently, and focuses on the importance of choosing reality building (Robert, 2020).

CBT is defined as a coherent, evolving, changing, and continuous process, as it has been used to treat anxiety disorder in recent years, and is based on changes in behavioral cognitive science predicting causally in psychopathology. Several studies have emerged that compare CBT with other treatments such as drug therapy. Although CBT is similar in effectiveness to pharmacological treatment, nevertheless medical treatment remains the standard treatment for familiar and common psychological problems, but there are reasons why CBT is the first line of treatment, or alternative therapy for many psychological problems such as anxiety, depression, and stress. Emotions and others, as CBT is considered a highly effective treatment

(Hofman, 2011)). It focuses on current conditions and emotions in real time, rather than childhood events. It can be a very useful tool - either alone or in combination with other treatments - in treating mental health disorders, such as anxiety, depression, post-traumatic stress or eating disorder. But not everyone who benefits from CBT suffers from a mental health condition, CBT can be an effective tool to help anyone learn how to manage stressful situations better, a structured system that focuses on problems, aims to achieve goals, and seeks to improve the overall behavior of the child. It also depends on the assumption that the way we think, feel, and act affects each other (Wood, et al., 2009; McGuinty, Bird, Nelson, McGuinty & Cashin, 2018; Scarpa and Reyes, 2011)

Cognitive behavioral therapy in adolescents with autism spectrum disorder focuses in part on treating autonomous and self-care skills and treating anxiety resulting from functional impairment, such as the study by Drahota, Wood, Szu & Vandyk, 2011) where skills were assessed. Daily teens with parents and their caregiver during the immediate treatment intervention for about three months. After evaluation and therapeutic intervention, it appeared that there was an improvement in the performance of daily life skills and a reduction in the daily routine participation of their children, which led to a decrease in the severity of anxiety, increased confidence in them, and an improvement in employment performance. Independence and self-care in their daily lives. Cognitive behavior therapy includes an essential component which is a focus on the new skills modeling method, and is important in the program because many high-performing individuals diagnosed with autism do not respond appropriately in social situations; Because they do not know how to respond or what they say despite their awareness of the need to do something, and modeling clarifies what to do in a particular situation and increases the likelihood

that a teenager will learn the skill (Torrado et al., 2017)

Anxiety symptoms in adolescents with learning disabilities: Anxiety is one of the most common symptoms in adolescents with learning disabilities, and studies aim to evaluate and provide the proposed treatment of anxiety with the help of caregivers. An experienced multidisciplinary team of doctors developed clinical recommendations on anxiety treatments, as follows: The anxiety assessment methodology is an approach to the disease assessment methodology as well as contributing factors at different levels of developmental stages, treatment includes: psychological learning, coordination, care and cognitive behavioral therapy adjusted for high-performance autism spectrum adolescents and drug therapy accompanied by side effects monitoring, in addition to most primary care providers lacking specific training in Managing adolescents with learning disabilities. Based on this result, a variety of efforts have been organized to develop structured treatment approaches to deal with anxiety assessment and treatment methods that primary care providers use in their clinical practice (Klebanoff et al., 2019; Vasa et al., 2016).

The prevalence of anxiety among adolescents with learning disabilities is about (39.6%). Despite the high prevalence, there are barriers preventing access to appropriate and timely mental health treatment. This places increasing demands on primary care providers to manage their anxiety. Due to the high rates of anxiety in this group, effective treatment protocols to treat symptoms of anxiety are important to help in promoting adolescents. Research that has used CBT supports all younger age groups through adolescents, and these treatment interventions are due to those with pathological anxiety disorders. As this treatment focuses on psychological education, cognitive therapy and confrontational therapy, and its results showed a significant decrease in anxiety and depression, but additional

studies that study the effectiveness of behavioral cognitive therapy in those with chronic nervous disorder and clinical anxiety recommended the need to work to increase and identify beneficial components of treatment (Nimmo-Smith et al., 2020; Wise et al., 2019). Anxiety disorders are associated with a growing impairment of social performance, leading researchers to seek treatments that will treat symptoms of anxiety in people diagnosed with the disorder. A recent survey found that anxiety is the second most common problem reported by parents, and additional pathological disorders coincide with the anxiety disorders of those diagnosed with the disorder (for example: depression, which leads to complex and severe psychological symptoms), and the diagnosis of anxiety disorders may be in those with Learning difficulties are complex. Because of poor communication and weak ability to express emotions, and certain symptoms of anxiety disorders may appear (for example: compulsive behavior versus repetitive behaviors). Accordingly, the researchers suggested that a proper diagnosis of their anxiety should include evidence of behaviors that do not belong to diagnostic symptoms of the disorder, He should distinguish weakness Performance due to symptoms of anxiety about it due to symptoms of disorder (for example: not participating in activities because of shyness and not because of a communication deficit or withdrawal and isolation) (Kester & Lucyshyn, 2019; Wood et al., 2009).

Previous studies :

His study (Spiker, Lin, Van Dyke & Wood, 2012) examined the limited interests and anxiety of adolescents with learning disabilities. "It has been shown that preoccupation with limited interests is one of the primary symptoms observed, and this study used the descriptive approach. The study sample consisted of (68) adolescents with learning difficulties. Between the ages of (12-16) years, all adolescents in the study were referred by the Parent Support Group and school

specialists. The subjects collected criteria for research diagnostic of anxiety disorder, such as separation anxiety disorder, social phobia, general anxiety, or obsessive-compulsive disorder based on semi-structured diagnostic interviews with the caregiver or child using the anxiety disorder interview schedule. As the children did not take any psychiatric medication or were taking a fixed dose of psychiatric medications (i.e. at least one month in the same dose). The results were as follows: About (85%) of (58) of the children in the study had limited interests There were (38) children who showed symbolic legislation, and (20) of them participated only in facts relating to interests of limited verbal memory and learning, and (10) of them did not present any limited interests. The results also indicated that limited interests emerged through play, and were significantly associated with an increased presence and severity of anxiety symptoms. Visualize the limited interests as possible and discuss reactions to adapt to negative emotional experiences. Descriptive studies indicate that the restricted content and expression varies widely among children.

(Sukhodolsky et al., 2013) conducted a study on the effectiveness of cognitive behavioral therapy for anxiety in adolescents with learning disabilities. The study sample consisted of (396) examiners obtained from searches in databases and magazines with manual search. The results indicated that eight studies involving 469 participants (252 treatments, 217 comparisons) collected the inclusion criteria, and were included in the Meta-Analysis. The overall effect sizes for the outcome measures of doctor and parent of anxiety in all studies were $d = 1.19$ and $d = 1.2$, respectively. Five studies that included the child's self-report resulted in an average of $d = 0.68$ across the reported self-anxiety. Parent ratings and doctor anxiety ratings are sensitive to detecting treatment change with CBT of anxiety relative to the waiting list and control conditions

for usual treatment. The study recommended the need for clinical studies to assess CBT of anxiety in adolescents with learning disabilities.

(Maskey, Lowry, Rodgers, McConachie & parr, 2014) conducted a study aimed at reducing anxiety in adolescents with learning difficulties through a virtual reality environment in light of the treatment of common anxiety in adolescents with learning disabilities, with fear of dealing with the outside world . The sample of the study consisted of (9) adolescents, whose ages ranged between (13-17) years. The treatment focused on combining cognitive behavioral therapy with gradual exposure in a virtual reality environment. The researcher used the experimental method in his research and the results showed evidence that cognitive behavioral therapy with a virtual reality environment can be an effective treatment for fear disorder in adolescents with learning difficulties. (2018 Zaboskil, Eric & Storch,) conducted a study aimed at detecting adolescents with learning difficulties and anxiety disorders, where preliminary evidence indicates that adolescents with learning disabilities with anxiety can undergo cognitive behavioral therapy, especially when doctors target family accommodations to integrate intervention plans Behavioral therapy Instead of pharmacological interventions, but more research is needed to establish drug efficacy for adolescent individuals with learning disabilities, as a number of experiments have indicated that cognitive behavioral therapy is an effective treatment in the results of a meta-analysis through (14) studies It was observed that the magnitude of the effect of CBT on Adolescents with learning difficulties and treatment was conducted using CBT in a group or individual form, as the number of sessions ranged between (6-32) sessions, as one session lasted from one to two hours, then CBT for this group appears to be most effective when emphasizing the nucleus The following ingredients are: Psychological education Exposure to the triggers of fear and cognitive restructuring .It includes

psychological education, cognitive and physiological reactions to anxiety, as well as treatment for anxiety.

(McGuinty et al., 2018) conducted a study on the effectiveness of a therapeutic intervention for adolescents with learning disabilities and those with symptoms of anxiety. It was conducted based on a literature review regarding important work in narrative therapy, therapeutic interventions for anxiety in adolescents with learning disabilities, evidence-based treatments for anxiety, and practice-based approaches to psychotherapy. The works were chosen based on their relevance to anxiety and learning difficulties. The current study introduces new four-session interventions aimed at reducing their anxiety. Where the treatment relied on codifying problems, converting metaphors, transforming emotional schemes that are not able to adapt, and generalizing problems. The results indicated the effectiveness of treating anxiety in adolescents with learning disabilities through a brief framework and that more clinical research is needed to evaluate the current model.

(Higgins, Slattery, Perry & O'Sha, 2019) conducted a study aimed at evaluating a group cognitive behavioral therapy program for adolescents with learning disabilities, as research has shown that levels of clinical anxiety levels are higher among diagnosed adolescents who have

learning difficulties compared to their peers who develop Normally. An exploratory study was conducted on the impact of a cognitive behavioral therapy program specifically designed for anxiety levels in adolescents with learning disabilities. The CBT program was delivered for a period of (12) weeks to (12) children. The combined mixed design design was used and the results were obtained by collecting and analyzing quantitative and qualitative data separately. Results indicate that CBT can be successfully delivered to a group of adolescents with learning disabilities. As with the nature of the design involved, quantitative results were reported as evidence supporting the qualitative findings of this study. Positive initial results indicate the need for a thorough and broad evaluation to determine the overall effectiveness of the program.

Method and procedures

Study Personnel: The study sample was chosen intentionally. The sample consisted of (8) students aged (14-16 years) diagnosed with learning difficulties and have symptoms of anxiety according to the scale of anxiety symptoms, and was taken into account when selecting the sample that they do not have other disorders and do not take any drugs that affect their activity, which affects On the effectiveness of the program. Table (1) shows the distribution of the study sample individuals.

Table (1) - The study sample members are distributed according to some demographic characteristics (n = 8)

the number	Category	variable
6	From 14 to 15 years old	The age of the teenager
2	From 15 to 16 years old	
8	Total	
8	Male	Gender

0	female	
8	المجموع	Total

Study tools:

To achieve the goals of the current study, an anxiety symptom scale and training program (CBT) were built.

Anxiety Symptoms Scale: To achieve the goals of the study, a tool was built to measure the symptoms of anxiety after reviewing the educational literature related to symptoms of anxiety, such as stress, discomfort, and others in adolescents with learning difficulties

(Vasa et al., 2016; Avnit, Ben-itzhak & Zachor, 2018; Burchi & Hollander, 2018),

It included (21) items distributed on two dimensions, each of which measures symptoms of anxiety, whether psychological or physical, as shown in Appendix (2) the scale in its final form. The scale included:

The first dimension (psychological symptoms of anxiety): This dimension consists of (11) paragraphs that measure fear and stress from stimuli, whether they are related to people, places, social situations or routine changes.

The second dimension (physical symptoms of anxiety): This dimension consists of (10) paragraphs that measure physiological symptoms, such as complaints about the presence of pain, physical disorders, and health manifestations.

Scale Correction: The scale follows the quadruple Likert scale, where it scales in its scale from (0-3), it is corrected as follows: (The attribute does not appear at all = 0, it appears in a low degree, meaning that it appears during (6) hours two to three times in a row = 1, it appears in a medium degree, meaning that it appears during (6) hours

three to six consecutive times = 2, it appears in a high degree That is, it appears during (6) hours more than six consecutive times = 3). Validate the scale :The scale was presented in its initial form to (10) arbitrators specialized in Jordanian universities in order to obtain their opinions and observations on the appropriateness of the paragraphs and their link to the fields to which they belong, the extent of clarity of the paragraphs and their connection to the field of psychological symptoms of anxiety and the field of physical symptoms of anxiety, as well as the adequacy of the number of paragraphs to the field. As shown in Appendix (1), as the amendments revolved around reformulating a number of paragraphs, and all paragraphs were adopted, where the agreement rate reached (90%) between the two arbitrators.

Construction Certification:

The study applied a measure of anxiety symptoms that was built on an exploratory sample from outside the study sample individuals, but within its community, and it consisted of (30) students. The construction of the scale was found truthful, as the paragraphs of the scale were analyzed and the correlation coefficient was calculated for each of the paragraphs, as the correlation coefficient here It represents a sign of honesty for each paragraph as a coefficient A link between each paragraph and the overall degree on the one hand, and between each paragraph and its association with the field to which it belongs, and between each field and the total score on the other hand. Table 2 shows that.

Table (2) - Correlation coefficients between the paragraphs, the total score and the field to which they belong

Correlation coefficient With the tool	Correlation coefficient With the domain	Paragraph number	Correlation coefficient With the tool	Correlation coefficient With the domain	Paragraph number	Correlation coefficient With the tool	Correlation coefficient	Paragraph number
.42(*)	.43(*)	15	.62(**)	.60(**)	8	0.65(**)	0.65(**)	1
.82(**)	.91(**)	16	.41(*)	.55(**)	9	0.69(**)	0.76(**)	2
.81(**)	.90(**)	17	.47(**)	.66(**)	10	0.43(*)	0.44(*)	3
.85(**)	.95(**)	18	.52(**)	.59(**)	11	.42(*)	0.46(**)	4
.73(**)	.85(**)	19	.60(**)	.50(**)	12	.59(**)	0.59(**)	5
.50(**)	.54(**)	20	.80(**)	.86(**)	13	.61(**)	.54(**)	6
.81(**)	.91(**)	21	.85(**)	.93(**)	14	.59(**)	.57(**)	7

* Statistically significant at the significance level (0.05).

** Statistically significant at the significance level (0.01).

Table (2) shows that the coefficients of paragraphs correlation with the instrument as a whole ranged between (0.41-0.86) and with the field (0.41-0.94), which indicates that all correlation coefficients were of acceptable and statistically significant degrees, and therefore no paragraph was deleted. Table No. (3) shows the correlation coefficients between the two fields, and the overall score ranged between 0.62-0.92. Stability of scale: the indications of stability of the scale were verified by the following methods: Application and re-application of the test (Test-Retest): where the scale was applied and then re-applied after two weeks to the same survey sample that was applied to in finding the truth,

and then the Pearson correlation coefficient was calculated between their estimates both times. As shown in Table (4).

Stability of internal consistency (Kronbach Alpha):

The coefficient of stability was calculated using the method of internal consistency according to the Cronbach alpha equation on the exploratory sample, and Table No. (4) shows the coefficient of internal consistency according to the Cronbach alpha equation and the stability of the return for the fields and the tool as a whole, and these values were considered appropriate for the purposes of this study.

Table (4) - Return stability and coherence factors for Alpha Kronbach for domains and overall score

Internal consistency	Steady return	the field
0.78	0.83	Psychological symptoms of anxiety
0.91	0.87	The physical symptoms of anxiety

0.92	0.91	Anxiety symptoms for people as a whole
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Table (4) shows that the internal consistency coefficients of Alpha Cronbach ranged between (0.78 - 0.92), while the stability coefficients for the return of the domains ranged between (0.86 - 0.93), which are acceptable parameters for the purposes of the study.

The training program (CBT): The program was built after reviewing the Arabic and English theoretical and practical frameworks related to CBT strategies, and its scientific content was reviewed, as references for each of (APA, 2013; Anderson, 2012; Cia et al., 2018; Creed, 2015; Sung et al., 2011; Ekman & Hiltunen, 2015; Wilkinson, 2015) to define goals, time, tools, and procedures for each session.

Sincerity of the program: The validity of the content was verified by presenting the training program in its primary form to (10) specialized arbitrators from Jordanian universities in special education, psycho-educational assessment and psychology. This is in order to obtain their opinions and observations on the appropriateness of the proposed behavioral activities and practices and their link to the proposed treatment areas, as well as on the adequacy of activities and behaviors aimed at remedying the targeted behavior. The suggestions of the arbitration members were taken and the program was finalized for its application.

Cognitive behavioral strategies and methods used in training :Explanation and clarification _ dialogue and mutual discussion _ brainstorming _ reinforcement of all kinds _ stimulation of all kinds (verbal, gesture and physical) _ self-talk _ storytelling _ acting and role-playing and modeling _ asking questions _ listening and listening _ presentation _ feedback _ in addition to the use of educational methods such as (images, cards ,Games, videos) and other special means for each session .Duration of the program:

The implementation of the training program took (12) weeks, which extended from 10/18/2019 to 19/19/2020 and includes:

(12) A session that includes cognitive and behavioral exercises and activities

Sessions are applied over a period of (12) weeks, when study members are trained in the content of a session once a week.

The training session was repeated twice during the same week, to ensure consistency in training and learn the target skill.

Duration of each session is 30 minutes.

General Contents of the Session: Adolescent's Name, Age, Session Date, Session Duration, Training Place, Training Officer, Objective, Training Content, Educational Procedures, Educational Activity, Evaluation.

Beneficiaries of the program: A group of adolescents with learning disabilities who are between the ages of 14-16 years.

Study methodology: The present study used the quasi-experimental approach to its suitability for the purposes of the study, as it adopted a one-case design with a pre- and post-test.

Study variables:

Independent variable: training program (CBT).

Dependent variable: symptoms of anxiety
Statistical treatment: Mathematical averages and standard deviations that included the level (reducing anxiety symptoms) of adolescents with learning difficulties (pre and post measurement) were used and the unscientific Wilcoxon Signed Ranks Test was used.

Results

The first question: What is the effectiveness of CBT in reducing symptoms of anxiety among a sample of adolescents with learning disabilities in Jordan?

To answer this question, the mean and standard deviations that included the sub-dimensions and

the total score on the anxiety symptoms scale of the total scores of the sample members in the pre

and post measurements were extracted as shown in Table (8).

Table (8): Arithmetic mean and standard deviations for the (anxiety symptoms) scale on the (pre and post) scales.

the number	measurement Posti		measurement Tribal		Dimensions
	standard deviation	Arithmetic mean	standard deviation	Arithmetic mean	
8	0.259	1.49	0.232	2.4	Psychological symptoms of anxiety
8	0.232	1.14	0.239	1.70	The physical symptoms of anxiety
8	0.187	1.36	0.122	1.79	Anxiety symptoms for people as a whole

Table (8) shows that there are apparent differences in the mean and standard deviations of the total scores of the study sample individuals on the sub-dimensions and the total score on the anxiety symptom scale in favor of the post-measurement on anxiety symptoms as a whole.

To check whether the differences were statistically significant among the study sample individuals, a Wilcoxon Signed Ranks Test was used to find the significance of the differences between the average ranks of the study sample scores in the pre and post applications of the anxiety scale, and the table below illustrates this.

Table (9): Wilcoxon Signed Ranks Test results to find an indication of differences between grade averages for the study sample scores in the pre and post applications of anxiety scale.

Statistical significance	Z	Total ranks	Average rank	the number		
.012	-2.498	36.00	4.43	8	Negative ranks	Psychological symptoms of anxiety after me - the psychological symptoms of
		.00	.00	0	Positive ranks	
				0	Equal ranks	
				8	Total	

						anxiety before me
.024	-2.354	34.00	4.71	7	Negative ranks	The physical symptoms of anxiety after me - the physical symptoms of anxiety before me
		2.00	2.00	1	Positive ranks	
				0	Equal ranks	
				8	Total	
.012	-2.594	36.00	4.63	8	Negative ranks	Symptoms of anxiety for people after me - symptoms of anxiety for people before me
		.00	.00	0	Positive ranks	
				0	Equal ranks	
				8	Total	

It is clear from Table No. (9) that there are statistically significant differences ($\alpha = 0.05$) for the study sample scores in the pre and post applications of the anxiety scale and the differences came in favor of the post measurement.

Discussion of the results: The results showed that there are statistically significant differences for the degrees of adolescents with learning difficulties in Jordan in the pre and post applications of the anxiety scale, and the differences came in favor of the post measurement. This result is explained by the program that was used, as it depended on teaching problem-solving skills, dealing with sources of anxiety, teaching emotional plans, and increasing coping skills. The response of the sample members is also due to good planning in preparing the training sessions, as it included sequential and clear goals for each session, as well as cognitive behavioral strategies and methods used in the training such as (explanation and clarification, dialogue and mutual discussion,

brainstorming, promotion of all kinds, induction of all kinds: verbal and gestural Physical, self-talk, storytelling, acting and role-playing and modeling, asking questions, listening, listening, presentation, feedback) in addition to using educational methods such as (images, cards, games of all kinds, videos, and drawing) and other special means for each session. In addition to choosing activities and exercises related to symptoms of anxiety for adolescents with learning difficulties according to activity requirements and the nature of the characteristics of the situation. The program, with its activities, also developed skills of expressing rejection or protest in response to demands that might be seen as threatening and disturbing. The current study was consistent with the results of a study by (Sukhodolsky et al., 2013) and with a study (Higgins, Slattery, Perry & O'Sha, 2019) on the effectiveness of CBT to improving emotional regulation and symptoms of anxiety in adolescents with learning disabilities, and consistent The current result with the results of a

study (McGuinty et al, 2018)And its results indicated the effectiveness of treating anxiety in adolescents with learning disabilities through the tools used in it.

Recommendations:

Based on the results achieved by the training program based on cognitive behavioral therapy, and because of its effectiveness in reducing symptoms of anxiety with adolescent children with learning difficulties, the researcher recommends the following:

Training of resource room specialists on how to employ cognitive behavioral therapy strategies for adolescents with learning disabilities.

Employing cognitive behavioral therapy strategy in inclusive schools for children with different developmental disabilities, and emphasizing the importance of its effectiveness in dealing with different behavioral problems.

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