

## Research Article

# Counseling with an emphasis in Health Psychology: Cognitive-Behavioral Therapy for Autism spectrum Children

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## ABSTRACT

Cognitive behavioral therapy is based on the concept that one's thoughts, feelings, physical actions, and sensations are interlinked. It also works on the basis that undesirable opinions and feelings can potentially catch an individual in a vicious cycle and that changing negative patterns can help an individual improve the way they feel about various things. Using cognitive behavioral therapy will allow the client to self-explore and identify what factors in life are causing problems or specific concerns. Cognitive behavioral therapy can help the children with Autism spectrum disorder to overcome the social and communication barriers if the levels of anxiety that they are feeling have dropped. Social skills and managing challenging behaviors such as anxiety and emotional regulation are also important and will be useful for children with Autism spectrum disorder to improve language/speech use, social communication/interactions, and symptom severity.

**Keywords:** Cognitive behavioral therapy, Counseling, Health psychology.

## 1. MAJOR INFLUENCES

The behavioral approach has its origins in the 1950s and has been essential from the psychoanalytic perspective (Wong, 1997). Modern behavior therapy arose concurrently in the U.S., South Africa, and Britain in the 1950s. Despite all the negative criticism and resistance from psychotherapists at the time, the behavioral approach persisted. Its focus was on representing that behavioral counseling techniques were effective and practical alternatives to traditional psychotherapy. During the 1960s, cognitive-behavioral approaches appeared, and they still have a significant impact on therapeutic practice. During the 1970s, behavioral therapy seemed to be a key in psychology and made an influence on psychology, psychotherapy, and psychiatry (Wong, 1997).

Behavior therapy is a clinical approach that can be used to treat a variety of disorders, in various types of settings, and with a wide range of special population groups (O'Leary, Daniel & Wilson, 1975). When the researchers think of talk therapy, cognitive-behavioral

therapy (CBT) always comes first in mind. In our opinion, it is a perfect fit for us as our therapeutic approach because the most important aspect for everyone is behavior. Behavior played a big role in our life growing up, as we learned how to address certain behaviors and thought patterns, whether it was for us or others. In my opinion, addressing one's current behaviors rather than analyzing the past is one of the main focuses of CBT. CBT always helps us to focus on the present issues of clients through self-awareness, process thinking, and dealing rationally with behaviors and thought processes. It helps us dig deep into the client's underlying emotions of certain behaviors, which give us tangible tools to determine their emotions, control their thinking, and reduce or get rid of unwanted behaviors. CBT is common in different cultures and ethnicities, and studies have examined various adaptations of the traditional CBT model by integrating culturally relevant content and modifications of interventions based on the cultural characteristics of clients (Iwamasa, Regan & Sorocco, 2019). According to Sharf, behavior therapy focuses on targeting a client's behavioral patterns and examining the reasons behind them (Sharf, 2016, p. 298). In our opinion, CBT examines the structure of the mind and how the mind works by the core concepts of beliefs, intentions, and desires.

The therapy is based on the concept that one's thoughts, feelings, physical actions, and sensations are interlinked. Moreover, CBT also works on the basis that undesirable opinions and feelings can potentially catch an individual in a vicious cycle and that changing negative patterns can help an individual improve the way they feel about various things. Our theory affects our understanding of clients as a future therapist because usually, clients have numerous problems, so the client and the therapist must decide on the first problems to be addressed so that the other problems follow. For example, if a client with autism or attention- deficit/hyperactivity disorder has certain disruptive behavioral patterns; so cognitive-behavioral techniques to change these patterns can be used.

One emphasis that is thought to be effective is positive reinforcement. When we previously worked with children with autism, positive reinforcement played an essential role in inspiring the clients to perform tasks and activities better. The positive event should follow the behavior, which increases the frequency of the behavior (Sharf, 2016, p. 294). For instance, if a client tells us "Thank you" for services provided, the expression of thanks acts as positive reinforcement and encourages us to continue doing well toward the client in the future. Positive reinforcement is also used due to its compatibility with cultural norms. we believe that CBT can be effective and appropriate for many clients and their problems. Each individual needs to be considered as a whole and counseling technique must be fitted to their needs.

Using CBT will allow the client to self-explore and identify what factors in life are causing problems or specific concerns. It also helps the client to focus on certain fears and triggers that might be the underlying causes of troublesome behaviors. Throughout our experience working with autistic children, we have exhibited a lot of dedication and compassion, making me a patient and altruistic person. It has also made us intuitive; enabling us to identify each child's needs and support them appropriately. When presented with a student demonstrating challenging behaviors, we were able to intervene and scaffold in developmentally appropriate ways that produced positive student outcomes, whether it was encouraging calm behaviors with a sensory-based experience or through positive reinforcement techniques. We have gained a lot of experience in building and supporting students' foundational communication development. One of the aspects CBT that needed to be considered with our future clients is exposure. Many individuals experience anxiety disorders that stem from other issues they face so, exposure will help us future clients face their fear and learn to accept and cope with reality.

## **2. VALUE SYSTEM AND BELIEFS**

CBT has helped us develop flexible, self-strengthening beliefs and attitudes toward ourselves, others, and the world around us. To associate my core values and beliefs to our psychotherapeutic approach, we want to start by our social values, starting with our sociability traits. Helping people is our top priority in life. As we are the researchers of this study, we are friendly and outgoing persons with self-control, adaptability, integrity, and a team spirit. We enjoy meeting new people from different backgrounds. However, that was not the case in our college years. A challenge we experienced established negative thoughts about ourselves which kept racing in our mind and led us to experience loneliness. CBT, especially cognitive restructuring, teaches people that the causes of their problems might not be as negative as they think; cognitive restructuring encourages balanced thinking (Wenzel, Dobson & Hays, 2016). Moving on from our early college years, we came to realize that it was difficult to think with this new style, but with time and practice, positive and rational thoughts came more naturally. Another value is self-esteem. Low self-esteem, lack of confidence, and feeling bad about ourselves often made us often feel unlovable, awkward, or incompetent and that had a major impact on our life. We believe that encompassing behavioral activation into our daily thinking

May help us reverse this cycle by re-engaging in activities that result in rewarding experiences. Speaking of behavioral activation, a friend of us experiences social anxiety, has been going to therapy, and told us her experience with behavioral activation, in which motivation to engage in social activities may be constructed by identifying and discussing the patient's relationship values and goals (Judah, Dahne, Hershenberg & Gros, 2020). Social

skills training complements theoretical models of behavioral activation such as therapist modeling, role-play, and feedback (Judah et al., 2020).

One of CBT's advantages is that it trains one's thoughts and changes one's behaviors in order to make changes to how one feels. CBT is provided in different settings such as groups, programs, and even self-help books, helping people build skills, techniques, and strategies that can be incorporated into daily life. According to Durham et al.'s (2005) study, short-term CBT is more effective than long-term outcomes due to the greater complexity and severity of problems. Considering short-term CBT, we find that it is more effective than long-term CBT because it is more goals-oriented. On the other hand, we believe that in the case of neurological disorders such as autism, long-term CBT would be more effective, since many autism cases are impaired in cognitive functioning.

Some parts of CBT do not work with certain populations. In our opinion, CBT is not effective unless it is modified for those who have neurological and cognitive related disorders. It will be to some extent challenging for many clients, such as children with autism, if techniques are not restructured to meet their specific needs. Another area of divergence for CBT is that it focuses mainly on someone's capacity to change, such as their thoughts, feelings, emotions, and behaviors, and does not focus on the wider problems in systems, families, and family history that usually have a significant impact on an individual's health and wellbeing. Regarding our values and beliefs, we highly believe in family systems and history and we think it should be a critical component of CBT because the family has a profound impact on one's emotions, thoughts, and behaviors. One significant point of deviation between the standard CBT and our experience is that it is hard to address our family's history, when no CBT techniques value this area.

### **3. CONTRASTS WITH OTHER APPROACHES**

Behavioral therapies, specifically CBT, can be used with other therapies including Adlerian therapy. Adlerian therapy can be described as the transitory, psycho-educational technique that explores both the humanistic and goal-oriented approaches. According to Sharf (2016), this therapy focuses on the clients' desires or struggles for success, connectivity with other people, and inputs to society as significant elements of mental health.

In order to completely understand the current personality of an individual, one must also concentrate on birth order (Sharf, 2016, p. 132). Essentially, focusing on the birth order qualifies the therapy to be future-minded as opposed to being retrospective. Using desires, intentions, and beliefs, therapists can appropriately examine how the mind works to help in exploring the best approaches toward correcting a specific behavior (Sharf, 2016, p. 133). Furthermore, our understanding of this therapy is that it examines the client's current

problem and connects it to previous experiences, such as family history. So, Adlerian therapy often prefers both counseling and psychotherapy, which are mainly dependent on the presentation of the client's problem and less on the client's perception of the problem. While CBT mainly examines the mind, Adlerian bases its emphasis on the understanding of the distinct lifestyle of the client before making endeavors toward changing their character. So, Adlerian therapy helps one understand two significant aspects of the client: their way of thinking and the context of their thoughts. Consequently, it is true that we often exhibit some faults in our thinking, which is the design of cognitive patterns learned at a young age, and that influences our current behaviors and feelings.

These therapies are similar. Adlerian therapy and the CBT can include various components drawn from theories and techniques as well as interventions. From the simple processes/stages of both the CBT and Adlerian therapies, for example, a therapist would start addressing a client's problem by creating a collaborative environment and supportive relations with the client. Building a relationship ensures understanding how the beliefs and presumptions of the client affect their interpretations of significant events. Essentially, if the client had anxiety problems in handling examinations, we would use the situations to examine the client's perceptions of the exam room or the examination. At the intervention stage, the therapist might employ various techniques such as therapeutic symbols and role-playing, which would help the individual commence changing their behavior. A combination of CBT and Adlerian therapy would be effective, as CBT would change patterns, such as behaviors and Adlerian therapy would change a certain lifestyle, such as developing social interests and a sense of connection regarding family dynamics.

#### **4. ASSESSMENT**

The case that we will be presenting was from our volunteer position as service learners' helpers for special needs at a school class that had children with autism and other neurological and behavioral problems/deficits. We spent about four months there, going once a week to observe a school class and help with play, sensory, and motor activities. For the case study, we will present Sara's case and a complete assessment of it.

Sara was raised in a bilingual Mandarin/English-speaking family, living with her parents, an older sister who is 10 years old, and a baby brother who is 8 months old. Sara was enrolled in a 4-8-year-old program for school readiness, and she was 8 years old at the time we worked with her. A little background history of Sara's autism: she was born full-term following a normal pregnancy and delivery and her newborn screen tests were normal. Her mother had concerns that she was not speaking any words, and her doctor said, "Let's wait and see." A follow-up appointment was scheduled for when she turned 2. At 3 years and

nine months old, she was diagnosed with severe expressive receptive language disorder because she communicated with single-word utterances. According to the neurologist, her expressive language skills were solid at the 18-to-21-month level and she used jargon phrases. Sara did speech therapy sessions and, soon after beginning the school year, the classroom teacher had concerns with Sara's development, specifically atypical behaviors, such as repetitive, self-stimming behaviors and unawareness of others.

To introduce Sara's case, we will connect her symptoms with the DSM-5 (Diagnostic and Statistical Manual of Mental Disorders). From what we observed, she shows a deficit in social communication skills along with the presence of repetitive and restricted behaviors and activities/interests. She has difficulty attending to structured tasks, following directives, and participating in adult-directed activities. Sara experiences a lack of social skills which includes interactions with people, the use of non-verbal communication, such as making eye contact, and the development and maintenance of relationships, such as making friends. For example, Sara does not react when children invite her to play. She also has a delay in cognitive levels, where she lacks emotions and has a decreased ability to learn or absorb new information, speech, and language. In terms of language, she speaks Mandarin and English equally, where English is the main language at school and both Mandarin and English are spoken at home. Sara experiences anxiety symptoms, specifically phobia, where she fears loud voices such as people shouting/screaming, children crying, or loud TV. Some of her strengths include memorizing shapes and colors and that she was potty trained.

According to our comment in terms of social communication as listed above, Sara meets all three categories from Criteria A. According to the DSM-5, she meets the symptoms, including deficits in social-emotional reciprocity, deficits in nonverbal communication such as lack of eye contact, and deficits in developing, maintaining, and understanding relationships (American Psychiatric Association, 2013, p. 50). Her severity is level 2, "Requiring very substantial support," where she has moderate to severe impairments in social communication that cause impairments in functioning.

In terms of motor movements, she experiences unusual movements such as spinning and rocking her body, and wiggling her fingers. Sara can be impulsive when jumping up and down, and also quiet, calm, forgetful, disinterested, and withdrawn. She has many tantrums with loud, intense screams. Sara experiences stimming behaviors such as teeth grinding, which is self-harming if it is done intensively. Symptoms include sensory deficits such as touch; for example, Sara tends to squeeze another person to show affection because she can't feel minor touches. With her case, sense of touch operates in isolation from the other senses, and the brain is not able to organize these stimuli in a suitable manner.

According to our observations listed above, Sara meets criteria B for restricted, repetitive patterns of behavior, interests, or activities (American Psychiatric Association, 2013, p. 50). Out of the four of the following criteria under criteria B, she meets three out of the four categories. According to the DSM-5 (2013), Sara meets the first category, "Stereotyped or repetitive motor movements, use of objects, or speech" (American Psychiatric Association, 2013, p. 50). She doesn't meet the second category in criteria B because, in terms of insistence on sameness to routines or ritualized patterns of nonverbal or verbal behaviors, she is very flexible when it comes to schedule changing and doesn't feel distressed or in agony when her therapists do things in a flexible matter.

we noticed that she does various things at various times, which we found to be strength for her case (American Psychiatric Association, 2013, p. 50). Furthermore, Sara meets the third category in criteria B, "highly restricted, and fixated interests that are abnormal in intensity or focus" (American Psychiatric Association, 2013, p. 50). For example, we have observed her using her iPad and getting preoccupied, focused, and attached to it. we have noticed that she puts the iPad very close to her face, which is abnormal because putting it close to her eyes has negative effects. She seems to have met the fourth and last category for criteria B since sensory perception is a big factor for her. She is highly deficit in sensory perception, so she seeks it a lot. For example, regarding temperature, she eats hot soup quickly and without being aware of its temperature. Sara tends to enjoy sniffing people up close to them. In terms of sensing pain, during playtime, she would fall down and end up not crying, expressing maladaptive behaviors, or showing any emotions. Lastly, to specify for the current severity of this Criteria (B), Sara falls under Level 2, "requiring substantial support."

Sara meets criteria C, in which her symptoms were present in the early development period, because her parents started noticing symptoms as early as 24 months. She also meets Criteria D, as her symptoms have caused clinically significant impairment in social, occupational, or other important areas of current functioning. Lastly, Sara also meets Criteria E, as her disturbances are not explained by intellectual disability or global development delay (American Psychiatric Association, 2013, pp. 50-51).

we consider autism to be a diagnosis for Sara, since she met most of the criteria listed above. For the specifiers, she has intellectual and language impairments because she struggles moderately-severely on those factors as a result of the DSM criteria and our observations listed above. In terms of the differential diagnosis, we would also identify and rule out intellectual disability because according to the DSM-5 (2013) a diagnosis with autism spectrum disorder in an individual with intellectual disability is appropriate when social communication and interaction are significantly impaired relative to the

developmental level of the individual's nonverbal skills, such as fine motor skills and nonverbal problem solving. (American Psychiatric Association, 2013, p. 58)

we will introduce the assessments that were applied for her case. First, the client came to the team with a diagnosis of expressive receptive language disorder from the neurologist with symptoms of autism when the client was 3 years and 9 months old. After the service team composed of a neuro-pediatrician, a psychologist, a speech therapist, and a psychotherapist read the report, they decided to run screenings and comprehensive exams for assessing her when she was 4 years old. The school psychologist and the rest of the team followed this step with the screening instruments and assessment tools. For the screenings, the team conducted behavioral observations that included screening instruments such as checklists and parent and/or teacher questionnaires. In terms of diversity considerations, the assessment tools were written in Mandarin so that the parents could fully understand certain terms, and there was a translator in case they needed further explanation and clarification. Before the screening and assessment tools were given, a detailed history from Sara's primary caregiver/parents was addressed, such as medical, developmental, behavioral, and family history.

In terms of cultural/diversity factors, it is important for clinicians to understand how different cultural aspects play a role in decisions that parents make for their children regarding screening, assessment, diagnosis, and future/treatment plans. As clinician cultural competency is essential, it is important to consider how Sara's mental health may be stigmatized in Chinese culture. As clinicians, we can approach the parents/caregivers and ask them about their distinctive styles of parenting so that the plan is not overgeneralized and biased.

Screening tools help provide information regarding developmental delays in cognitive development, language, motor movements, sensory deficits, and social and communication skills. The first screening tool that was used is called "ESAT" (Early Screening of Autistic Traits). Hall (2013) stated that the ESAT was implemented for identifying young children between 16 to 48 months old who are at risk for ASD. It consists of a 14-item questionnaire that includes yes or no questions for the parents to report, such as "Can your child play with toys in varied ways?" (as cited in Swinkles et al., 2006, p. 23). Another screening was the "SCQ" (Social Communication Questionnaire), which was designed to screen children aged 4 or older for pervasive developmental disorders. According to Hall (2013), this screening is a parent report measure that contains 40 items regarding the presence or absence of language, social interaction, communication, and repetitive and stereotyped behaviors.



For the comprehensive diagnostic process evaluation assessment tools following the screenings to assess for diagnosis, the “CARS-2” (Childhood Autism Rating Scale) was given for her case when she was 4 years old. As Hall (2013) discussed, this is for children aged 6 years or younger with an IQ estimated at 79 or lower with impaired communication. It asks questions regarding visual response, verbal/nonverbal communication, response to touch and other senses, fear/anxiety, emotional regulation, adaptation to change/restricted interests, and other factors (as cited in Schopler, Van Bourgondien, Wellman & Love, 2010). The team told us that she resulted in the moderate to severe end of the spectrum. Another assessment tool that supports the diagnosis was applied after the CARS-2: the “ADOS” (Autism Diagnostic Interview-Revised and the Autism Diagnostic Observation Schedule). According to Hall (2013), ADOS, is a semi-structured observational assessment used target symptoms of ASD regarding social interaction and behaviors, communication, play, and repetitive behaviors during a 2-hour interaction with the child. As a result of the ADOS, she met the criteria for moderate to severe autism. Other assessment tools included ABAS, IQ, and ASRS to determine the diagnosis. As a future therapist, if Sara came to us as a client for CBT, we would want to focus on the anxiety/fear, social, and cognitive aspects of her autism. Since she didn’t have an assessment for anxiety levels, we would prefer to assess that before treatment plan.

## **5. CASE CONCEPTUALIZATION, TREATMENT PLAN, AND INTERVENTIONS**

To conceptualize her case, we want to first consider her diagnosis and what might be her current problems and areas of development. We want to address Sara’s emotional, physiological, and behavioral reactions that occur in situations and understand how our client copes with those behaviors and cognitions. While working with her, Sara received only an applied behavioral analysis, occupational therapy, and speech therapy. If Sara came to us as a client in the future, we would consider CBT as our therapeutic orientation because it would be effective, specifically for her anxiety, which ties into her social interactions and cognitive level of functioning because CBT is useful to assess baseline functioning as well as therapeutic progress. According to the DSM-5 (2013), one of the most common co-morbid psychological disorders is among the ASD population, with anxiety disorders affecting 30–80%, although anxiety is not a defining characteristic of autism spectrum disorder (American Psychiatric Association, 2013, p. 58). According to our past experiences working for children with autism, we agree with the DSM-5 in terms of anxiety co-morbidity because we have noticed and realized that anxiety is a major commonality among most students in that class.

In terms of theoretical orientation, according to our research, most studies that address CBT for ASD talk about treating the anxiety issues that people with ASD face. Even though the majority of studies state that CBT is more effective for higher functioning autism, I still think that once it is modified, it will be as effective for anxiety-related symptoms, especially in terms of secondary issues that are related to her experience being on the autism spectrum such as aggression, anxiety, and social skills deficits. Since Sara is generally a concrete thinker, modifying the standard CBT techniques and interventions is essential so that it can be more hands-on and experiential. The therapy she attends doesn't focus deeply on social/cognitive skills or certain fears, which is why CBT is a good fit. Since her case is moderate to severe, CBT must be adapted and adjusted to meet her needs and strengths and be able to fit her case as being in the moderate to severe level. She is 8 years old, which, we think is a good age to start CBT with her, because she will have better memory and verbal expression than being under 8 years old.

Considering gender and sexual orientation, since Sara is emotionally /socially /cognitively impaired and deficit, it is hard to address this aspect, but in terms of her parents, as a therapist, addressing and educating them on those topics is essential because children with autism are not fully aware of sexuality and gender identity. Since she is still 8 years old and on the autism spectrum, she will only know minimal differences between genders and sexual orientation. In terms of diversity and culture, stigma about mental health is a factor in Chinese culture. This reminds us of when we first met Sara's mother at the school to discuss how Sara has been doing in school. She mentioned how her husband and she denied that their child had autism and told us that in her culture, mental disorders are considered as a stigma. The mother stated that she was shocked and kept blaming herself as if it was her fault that her child had autism. Overall, as a future therapist, if someone with autism came to us, we would introduce psychoeducation and talk about the case before treatment planning.

Before heading to treatment planning, we want to consider cultural competency regarding conceptualization, treatment planning/goals, and interventions. According to Kramer, Kwong, Lee, and Chung (2002), Culturally competent assessment and treatment of mental health problems in Asian Americans requires that health professionals ask patients and their family members to share their cultural views on the cause of the problem, past coping patterns, health care-seeking behaviors, and treatment expectations (Kramer et al., 2002). Considering this and giving them reassurance is important. We would also give them an assessment besides Sara's symptoms, such as the Autism Family Experience Questionnaire (AFEQ), which focuses on establishing measures of child adaptive functioning, parental mental health, and parental wellbeing (Aldred et al., 2017). In our opinion, this is a helpful tool that will help us collect enough information regarding

the parents' mental health, which will also help us assess comprehensively before heading to plan.

Our design for the treatment plan would be in this order: psych education, CBT techniques such as visualization, task analysis, exposure and cognitive restructuring, and coping skills and problem-solving, which includes varied modifications that involve increased and intense caregiving by the parents. To start with the treatment plan, we would provide parental psychoeducation because we think it is a critical component for treatment. Since Sara is only 8 years old and not cognitively challenged or aware of her case, psychoeducation would be difficult to apply to her. Talking and discussing in detail about Sara's case to the parents will be helpful since they are not fully aware of her case. According to the DSM-5 (2013), educational levels and problems have an effect on the individual's diagnosis (American Psychiatric Association, 2013, p. 723). So, educating the parents on autism and mental health awareness would help the parents learn more about Sara's case. By letting the parents participate in most sessions, they will better understand the process of CBT and this will lead them to help Sara with exposures and skills practice at home. Asking them what Sara is good at, her strengths, positive traits, and what she likes and her interests will help us discuss the next steps with them. We will also provide them information and an overview of our theoretical orientation and how it is effective for her case by telling them that there will be a cognitive component that will help Sara change how she thinks of a certain situation, whether it causes fear or anxiety, and on the other hand, the behavioral component which will help Sara change those behaviors in terms of how she reacts to a certain situation. So, our goal for this first step of treatment is for the first session to relate to psychoeducation for the parents.

From what we saw in our volunteer experience, her parents' main goals were to manage and reduce her anxiety, tantrums/stimming, social, emotional, and cognitive behaviors in general, so CBT will be a helpful and effective tool in managing those factors. Moving on to exposure, we want to address Sara's fears and behavioral/cognitive/emotional issues by using several techniques for the intervention that will help reduce those levels. This will lead to coping skills which will help Sara cope with her anxiety and then problem-solving skills which lead to solving certain issues in certain situations. And before moving to intervention, going over all those steps with her parents and getting their approval is vital for the treatment planning in order to start the intervention. We would also assess and compare her anxiety levels before and after the intervention.

Taking Sara's case into account, since she is on the moderate to severe end of the spectrum, an intense, longer-term intervention would be a good fit for her to meet her parents' goals. A 15-week program, with one 1-hour session per week, would be a good start.

A major aspect of the intervention is to have it ASD-friendly; in other words, to make it more repetitive, visual, modified, and tangible, so that it can be more effective. First off, we want to address Sara's anxiety and fears. One is self-harming, which involves such stimming behaviors as teeth grinding. So, taking her to a different space and letting her focus on a different task that she enjoys will be useful for this aspect. Another aspect is that she has a fear of dogs. Using exposure therapy, specifically virtual reality, will be a good step to manage her fear of dogs, so a step-by-step process needs to be considered. Throughout our observation, we have seen Sara cry a lot in terms of her anxiety, loud voices being one of her fears. Whenever someone else cries or screams, or when she hears loud TVs/music, she keeps crying. So, a CBT technique that can be used in the intervention is the redirecting technique. We would want to remove her from the environment such as by taking her outside to change her mindset. Or, we would do activities to distract her, such as using gross motor skills, having conversations with her, or even labeling items to distract her from her crying. So, the goal for this aspect of the intervention is to apply those techniques regarding her anxiety in weeks 2 to 4, which is three sessions in three weeks, since it is a challenging symptom she experiences.

Another anxiety and behavioral experience are tantruming and avoiding certain tasks, so distracting her from the task she is doing and giving her space will help reduce her anxiety. For example, we would tell her to look at the sky and ask "What do you see?" and also give her more attention and maintain eye contact with her. Taking her outside for a walk or to a calm space might make her end up having more behaviors such as, tantrums due to a certain environment that includes kids crying at the park. So, another example is to distract her behaviors by naming two things she sees in a picture and staying indoors. Providing her with reinforcement, such as positive reinforcement or giving her a favorite snack, might calm her down. Social skills training will also be beneficial for Sara since she is deficit in this component. Teaching her how to shake hands with a person or simple greeting phrases will help improve her social skills levels. We believe that the goal for this technique regarding her tantrums / avoidance behaviors for the intervention is to practice them in weeks 5 and 6, which is in two sessions over two weeks. In terms of cognitive restructuring, how we think of it in Sara's case will be different from that of a higher functioning client or client with a higher cognitive level, so it should be modified. Since she is limited in her cognitive ability, an example would be replacing the stimming repetitive sounds she makes with thoughts. So, by being verbal with her, we would tell her to use words instead, such as "I am happy, I am excited, and I am fine." The goal for the cognitive restructuring technique is to get it done in week 7, which is one session.

We have also noticed that Sara is an intense visual learner and deeply relies on visuals, such as images to guide her following complete certain tasks, so a CBT technique that will

be helpful is visualization. Sara tends to use only visuals when it is difficult for her to do something; for example, it is hard for her to select a song to sing, so we would want to create a visual such as showing her clips of some songs for her to pick with her hand. Another example would be sensory visuals, such as showing her a picture of someone washing his/her hands, so that she can do that task or any other. According to Ekman and Hiltunen (2015), information is usually visualized on the whiteboard and CBT is modified using visualized language throughout the entire sessions, which makes the conversation organized and straightforward, making it easier for ASD clients to follow a conversation and be a part of it, thus avoiding misunderstandings and confusion (Ekman & Hiltunen, 2015). On the other hand, she has some strength regarding her cognition; since she is a visual learner, she remembers the shapes of the words and memorizes the words, but at the same time, when any new information or sentence is provided for her, she can't comprehend it. She uses a lot of her memory to obtain the information, so repetition would help her a lot in this case. She has speech delay, so whenever she is asked to retell a story, we could ask her to retell it by putting the pictures and cards in order so that she can see what is in the picture, which will help her with the cognition aspect of CBT.

Speaking of visualization, we also think that using sign language at times would be helpful for Sara. We noticed that teachers did that at the school, so integrating it in CBT would let her express emotions since she finds it hard to express emotions or say them in words, such as asking questions and requesting help whenever she is struggling or can't seem to do an action. Furthermore, our goal is to practice this intervention in terms of visualization in weeks 8-11, which is four sessions, since it is an important aspect of Sara's case.

Another intervention that I will be effective for her case is task analysis. Using task analysis technique with the kids to break down the steps to do a certain task such as washing their hands in case they couldn't follow directions probably. For example, by using PECS (Picture Exchange Communication System), we would show six steps from pictures, such as turning on the water, putting water on their hands and so on. According to Hodgdon (1995) and Mesibov and Howley (2003) providing visual clarity in the classroom and color-coding areas for snacking, working, and playing are examples of visual clarity for task organization. Looking at it through our theoretical lens for CBT, it is like breaking big components into smaller ones in order to make it easier in terms of cognition. In terms of task analysis, getting Sara to practice those skills in weeks 12 and 13 will be an ultimate goal.

Addressing emotional regulation for our intervention includes bringing the parents into the therapy. We think that emotional regulation is an important factor in a family dealing with a child with autism. Ting and Weiss's (2017) study found that "parent scaffolding was

associated with child externalizing problems”. Ting and Weiss (2017) also stated that “parent scaffolding, which taps into parents’ ability to respond sensitively to their child and maintain her persistence toward the task, is important in children’s emotional development”. Lastly, we believe that meeting Sara’s parents and sister along with Sara for weeks 14 and 15, which are the last two sessions, will be beneficial in terms of emotional regulation so that they can apply it with her at home.

For ASD children, many don’t simply agree with recommendations from their therapist. As a future therapist, it is important to identify potential obstacles early to avoid setbacks or treatment failures. For example, asking for frequent feedback from the parents helps to gain their collaboration consequently, this will lead to an active treatment approach. Barriers include logistic difficulties, such as financial stability, time limitations, and family culture. Other barriers might involve personal beliefs about therapy, stigma, or interpersonal issues such as families not supportive of CBT.

## **6. LEGAL/ETHICAL ISSUES**

According to Graf, Miller, Epstien, and Rapin (2017), families, advocates of individuals with ASD, health care and other professionals, and governments may have different views of ASD diagnostic criteria, screening, testing, and the effectiveness of various interventions (Graf et al., 2017). I think that this is a major ethical/legal issue, especially since ASD might be misdiagnosed by other professionals and disagreements may occur, so as a future therapist, having much evidence to support Sara’s diagnosis and intervention is important. Graf et al. (2017) also state that “Governments struggle to provide a fair allocation of appropriate special education and supportive services”. I think this is an issue because it is sometimes hard to have access to diagnosis and care/treatment/intervention because it is limited. Another ethical/legal issue for Sara’s case is self-harm since she tends to hurt herself sometimes. Considering this, having her parents and caregivers accompany her at all times would be safer.

Another aspect is that she is a minor, so informed consent should be given and introduced to parents firsthand. Another issue is that her current school class is not specified for only children with autism, but other neurodevelopmental disorders. That is one concern for the parents because they are struggling with finding a different school that focuses on the one-on-one type of treatment and teaching for autism classes specifically. Furthermore, we would want to make it affordable and have them pay according to their income to provide the right services for their child. Building rapport and sharing a language with the parents and the client will make the intervention more engaging and effective.

## 7. EVALUATION OF EFFICACY

As a result of our research, most studies have talked about how CBT is most effective for high functioning ASD, but we believe that, with modification, it will also work for moderate to severe cases on the spectrum. If we happen to work with someone like Sara in the future with our intervention, during a 15-week session, a lot can happen regarding behavioral control, cognitive skills, and emotional development with intense techniques. The goals will have been met if aspects regarding behaviors, anxiety and cognitive levels were reduced and managed by the final assessment results. If someone followed my psychotherapeutic approach, we would want them to expect results of therapy such as being able to help clients handle stressful situations and that the client is able to manage reactions and reduce anxiety over time. Another aspect of the approach is that involvement of the parents in the intervention will make it more effective because they can apply techniques with the client at home. One of the main results and indications of therapy is behavior change, especially in neurodevelopmental disorders such as autism. CBT will eventually help the children overcome the social and communication barriers if the levels of anxiety that they are feeling have dropped. Social skills and managing challenging behaviors such as anxiety and emotional regulation are also important and will be useful for children with ASD to improve language/speech use, social communication/interactions, and symptom severity.

Lastly, we think that CBT as an intervention by itself is not enough for ASD clients. Having ABA, occupational therapy, and speech therapy along with it will be more beneficial for Sara's case. However, since we are taking CBT as our counseling psychotherapeutic approach, we were able to modify it to her case, even though we didn't completely follow the original CBT techniques that work with most clients, especially high functioning ones. We believe that there will be a high chance of goals being met because according to research.

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