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## Cognitive Behavioral Therapy Adaptations for Adolescents with Autism Spectrum Disorder and Co-Occurring Mental Health Disorders: Training for Mental Health Counselors

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Cognitive Behavioral Therapy Adaptations for Adolescents with Autism Spectrum Disorder and  
Co-Occurring Mental Health Disorders:  
Training for Mental Health Counselors

A Project Presented to  
the Graduate Faculty of  
Minnesota State University Moorhead

By

Zackary Hajjali

In Partial Fulfillment of the  
Requirements for the Degree of  
Master of Science in Counseling

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## **Abstract**

Cognitive Behavioral Therapy (CBT) is a versatile therapeutic approach that can be utilized to treat various emotional disorders. Therefore, the effectiveness of CBT is conceptualized through a thorough examination of present literature and its use in treating various emotional disorders in adolescents. Literature reviewed includes meta-analyses, journals and articles. CBT proved to be a commonly used therapeutic approach, and demonstrated adaptability when necessary. A wide array of benefits from using CBT to treat emotional disorders were displayed across multiple sources. The training presented in this project will address the use of CBT adaptations for adolescent clients with autism spectrum disorder (ASD) and co-occurring mental health disorders. The objective of this training will result in the education of mental health counselors on treatment adaptations and approaches, and effective implementation.

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Cognitive Behavioral Therapy Adaptations for Adolescents with Autism Spectrum Disorder and  
Co-Occurring Mental Health Disorders:  
Training for Mental Health Counselors

**Introduction**

In recent years, cognitive-behavioral therapy (CBT) has become an increasingly popular therapeutic approach for treating adolescents with emotional disorders. The prevalence of emotional disorders displays itself in about 18% of adolescents worldwide (Gaudiano, 2008). With disorders influencing adolescents in various ways, utilizing a therapeutic approach with an extensive array of approaches is beneficial to the therapeutic process. Psychiatrist Aaron Beck emphasized the importance of observing the influence cognitions have on a person's behaviors (Gaudiano, 2008). Altering dysfunctional cognitions related to specific topics in a therapeutic setting subsequently leads to change in client's behavior and outlook. A multitude of practicing helping professionals have indicated that CBT is their preferred therapeutic approach due to its clear principles that facilitate therapeutic goals (Gaudiano, 2008). CBT's sustained popularity among counselors and therapists is related to the extensive research on CBT's practicality as a therapeutic approach. The success of CBT as a versatile therapeutic approach when treating emotional disorders in adolescents can be attributed to the immense amount of empirical support documented in the literature (Gaudiano, 2008). The function of the present review is to categorize the efficacy of CBT in addressing emotional disorders in adolescents. Therefore, the effectiveness of CBT is conceptualized through a thorough examination of present and adjacent literature and its use in treating various emotional disorders in adolescents.

## **Literature Review**

### **Cognitive Behavioral Therapy**

#### **Evolution of Cognitive Behavioral Therapy**

Considering the evolution of CBT is important when understanding its application in counseling over time. Using a meta-analysis, it is possible to explicate the differences between early and recent uses of CBT in treating adolescent depression (Klein, Jacobs & Reinecke, 2007). Understanding the efficacy overtime when considering a therapeutic approach is important to consider once there have been empirical developments over an extended period of time. The present meta-analysis provides researchers and helping professionals understand what is currently understood about CBT, and what replications and adaptations are appropriate. Defining CBT as interventions promoting emotional and behavioral change through active thought changes and processes was critical to the meta-analysis (Klein, Jacobs & Reinecke, 2007). In comparison to the recent trials of CBT, it was found that there was an increase in efficacy when compared to more recent CBT trials (Klein, Jacobs & Reinecke, 2007). The inclusion of CBT adaptations, as well as the development of delivering treatment contributed to the increase in efficacy (Klein, Jacobs & Reinecke, 2007). CBT has much empirical evidence that can be synthesized through the use of a meta-analysis. Understanding research that may have been faulty is important to avoid reverting back to treatment aspects that have proven to be faulty. Once more research is conducted on the topic of CBT with various emotional disorders, it will be important to continue reviewing the literature and completing meta-analyses.

#### **Therapeutic Alliance**

The therapeutic alliance between counselors and clients is an essential element in counseling that CBT facilitates within a therapeutic relationship. Shirk, Gudmundsen, Kaplinski and McMakin (2008) examined the correlation between alliance and treatment outcomes in treating adolescents that met criteria for various depressive disorders. With increased attention towards the importance of alliance as an influence on the therapeutic outcome for clients, the extent to which alliance is measured has historically varied. The majority of past studies have interpreted alliance broadly, whereas recent studies measure alliance from the perspective of the individual client and the counselor (Shirk, Gudmundsen, Kaplinski & McMakin, 2008). Inclusion of both the client and the counselor to the alliance depicts the therapeutic relationship accurately, and offers insight towards client outcomes after receiving treatment. Assessment of alliance was done by both the counselor and client by measuring their perceptions of the emotional bond, as well as task collaboration after the third session (Shirk, Gudmundsen, Kaplinski & McMakin, 2008). Overall, alliance was found to be a significant influence on client outcome when CBT was used as the therapeutic approach (Shirk, Gudmundsen, Kaplinski & McMakin, 2008). Interpreting task collaboration within the therapeutic alliance displayed CBT's effectiveness as the therapeutic approach to treatment. Replicating the study would provide further contributions to the efficacy of CBT and its influence on therapeutic alliance.

### **Transdiagnostic Cognitive Behavioral Therapy**

Harris and Norton (2019) contributed to the discussion of CBT's efficacy when treating principal and comorbid depressive diagnoses. Although CBT is understood to be the pinnacle standard for treating depressive disorders, the burden of training clinicians in specific protocols can be seen as a barrier to practicing professionals (Harris & Norton, 2019). Adaptations of CBT can be implemented to address any barriers that withhold counselors from using the versatile



therapeutic approach as a treatment modality. With a broad and established evidence base, Harris and Norton (2019) aimed to using transdiagnostic cognitive behavioral therapy (tCBT) protocol to treat emotional disorders. Although it is used to broadly treat emotional disorders, tCBT offers an adapted protocol that still includes traditional elements of CBT and supplements the emphasis of emotional engagement (Harris & Norton, 2019). Adaptations of CBT have been common since its introduction as a therapeutic approach, and have been implemented in hopes providing clients with optimum care. Once clients were assessed for emotional disorders, tCBT treatment began. The first three sessions focused on psychoeducation of emotional disorders and introducing how to reduce automatic thoughts and thinking errors by reconstructing cognitions (Harris & Norton, 2019). The transdiagnostic approach in comparison to a traditional CBT approach provides the opportunity for underlying diagnoses to be addressed through psychoeducation with clients. In the last few sessions of tCBT, clients were provided with psychoeducation regarding further maintenance of progress, including how to approach stressors or relapses (Harris & Norton, 2019). Findings provided support for the efficacy of tCBT when treating primary and comorbid emotional disorders (Harris & Norton, 2019). The evidence-based nature of transdiagnostic treatment should be considered appropriately.

### **Cognitive Behavioral Therapy and Adolescents**

The range of CBT's application to emotional disorders extends into treating adolescents with anxiety disorders. Hogendoorn, Prins, and Boer (2014) investigated whether changes in coping strategies, and positive and negative thoughts for children and adolescents would be followed by lessened anxiety disorder symptoms. CBT was the primary therapeutic treatment for the study. The development of CBT programs and their use in treating anxiety disorders has been a product of various biological, behavioral and interpersonal models (Hogendoorn et al., 2019).

The development of these models has improved CBT's variability, specifically in treating anxiety disorders. Since biological, behavioral and interpersonal models were used as the foundation for CBT adaptations to use with anxiety disorders, the relevance and reliability can be traced back through various structured empirically proven models. The majority of past studies have been unable to pinpoint the exact mechanisms involved in changing anxiety symptoms. Hogendoorn, Prins, and Boer (2014) investigated the relationship between cognitions and change in anxiety symptoms. Identifying these mechanisms can provide CBT developments with monumental enhancements for its use with anxiety disorders, and furthermore, can be replicated and applied to other emotional disorders.

The experimental design used assessed anxiety symptoms before, during and after treatment, which allowed researchers the opportunity to better understand the mechanisms in anxiety symptoms changing (Hogendoorn et al., 2019). The inclusion of assessing anxiety during treatment allows for a unique interpretation of the treatment's effectiveness. The presence of these interpretations during treatment eliminate the potential for missing influential information. Results showed that the majority of cognitions were changed through the use of CBT, and anxiety symptoms were significantly reduced (Hogendoorn et al., 2019). Even though changes in all cognitions related to anxiety symptoms were not successfully reconstructed, the design of the study cannot be ruled out since it is impossible to guarantee what caused partial insignificance (Hogendoorn et al., 2019). Identifying the relationship between cognitive reconstruction and anxiety symptoms would further provide the literature an increase in developing CBT.

### **Cognitive Behavioral Therapy and Obsessive Compulsive Disorder (OCD)**

The purpose of this study was presented to assess the effects of CBT on adolescents with obsessive-compulsive disorder (OCD), and compare to the effects of not receiving treatment

(Uhre et al., 2020). Although CBT is the recommended treatment for adolescents with OCD, past studies have had limitations such as including only symptom severity as an outcome measure, and failing to assess risk of bias included in trials (Uhre et al., 2020). Assessing limitations across an array of studies in the present meta-analysis provides an accurate depiction the effectiveness of CBT in treating OCD in adolescents. The primary analysis provided evidence showing that CBT was able to substantially reduce OCD symptom severity and improve functioning in comparison to no intervention being present (Uhre et al., 2020). Although CBT and no intervention showed the same adverse effect on participant's quality of life, these are understood to be because of a lack of power over the entirety of research included in the meta-analysis (Uhre et al., 2020). The assessment of risk of bias across the studies included showed only one study having a low risk of bias present (Uhre et al., 2020). The assessment of psychotherapy is commonly associated with evidence being rated with high risk of bias since therapists cannot be blinded to the treatment they are providing (Uhre et al., 2020). Elimination of biases within the studies that were included should be limited as much as possible while still providing clients with adequate knowledgeable counseling. Overall, the reliability of treatment in adolescents with OCD can be further investigated through replicating studies to eliminate the risk of biases, paired with reaching conclusive conclusions across studies.

Hojgaard, Skarphendinsson and Ivarsson (2019) investigated hoarding habits that occur in children and adolescents with OCD, the potential for clinical variable differences, and the outcome of using CBT. When left untreated, OCD is likely to follow an adolescent into adulthood, and continue to significantly impair daily functioning (Hojgaard, Skarphendinsson & Ivarsson, 2019). Studies that focus on the impairments of hoarding among adolescents are lacking in the present literature surrounding OCD (Hojgaard, Skarphendinsson & Ivarsson,

2019). Discovering whether hoarding symptoms predict the prevalence of OCD among adolescents could also predict the efficacy of the recommended CBT treatment. Although modified versions of CBT have shown success among adults with hoarding symptoms, these adapted treatments have not been evaluated with adolescent participants (Hojgaard, Skarphendinsson & Ivarsson, 2019). Other contributing factors that are similar between adolescent and adult experiences with OCD should be considered, as well as the potential for differing symptomology. Participants of the study were assessed for an OCD diagnosis, as well as the severity of their diagnosis (Hojgaard, Skarphendinsson & Ivarsson, 2019). Treatment included assessing hoarding symptoms according to the same terms of other symptoms commonly attributed to OCD (Hojgaard, Skarphendinsson & Ivarsson, 2019). The prevalence of hoarding symptoms among participants were consistent with the researcher's expectations (Hojgaard, Skarphendinsson & Ivarsson, 2019). Hoarding symptoms developing at an early age shows a need for OCD among adolescents needing to be addressed in order to eliminate continuation into adulthood. Analysis of CBT's use as treatment shows that it is beneficial when treating adolescent OCD symptoms, including hoarding symptoms (Hojgaard, Skarphendinsson & Ivarsson, 2019). However, Hojgaard, Skarphendinsson, and Ivarsson (2019) indicated low insight in hoarding OCD symptoms compared to OCD without hoarding symptoms.

Inconsistencies in the literature can be attributed to the lack of studies regarding hoarding symptoms in adolescents with OCD. Establishing consistency within the literature could lead to further legitimization of assessing hoarding symptoms in adolescents with OCD.

### **Cognitive Behavioral Therapy and Attention Deficit Hyperactivity Disorder (ADHD)**

Spirch, Safren, Finkelstein, Remmert and Hammerness (2016) aimed to test CBT and its use for ADHD symptoms in adolescents who are also receiving medication treatment (Sprich et

al., 2016). Understanding that although medication can be effective, the inclusion of other treatments displays additional benefits when treating adolescents. Although adolescents may be diagnosed and prescribed medication as their primary treatment, the prevalence of ADHD medication being discontinued before graduating high school is staggering (Sprich et al., 2016). The use CBT intertwined with medication treatment can help facilitate the continuation of receiving the maximum treatment, which ultimately leads to maximum potential for treatment. When adolescents do continue their pursuit of medication, potential residual symptoms of ADHD post-medication treatment can be alleviated through the use of CBT (Sprich et al., 2016). The use of CBT was found to be effective when treating adults with ADHD in a past study, leading researchers to hypothesize that CBT would be an effective treatment alongside medication when treating adolescent ADHD. (Sprich et al., 2016). Sprich, Safren, Finkelstein, Rammert, and Hammerness (2016) had adolescents with ADHD either receive continuous CBT and medication treatment simultaneously, or begin with CBT and then continue only using medication to treat ADHD symptoms. Although there were clients that were initially on the waitlist before they began receiving CBT, they were still using prescribed medication as their sole remedy of ADHD symptoms (Sprich et al., 2016). This portion of participant's involvement in the study and their treatment was crucial for researchers to effectively interpret how CBT would influence clients who were already medically being treated. Results affirmed the hypothesis developed, which displayed the efficacy of CBT and medication being superior to solely medication treatment (Sprich et al., 2016). With the results showing residual symptoms of adolescent ADHD being alleviated through the use of CBT, researchers were able to display the ultimate potential of adolescent's progress through treatment.

### **Cognitive Behavioral Therapy and Body Dysmorphic Disorder (BDD)**

Krebs, Cruz, and Monzani (2017) aimed to discover the long-term effects of CBT when working with adolescent body dysmorphic disorder (BDD). The short term efficacy of CBT with adolescent BDD has been proven in past studies (Krebs et al., 2017). Completing follow ups with the participants from the past trial provides the literature with an over-arching study that assesses the long-term effects CBT has on adolescents with BDD. With a limited amount of studies of this nature within the literature of BDD, continuing usage of CBT in longer term trials poses the potential for discovering optimal treatment. Participants assigned to receive CBT underwent treatment based around psychoeducation, response prevention, and relapse prevention (Krebs et al., 2017). Outcomes of treatment were assessed through self-assessments, as well as clinician rating scales (Krebs et al., 2017). Overall, CBT was connected to decreased BDD symptoms in adolescent participants (Krebs et al., 2017). Along with measuring BDD symptom levels, participant involvement in follow ups showed significant decreased symptoms, and made further gains throughout the process (Krebs et al., 2017). BDD related depressive symptoms questioned by the second hypothesis were also decreased throughout the long term CBT follow ups (Krebs et al., 2017).

The importance of these findings together details the benefits of long-term CBT for adolescents with BDD. Assessing the long-term effects of CBT treatment and results must be done cautiously due to a lack of control (Krebs et al., 2017). Adolescents with BDD have the potential from benefiting from studies that provide the literature with a refreshing take on treating the diagnosis.

### **Cognitive Behavioral Therapy and Post-Traumatic Stress Disorder (PTSD)**

Smith, Yule, Perrin, Tranah, Dalglish and Clark (2007) evaluated efficacy of trauma-focused CBT when treating posttraumatic stress disorder (PTSD) in adolescents. Traumas included

within the participants in the study include sexual abuse, interpersonal violence, natural disasters, and motor vehicle accidents (Smith et al., 2007). Effectiveness of CBT has been proven when treating adolescents with PTSD, but this study aimed to focus on the trauma-focused model of CBT (Smith et al., 2007). In doing so, the overall literature is enhanced by focusing on a differing approach of CBT with adolescents and PTSD. The trauma focus is beneficial to the literature in providing insight into adaptations of CBT being considered when treating a client. After participants were assessed for a PTSD diagnosis, those who were selected to receive CBT were assessed using the Ehlers and Clark adapted CBT model (Smith et al., 2007). The adapted model provided an approach appropriate for working with the adolescent participants. Initial symptom monitoring was conducted over a four-week basis, and reassessed in week 11 (Smith et al., 2007). Once participants underwent their final assessment, findings showed that PTSD improved to such a level that participants no longer met criteria for the disorder (Smith et al., 2007). With no adverse effects from CBT present, clients were successfully treated. Also, the trauma-focused CBT approach resulted in significant reduction of depression and anxiety related to participant's PTSD, and presented significant improvement in functioning (Smith et al., 2007). Results were maintained across participants in a follow-up conducted over the course of six months (Smith et al., 2007). Smith, Yule, Perrin, Tranah, Dalglish, and Clark's (2007) approach utilizing randomized control design in treating adolescents with PTSD should be considered for replication to legitimize findings.

### **Cognitive Behavioral Therapy and Medication Treatment**

The effectiveness of utilizing a combination of CBT and a selective serotonin reuptake inhibitor (SSRI) in treatment for major depressive disorder (MDD) in adolescents is unclear. JAMA (2004) pursued assessing the effectiveness of the combined treatments when used for

MDD. The Treatment for Adolescents with Depression Study (TADS) was designed to support the use of CBT in treating MDD in youth (JAMA, 2004). While this study was successful in assessing CBT's use, a contrasting randomized control trial was conducted by TADS that displayed the efficacy of fluoxetine as an MDD treatment (JAMA, 2004). Along with the benefits of medication, the negative effects of medication as a sole treatment for adolescent MDD arose (JAMA, 2004). The lasting impact of medication treatment as a long-term treatment for adolescents needed to be addressed, which included the use of combining CBT and fluoxetine treatment. Participants involved were adolescents assessed for a diagnosis of MDD who could be involved in independent or co-occurring CBT and fluoxetine treatment (JAMA, 2004).

Once blindly divided into their respective treatment, participants either received manual guided CBT treatment for 12 weeks, received an appropriate dosage of fluoxetine according to MDD severity, or a combination of the two preceding treatments (JAMA, 2004). Each treatment alone was found to be effective in treating MDD in the adolescent participants (JAMA, 2004). Although both treatments function effectively as independent treatments, the use of combined CBT and fluoxetine treatment could be more effective to clients, rather than only receiving one form of treatment. When combined, CBT was found to enhance the management of fluoxetine treatment among participants (JAMA, 2004). Determining the true potential of effectiveness could be further enhanced had there been a fluoxetine placebo treatment. The continuation of studies pertaining to the effectiveness of CBT and fluoxetine treatment could contribute to the literature of treatment for adolescents with MDD.

### **Cognitive Behavioral Therapy and Autism Spectrum Disorder (ASD)**



Along with its prevalence in treating primary disorders, CBT displays a range of effectiveness in treating co-occurring disorders. Wood, Ehrenreich-May and Alessandri (2015) sought to clear up the uncertainties that are attributed to the use of CBT in treating clinically elevated anxiety symptoms for adolescents with Autism Spectrum Disorder (ASD). CBT has shown success when treating other common symptoms of ASD, and displays versatility in its adaptations being utilized to cater towards a client's individuality (Wood, Ehrenreich-May and Alessandri, 2015). The adapted model used by Wood, Ehrenreich-May, and Alessandri (2015) was the Behavioral Interventions for Anxiety in Children with Autism (BIACA). The BIACA addresses the developmental needs for adolescent clients with co-occurring ASD and clinical anxiety (Wood, Ehrenreich-May and Alessandri, 2015). Using this adapted approach, it is important that the essence of CBT remains in order to optimize the treatment's effectiveness. Despite the BIACA's flexible nature, the maintenance of CBT protocols was upheld by requiring a minimum of three sessions being spent on identifying basic coping skills (Wood, Ehrenreich-May and Alessandri, 2015). Other than the uniformity of introducing various acronym's and systems that are commonly beneficial for clients with ASD, the BIACA model emphasized the individuality when treating ASD symptoms and clinical anxiety (Wood, Ehrenreich-May and Alessandri, 2015). In the post-treatment analysis of clinical anxiety amongst adolescents, the BIACA model was effective in its treatment (Wood, Ehrenreich-May and Alessandri, 2015). Considering that the participants involved in the study were assessed as having high functioning ASD, considering the use of any form of CBT may be critical when assigning treatment to an adolescent with ASD.

## **Conclusion**

The present review examined the existing and adjacent literature to examine the effectiveness of CBT in its use in treating various emotional disorders in adolescents. Developing CBT's use with adolescents has grown in recent years, providing insight into providing optimal treatment for emotional disorders. Versatility of CBT has allowed researchers and helping professionals make adaptations to best suit their targeted population. In using adapted models of CBT, researchers have been able to address emotional disorders among adolescents that co-occur with other social and cognitive disorders. Literature across the spectrum of emotional disorders is still growing with further adaptations to CBT being made, as well as replication studies being conducted. The future of CBT's use in treating emotional disorders in adolescents relies on continuation of developing adapted approaches and replicating studies on established approaches.

Moreover, the use of CBT for adolescents with ASD and co-occurring mental health disorders is underrepresented in the current literature. Treatment adaptations for this population, such as the BIACA should be considered as the source for future studies. Further additions to the literature for ASD in adolescents will enhance the validity of CBT's treatment of ASD and co-occurring disorders. Considering the expansion of the present literature has inspired the development of a training for work with adolescent clients with ASD and co-occurring mental health disorders. Mental health counselors who are provided a training with this population will have a better understanding of how to guide their treatment. Providing developmentally appropriate assessments, constructing treatment plans and adapting the therapeutic process accordingly.

## **Training Manual**

### **Training Description**

The versatility of CBT emphasizes the potential for training helping professionals in its various adaptations to implement optimum care. Professionals that partake in specialized training sessions are given tools that facilitate the development of their informed approach to client treatment. Learning about using appropriate assessments and developing treatment plans that are catered to individualistic needs and goals allows trainees to view their role as a professional differently. Along with the various adaptations made for counseling, the awareness of representation and service for the population lacking in practice and research is essential. With apparent gaps in the current research that is available for CBT adaptations efficacy, refining one's work with an adapted CBT tool is critical for a client's treatment.

A training based on CBT's use for adolescents with ASD and co-occurring mental health disorders is used to enhance mental health professional's care. The purpose of this training is to educate counselors on treatment adaptations and approaches, and effective implementation of CBT with adolescent clients with ASD and co-occurring mental health disorders. The training is roughly one to one-and-one-half hours long. Prior to attending the training session, participants will complete a pre-test to assess their pre-existing knowledge. The training session begins with the introduction of a case study example of a person with ASD who is seeking treatment for underlying mental health concerns. Participants would be split into groups to discuss and conceptualize the case study. Topics that should be considered during conceptualization would be an appropriate diagnosis to address the mental health concerns, as well as any possible courses of action regarding treatment. After the small group discussions, the trainer would facilitate an open discussion in a large group to provide trainees with the opportunity to share

their ideas and learn from others. The trainer is then responsible for providing trainees with various CBT adaptations on interventions that can be used to treat the client in the case study, as well as additional interventions that are empirically supported. Following completion of the training session, participants will complete a post-test to assess acquired knowledge from training.

### **Exit Evaluation**

In order to assess what was learned throughout the training, the mental health professionals involved will need to complete an exit evaluation to conclude their training. The evaluation should be sent to participant's email before presenting. They will be able to access the evaluation through their email, and be able to submit the document in the same thread. Here are five prompts that should be used on the evaluation:

1. What is cognitive behavioral therapy (CBT)?
2. What is autism spectrum disorder (ASD)?
3. What is one adapted form of CBT that you would like to try with clients?
4. On a scale of 1-5, how beneficial was this training for your role as a mental health professional?
5. How could this training be improved?

**Slide 1: One minute**

# Cognitive Behavioral Therapy Adaptations for Adolescents with Autism Spectrum Disorder and Co-Occurring Mental Health Disorders: Training for Mental Health Counselors

Created and Presented by: Zackary Youssef Hajjali

**Script:** Hello and welcome everyone! My name is Zackary Hajjali, and I am a clinical mental health counseling student at Minnesota State University Moorhead. Today, you will all experience a training about cognitive behavioral therapy adaptations that can be used when treating clients with autism spectrum disorder and co-occurring mental health disorders. I know that many of you work with clients in a variety of different settings, but after today's training, you will have established background knowledge and understanding of tools that can be used to expand your scope of practice.

**Slide 2: Two minutes**

# Purpose

## Learning objectives:

- Understand appropriateness of assessments and treatment planning
- Awareness of underrepresentation in practice and research
- Knowledge of evidence-based resources
- Understand that treatment is not used to cure ASD

**Script:** Our main purpose of this training is to provide our clients with optimum treatment. Treatment options for clients with ASD and co-occurring mental health disorders are often overlooked or misunderstood due to the lack of awareness in counselor practice and research. Our adolescent clients with ASD and co-occurring mental health disorders are often presented with difficulties in establishing and maintaining relationships, or communicating with those they are around. Today, you are going to learn about how CBT adaptations can facilitate growth in these areas of difficulty for your clients. The learning objectives for today are to understand appropriateness of assessments and treatment planning. We will also discuss the underrepresentation in practice and research, and explore what evidence-based resources are available. Finally, we will emphasize the importance of understanding that CBT treatment is not used to cure ASD, but is used to treat the co-occurring disorders.

**Slide 3: Ten minutes**

What do you know about CBT for adolescents?

**Script:** Before we discuss CBT's use with adolescent clients, I want to hear what you already know about its efficacy. You will have five minutes to think and discuss in the groups that you are seated in, and we will come together as a large group to share at least one thought from each group. Make sure to allow for time to designate a representative for your group to speak!

**Special directions:** Once they have had five minutes to confer with one-another in their small groups, ask each small group representative to share what was considered for five minutes.

**Slide 4: Two minutes**

## CBT for Adolescents

- 18% of adolescents display presence of emotional disorders
- CBT addresses a variety of adolescent emotional disorders
  - Extensive array of therapeutic approaches
  - Versatility is displayed in therapeutic process (Gaudiano, 2008)
- Altering dysfunctional cognitions → change in client's behavior
  - Addressing developmental needs for adolescent clients (Hogendoorn, Prins, Boer, et al., 2014)

**Script:** According to Gaudiano, it is found that 18% of adolescents display the presence of emotional disorders. These include, but are not limited to: anxiety, depression, personality, psychotic, and eating disorders. With disorders influencing adolescents in various ways, utilizing a therapeutic approach with a versatile and extensive evidence-based nature is beneficial to the therapeutic process. CBT has been indicated as the preferred therapeutic approach by a multitude of practicing helping professionals. This is largely due to CBT's clear principles that facilitate therapeutic goals, including the alteration of dysfunctional cognitions. Revising persistent dysfunction in thought patterns is intended to lead to desired progress in the client's behavior. Specifically, for adolescent clients, CBT has been found to address the developmental needs that will help guide successful treatment.



**Slide 5: Ten minutes**

What do you know about CBT for ASD?

**Script:** Similar to asking you about CBT with adolescents, I want to learn what you know about CBT's efficacy with ASD. Take five more minutes with your group to share what you know about how CBT is used to treat clients with ASD. Once again, make sure to identify a representative to share for your group when we come back together!

**Special directions:** Once they have had five minutes to confer with one-another in their small groups, ask each small group representative to share what was considered for five minutes.

**Slide 6: Four minutes**

## CBT Adaptations for ASD

- ASD – complex developmental condition that involves persistent challenges in social interaction, communication, and restricted/repetitive behaviors
- CBT is not used to cure ASD
  - CBT displays effectiveness in treating co-occurring disorders
- Versatility provides catered treatment to individual needs
- Behavioral Interventions for Anxiety in Children with Autism (BIACA)
  - Addresses developmental needs for adolescent clients with co-occurring ASD and clinical anxiety

(Wood, Ehrenreich-May & Alessandri, 2015)

**Script:** ASD is defined as a complex developmental condition that involves persistent challenges in social interaction, speech communication, which can verbal or non-verbal, as well as restricted or repetitive behaviors. Each of these three criteria can persist in a client's life in various ways, but are commonly linked with one-another due to the disruption caused between themselves and those that surround them. Moreover, our adolescent clients with ASD are also experiencing other developmental changes, while also beginning to establish themselves in their education and social lives. Once again, it is important to remember that treatment is not used for curing a client's ASD, but instead, the co-occurring disorders that are present. With CBT, versatility is a strong advantage when considering therapeutic approaches because of the large spectrum that is observed with ASD. An example of a treatment modality that is an adapted form of CBT is the Behavioral Interventions for Anxiety in Children with Autism (BIACA). The BIACA is used to

address the developmental needs for adolescent clients with ASD and co-occurring clinical anxiety.

**Slide 7: Five minutes**

## BIACA

- Designed for specific anxiety-related co-occurring disorders with ASD
  - (Ex. Separation anxiety disorder, social anxiety disorder, etc.)
- Modular treatment
  - Flexible sequence of administration
    - Psychoeducation, exposure in sessions, and basic coping skills required
  - Counselor's judgment required in therapy module selection
- Parent involvement
  - Parent-only sessions emphasize home-based exposures

(Wood, Ehrenreich-May & Alessandri, 2015)

**Script:** The BIACA is designed for treatment of anxiety-related co-occurring disorders with ASD, such as separation anxiety disorder and social anxiety disorder. These do not represent the extent of anxiety-related disorders, but are the most common for using this approach. The BIACA expresses its CBT characteristics through its use of a modular treatment approach, which can be described as a flexible sequence of administration. In order to maintain its status as a CBT adaptation, psychoeducation and exposure in sessions, and identification of basic coping skills is necessary, but the BIACA still provides the client with individualistic consideration of functioning and progress in treatment. Not only is this great for clients, but also for counselors who use this approach. The BIACA relies heavily on the judgment of the counselor in making therapy module selections, and how they are applied in treatment design and objectives. Lastly, parent or guardian involvement in treatment is an essential aspect of the BIACA's success as a treatment option. Typically, weekly sessions are split into thirds: session with client individually,

session with client and parent or guardian, and session with parent or guardian alone, known as parent-training. In the parent-training portion of sessions, the counselor provides resources to reference for the parent or guardian to encourage their child to be independent and increase communication skills. These home-based exposures provide clients with a safe and familiar environment to practice the skills they learn in counseling, and are reinforced by those they are around most.

**Slide 8: Six minutes**

## Case Study: Tim

Tim is a 13-year-old male who has had a diagnosis of ASD since he was eight-years-old. Tim reports that while he is at school, he mainly sticks to his work and does not go out of his way to make social connections with new people. In previous attempts to interact with new people, Tim states that he has a hard time concentrating during the interaction. Tim reports that he often believes he is embarrassing himself by even trying to engage with new people. Once he loses his concentration, Tim begins to sweat and stumble his words, leading to feeling even more embarrassed. Tim has two best friends that he grew up with in the same neighborhood. After the interaction, Tim will ruminate on the embarrassment, and ask himself why he is so "stupid". Tim reports that he will sometimes forget to complete his homework because he was too busy worrying about what people think of him.

**Script:** In order to try and apply what we have learned so far about CBT adaptations with adolescent clients with ASD and co-occurring mental health disorders, I have designed a case study that I would like you all to consider. What I am now passing out is a handout of the case study up on the slide, as well as some questions that we will use to guide discussion. "Tim is a 13-year-old male who has had a diagnosis of ASD since he was eight-years-old. Tim reports that while he is at school, he mainly sticks to his work and does not go out of his way to make social connections with new people. In previous attempts to interact with new people, Tim states that he has a hard time concentrating during the interaction. Tim reports that he often believes he is embarrassing himself by even trying to engage with new people. Once he loses his concentration, Tim begins to sweat and stumble his words, leading to feeling even more embarrassed. Tim has two best friends that he grew up with in the same neighborhood. After the interaction, Tim will ruminate on the embarrassment, and ask himself why he is so "stupid". Tim reports that he will

sometimes forget to complete his homework because he was too busy worrying about what people think of him”. Are there any questions about Tim’s case study?

**Special directions:** Pass case study and discussion questions out evenly among training participants before reading case study. Read case study to participants one time through.

**Supplies:** Handout of case study, discussion questions, and writing utensils.

**Slide 9: Two minutes**

## Discussion Questions

- What goals and objectives would be appropriate for Tim?
- Diagnosable co-occurring mental health disorder?
- What other services may be important to consider for Tim?

**Script:** The questions that I would like you all to discuss in your groups are: “What goals and objectives would be appropriate for Tim?”, “Diagnosable co-occurring mental health disorder?”, and finally, “What other services may be important to consider for Tim?”. I will give you all ten minutes to re-read the case study in your small groups, and answer the discussion questions that are included on the handouts. We will come back together as a large group afterwards. Are there any questions about the discussion questions?

**Special directions:** Read discussion questions to participants one time through before splitting into groups. Leave discussion questions slide up while groups are working.

**Supplies:** Handout of case study, discussion questions, and writing utensils.



**Slide 10: Twenty minutes**

## Group Discussion

**Script:** Now that you all have had some time to confer with one-another, how can we approach treatment for Tim?

**Special directions:** Allow for 20 minutes to go over answers from each group regarding the discussion questions and other things noticed.

**Supplies:** Handout of case study, discussion questions, and writing utensils.

**Slide 11: Five minutes**

## Tim's Diagnosis

- ASD with co-occurring social anxiety disorder
- Criteria for social anxiety disorder
  - Persistent fear or anxiety about specific social situations due to fear of being judged or embarrassed
  - Avoidance of anxiety-provoking situations or enduring them with intense anxiety
  - Excessive anxiety that is out of proportion with situation
  - Anxiety or distress interferes with daily living
  - Fear or anxiety is not better explained by a medical condition, medication or substance use.

(American Psychiatric Association, 2013)

**Script:** If I were to diagnose Tim with a co-occurring mental health disorder alongside his existing ASD diagnosis, I would diagnose him with social anxiety disorder. Using Tim's presented symptoms, a social anxiety disorder diagnosis would be fitting according to the criteria of the DSM-V. Tim has specific persistent fear and anxiety about being involved in social situations with people that he is unfamiliar with, and actively avoids being put in situations that would provoke his social anxiety. When Tim is placed in a situation that provokes his anxiety, he endures through the situation, but also experiences a loss of concentration, sweating, and stumbling words when trying to engage, which leads to further embarrassment. Tim's anxiety could be described as out of proportion due to the nature of his rumination afterwards, along with the self-deprecation of asking himself why he is "stupid". Tim's anxiety is seen interfering with his daily living due to the lack of desire to make new connections, and forgetting to complete his

homework due to worrying about what people think of him. Are there any questions about this assessment of Tim's case study?

**Special directions:** Ask for questions to continue engaging and teaching participants.

**Slide 12: Six minutes**

## Appropriate Assessments

- BIACA
  - Individualistic approach to anxiety symptoms and triggers
    - Based on personal characteristics, age, etc.
  - Establish coping mechanisms to utilize (Wood, Ehrenreich-May & Alessandri, 2015)
    - School or social triggers
- Autism Co-morbidity Interview-Present and Lifetime (ACI-PL)
  - Assists in diagnosing co-occurring disorders
  - Includes semi-structured interview with parent(s)/guardian(s) (MacNeil, Lopes, & Minnes, 2009)

**Script:** A potential treatment option for approach Tim's case study would be to utilize the BIACA. For Tim, the BIACA would be utilized in implementing an individualistic approach to anxiety symptoms and triggers that he experiences, either based on personal characteristics, age, or any other identifying factor that is discovered. The establishment of coping mechanisms, providing psychoeducation, and exposure in sessions would be necessary to include in Tim's treatment in order to meet the requirements of CBT and the BIACA. Learning about Tim's interests and strengths will help in identifying potential coping strategies, and ultimately teach Tim how to cope when he finds himself in social situations with new people. Another assessment that may be useful in diagnosing Tim with a co-occurring mental health disorder would be the Autism Co-Morbidity Interview-Present and Lifetime (ACI-PL). The ACI-PL assists in diagnosing co-occurring disorders, and utilizes a semi-structured interview with the client's parents or guardians as informants. In order to generate an appropriate treatment plan for Tim or

any adolescent client with ASD and co-occurring mental health disorders, ensuring the developmental appropriateness of therapy modules and activities will facilitate the efficacy of treatment. The level of client expression, and enhancement of the therapeutic relationship may also be enhanced if the counselor is active in learning about client interests, and can oftentimes be utilized in guiding treatment activities.

**Special directions:** Ask for questions to continue engaging and teaching participants.

**Slide 13: Five minutes**

# Treatment Planning

- Common treatment modifications considering ASD
  - Concrete tools and supports
  - Hierarchies that address ASD symptoms
  - Incorporate client's special interests
  - Parental involvement

(White, Simmons, Gotham et al., 2019)
- Developmentally appropriate activities to guide expression
  - (Ex. Emotion thermometer, emphasizing client interests, etc.)

(MacNeil, Lopes, & Minnes, 2009)

**Script:** Treatment modifications for Tim would be important to consider. The use of concrete tools and support in place of abstract metaphors or interpretations would be developmentally appropriate. Having a secure foundation for treatment tools would be helpful considering Tim's difficulty with concentration and engagement with others. Creating hierarchies would allow Tim to identify potential fears and triggers that heighten his co-occurring symptoms. Learning more about what his special interests are may help guide the success of the previous points.

Incorporation of Tim's interests have the potential to make identifying concrete tools and a hierarchy for his triggers more enjoyable and attainable for him. Utilizing Tim's parent's insight about his childhood and how he currently lives could be greatly influential for his treatment. The involvement of his parents in his life can show how they could help Tim solidify treatment goals and objectives. As important as it is to emphasize client interests in treatment planning through collaboration, the developmental appropriateness of activities will aid the process.

**Special Directions:** Ask for questions to continue engaging and teaching participants.

**Slide 14: Three minutes**

Questions?

**Script:** Now that we have completed going over Tim's case study, does anyone have any questions about the case study in general?

**Special directions:** Allow participants time to ask questions.



**Slide 15: Ten minutes**

## Exit Evaluation

Login to your email and find the message from zackary.hajjali@gmail.com titled "CBT Adaptations for Adolescents with ASD and Co-Occurring Mental Health Disorders"

\*Click on the link and fill out the document. Thank you!

**Script:** Before we end training, I do have an exit evaluation for you all to complete so I can gather data on today's training to inform ones that are done in the future! I appreciate any feedback you can give. Please go into your email and find an email I sent yesterday titled "CBT Adaptations for Adolescents with ASD and Co-Occurring Mental Health Disorders". Click the link and fill out the form. Take your time, and when you are done, please send the completed form back and hang tight for a moment. Thank you!

**Special directions:** Allow participants time to answer questions provided in exit evaluation.

**Supplies:** "CBT Adaptations for Adolescents with ASD and Co-Occurring Mental Health Disorders" exit evaluation should be sent to each participant's email prior to training.

**Slide 16: One minute**

# Thank you!

If there are any questions about this training, feel free to email me!

[zackary.hajjali@gmail.com](mailto:zackary.hajjali@gmail.com)

**Script:** Thank you all so much for attending this training today. I hope you were able to learn something new about CBT and its use with adolescents with ASD and co-occurring mental health disorders. If there are any questions that you have come up once you leave, feel free to email me at [zackary.hajjali@gmail.com](mailto:zackary.hajjali@gmail.com). Enjoy the rest of your day!

## Critical Analysis

### Strengths

After reviewing the training, a strength that the author finds to be most important is the discussion of awareness pertaining to a specific underserved population in the profession.

Trainings should be designed to allow professionals with an opportunity to expand their scope of practice within areas of counseling that they are competent to work in. By having participants participate in analyzing a case study and provide rationale for a diagnosis and treatment initiates the process of developing their scope of practice. The goal is that after applying their concrete knowledge and what is learned in the training, they will be able to attend to their clients more readily and appropriately. This is partially done by the presenter providing resources that come from evidence-based research.

Another strength to identify within the training is the specification of tailoring treatment while considering the developmental appropriateness. The content within the presentation is geared towards adolescent clients with ASD and co-occurring mental health disorders, but the assessments and activities that are discussed should be considered within the context of the client. The inclusion of a case study in the training provides participants with just one example of a client with social anxiety disorder. The presenter and the participants should utilize this case study as just one example, and be inspired to continue researching ASD and other co-occurring disorders.

### Growth Areas

Despite the specification of this training being tailored towards mental health counselors, this is an area that could be improved. The training could be altered to be applicable to other

areas of counseling, such as school counseling. A school counselor's approach to working with a student who has diagnosable ASD and a co-occurring mental health disorder would approach treatment differently than a mental health counselor. Differences may appear due to differences in session time, resources, or support from the school or agency.

Another aspect of the training that would benefit from expansion would be the level of evidence-based research that supports ideas presented. This point partially relies on the current state of the literature growing, but also is related to the presence of adjacent literature due to the lack of research specifically about ASD and CBT.

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