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Effectiveness of Art Therapy with Children with Both Attention-deficit/hyperactivity and Autism

Capstone Thesis

Lesley University

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Clinical Mental Health Counseling with specialization in Art Therapy

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Abstract

In this capstone thesis, I review current art therapy research and methods for treating and understanding children with the dual diagnosis of Attention-deficit/hyperactivity disorder (ADHD) and autism spectrum disorder (ASD). These two diagnoses can be complex and can present similar symptoms and may be hard for counselors to identify the actual issue. Focusing on specific symptoms such as lack of social and communication skills and how utilizing art therapy interventions can potentially help reduce those symptoms will be the main focus of this thesis. The population focus is on children in preschool and grade-schooler settings aged 4 to 12. Then I apply and combine research on children with ADHD with research on art therapy with children with ASD, concluding with what is beyond the scope of this paper and current limitations such as lack of research about children of color, different races, and cultures. Additional recommendations offered are what should always be included in research with this population and possible art therapy interventions that could be integrated into schools' curriculum. This thesis demonstrates that art therapy can be used as an intervention tool for treatment with this population to promote positive social skill and increase academic achievement and expression of emotions.

Keywords: Attention-deficit/hyperactivity disorder (ADHD), Autism spectrum disorder (ASD), Art therapy, Social skills, Communication skills, Black people, People of color, Interventions

Art Therapy for Children with Both ADHD & ASD: How It Can Improve Their Social and Communication Skills: A Literature Review

Introduction

The topic of the capstone thesis is the effectiveness of art therapy with children with attention-deficit/hyperactivity disorder (ADHD) and autism spectrum disorder (ASD). It is about summarizing the behaviors found in children with ADHD and ASD such as difficulties socializing with others, interpreting their peers' feelings or emotions, impulsivity, inability to pay attention/focus, and hyperactivity. It will discuss how art therapy can potentially help reduce the ADHD and ASD symptoms as a dual diagnosis in children. There is literature about art therapy with children with ADHD (Habib & Ali, 2015), and there is literature about art therapy with children with ASD (Schweizer et al., 2020). However, the literature so far indicated that there is not enough research on the use of art therapy with children who have these two co-morbid diagnoses. One reason behind this might be because art therapy is a relatively new profession compared to the traditional methods of treatment (Habib & Ali, 2015). This capstone thesis will discuss findings around treatment and methods for children with the dual diagnosis of ADHD and ASD using art therapy.

Based on the research found, there are many documented treatment approaches and studies that investigated the efficacy of different treatments used to treat children with ADHD. They found that multimodal treatment, behavioral modification, medication, and the combination of latter two were most effective for this population (Habib & Ali, 2015, p. 16). One of the reasons why this thesis topic is important is because art therapy can be used as an intervention tool with this population to promote positive social skills, increase academic achievement, and expression of emotions. Art therapy can also be beneficial to all types of children and it can be most accepted by children with emotional, developmental, and behavioral problems such as the

ones found in ADHD (Habib & Ali, 2015, p. 16). Another reason why this topic is important is because of the positive outcome art therapy has on children with autism spectrum disorder or ASD. Children diagnosed with ASD are distinguished by their limited social and communication skills and repetitive and obsessive behaviors (Schweizer et al., 2020, p.1). According to Schweizer et al. (2020), the main improvement after art therapy treatment was seen in children's flexible and social behavior (p.1). This art therapy program "focused on children's difficulties with their sense of self, emotion regulation, flexibility, and social behavior" (Schweizer et al., 2020, p.1). These are important factors for improvement since children with autism might not have the opportunity to do so in a regular classroom setting. In art therapy, this population will have their experiences during art-making processes and the art product they create which will help reduce or stabilize their problematic behavior and support them in dealing with and accepting these problems.

It is also worthwhile to research this topic since findings show that when a child with ASD has difficulties with perceiving their feelings and experience, the child can explore and develop preferences and new skills during art therapy. It is a great opportunity for these children with ASD to work with art materials that offer them a focus on tactile and sensory motor skills (Schweizer et al., 2020, p.1). Children with ASD need to keep focusing on their sense of self, regularity of their emotions, flexibility, and social skills problems. Also, the art therapist's positive behavior can contribute to improvements with this population. The capstone thesis will also discuss the findings on non-art therapy interventions used with children with ADHD and ASD and other medical facts describing what these two diagnoses are (Sáenz et al.,2020; Doherty et al., 2020).

Doherty et al. (2020) provided medical information relating to ADHD and ASD that contributes to this thesis. It analyzed the longitude of the relationships between ADHD and ASD symptoms in a population at risk boys with fragile X syndrome (FXS). FXS is the most commonly known heritable form of intellectual disability, it is estimated that 1 in 2500 in both males and female but there is no research on how these two disorders are related to each other. In Doherty's study had findings showing what low IQ meant for this population and explained those ASD symptoms in children with fragile x syndrome. The study also "highlighted the longitudinal studies investigating individual differences across atypically developing children are key to understand the emergence of strengths and weakness over time to ultimately identify early potential targets for enrichment and interventions" (Doherty et al., 2020, pp.1-2). This was useful and new information for the writer, and it will help with the research about these two disorders. It also made the writer wonder if art therapy will help reduce any brain abnormalities of the children with ADHD and ASD and help this population cope with their symptoms.

Based on the experience of working with children ages four to 12 with ADHD, behavioral, social, emotional behaviors, and developmental delay, I witness how art therapy interventions and coping skills suggestions have been helping this population and decreased their symptoms. The classroom environment by itself was not a very successful environment for all of the children, especially those with the symptoms mentioned above. This is another contribution to the thesis question of how effective art therapy is with children with the dual diagnosis of ADHD and ASD in a school setting. Before diving into more details and research findings, the next section will discuss what approach was taken to search the literature, what terms were used, and what criteria were used to select the articles reviewed.

There were a couple of methods used in this thesis since the capstone thesis followed the format of option 2: Critical Review of Literature. At first, I used the Lesley University Library database to search for articles that did studies to find out how effective art therapy is with children with ADHD and ASD. Then, this writer narrowed down the search to two symptoms found in these disorders, which were lack of social and communication skills. Doing this helped this writer find more articles that discussed further the art therapy interventions with this population. Then this writer used the following search terms to find more articles: “Art Therapy,” “ADHD,” “Children,” “Art,” “ASD,” “Comorbidity children.” The criteria that were used to select the articles reviewed were that they contained specific information about both diagnoses ADHD and ASD and contained information about art therapy sessions with children with ADHD and ASD. Terminology, accessibility, validity and the lack of research including children of color and cultural considerations were also key components for the selection of articles. In the following section, the Literature Review, I will go into more details of these articles and the creditable information that was found that will be helpful in future research.

Literature Review

This literature review describes the history and overview of ADHD and ASD, how it affects children in a school setting, as well as the practice of possible art therapy interventions that can be used specifically for children with the dual diagnosis of ADHD and ASD. It describes how art therapy could be integrated into the curriculum in special education. Current literature on group art therapy with children with ADHD and parent support and how this group art therapy might be beneficial to be applied in one-one art therapy with children with both ADHD and ASD is included.

Overview of Attention-deficit/hyperactivity disorder (ADHD)

Mental illness is a concern in the United States, with current estimates indicating that 13% to 20% of children experience a mental disorder in a given year (Losinski et al., 2016). The current psychiatric term for children exhibiting extreme problems with inattention, impulsivity, and hyperactivity is attention-deficit/hyperactivity disorder. These children's impulsive behaviors can manifest as social intrusiveness, such as interrupting others, and/or making essential decisions without thinking about long-term consequences (Habib and Ali, 2015). There are epidemiology studies that indicate that about 3% to 10% of children in the United States are diagnosed with ADHD. Boys with the disorder outnumber girls in both clinical and community-based settings. More than half of children diagnosed with ADHD received psychoactive medication, while 12% received special education and 34% received mental health services (DuPaul & Stoner, 2014). According to DuPaul and Stoner (2014) "It typically requires the services of multiple communities and education professionals to achieve positive developmental outcomes" (p. 5). DuPaul and Stoner (2014) revealed that most ADHD research has focused on white males from middle socioeconomic status, also known as SES, backgrounds. In recent years, some investigations have included more diverse samples in terms of sex, ethnicity, and SES. African American children are most likely to exhibit ADHD symptoms based on teacher and parent reports. However, these same children are only two-thirds as likely to be diagnosed and treated for ADHD as white children. There are lower rates of diagnosis among African American children, which may be related to parents having different beliefs about ADHD, greater exposure to socio-environmental risk factors, and lack of access to treatment services (DuPaul & Stoner, 2014). According to Hoogman et al. (2020), individuals that meet ADHD criteria experience difficulties across a broad range of situations at home, school, and

work which leads to a high personal and social burden. Parents of children with ADHD reported significantly greater stress than parents of children without ADHD. They are also confronted with other challenges, as they are at risk to be bullied, have lower self-esteem, and feeling stigmatized. Hoogman et al. (2020) once said “Studies aimed at unraveling the neurobiology of ADHD have shown that ADHD is heritable and have identified the first genome-wide significant risk loci for ADHD” (p. 1).

Based on DuPaul and Stoner (2014), there is no apparent single cause of ADHD. Instead, the ADHD symptoms may result from a variety of casual mechanisms. It could be environmental influences such as family stress and/or poor parental disciplinary practices, but it does not play as large a casual role as neurobiological variables. There appear to be minor differences between the brains of individuals with ADHD and those without. DuPaul and Stoner (2014) also mentioned that “the most widely studied and cost-effective treatment for ADHD is the prescription of psychotropic medications, primary stimulants such as Ritalin (MPH)” (p.27). It is important for there to be a team approach to the treatment of ADHD to have a successful outcome. Sometimes, miscommunication between school and home or school professionals can result in ineffective service delivery for the children.

Experience at the school setting for children with ADHD

The core behavior difficulties of ADHD, such as inattention and hyperactivity, can cause problems for children in a school setting. Children with ADHD often disrupt classroom activities and thus disturb the learning of their classmates. Their performance in the classroom may also be compromised due to the lack of attention to task instructions. Children with ADHD might exhibit impulsivity in different ways including frequent calling out without permission, talking with classmates at inappropriate times, and becoming angry when confronted with frustrating tasks

(DuPaul & Stoner, 2014). The most present classroom issue exhibited by this population is a relatively high level of inattention or off-task behavior. Elementary school students with ADHD exhibited less time on tasks relative to non-ADHD classmates during group instruction and individual work, but not when the class was working together with small group work (DuPaul and Stoner, 2014). There were no significant on-task behavior differences during non-academic subjects such as art and music.

Social difficulties associated with ADHD. Students with ADHD are at risk for significant difficulties in a range of functional areas such as social skills and disturbances in peer relationships. It is very difficult for many children with ADHD to begin and maintain friendships with their classmates. Some studies have found high rates of peer rejection for these children. About 22% of boys and 15% of girls with ADHD can be characterized as having a ‘social disability’. Children with ADHD report that their peers and classmates usually provide less frequent social support compare to their non-ADHD classmates (DuPaul & Stoner, 2014). These disturbed peer relations of children with ADHD are due to inattentive and impulsive behaviors disrupting their social performance. Some of the most common performance deficits connected with ADHD include inappropriate attempts to join ongoing peer group activities, poor conversation, taking on aggressive solutions to interpersonal problems, and being vulnerable to losing temper control when there are relationship conflicts. Although children with ADHD sometimes can articulate the proper social behaviors, there will still be a tendency for them to propose aggressive solutions to their problems. Currently, the most expected outcome is that ADHD symptoms can lead to social performance difficulties for these children, rather than to social skills deficits (DuPaul & Stoner, 2014).

DuPaul and Stoner (2014) also discussed those children with ADHD and aggression who exhibit greater frequencies of antisocial behaviors such as lying, stealing, and fighting; those who are hyperactive but not aggressive are at higher risk for peer rejection than those displaying solely ADHD. In the following section, the thesis will touch base on Autism Spectrum Disorder (ASD), which is another disorder that displays similar symptoms to those found in ADHD. It will also discuss ASD's facts and characteristics found in children with the disorder.

Overview of Autism Spectrum Disorder (ASD)

In 2014, the Centers for Disease Control (CDC) reported that one out of every 68 children in the U.S received an autism spectrum disorder diagnosis. Autism spectrum disorder (ASD), also known as a pervasive developmental disorder, is an early-onset disorder, Autism is a disorder characterized by impaired social communication and a limited range of activities and interests (Chincholkar et al., 2019). Children with autism are more likely to suffer from depression (Epp, 2008). There are delays or abnormal functioning that can happen in early childhood that need to be noted, even if those symptoms are not recognized until their later childhood years (Richard et al., 2015). Richard et al. (2015), revealed that “in recent study research on autism was identified as the third most important population needing attention according to art therapy researchers,” (p.13). Children with ASD may experience social skill difficulties, such as being unable to understand and use nonverbal behaviors, interpreting other people's thoughts and emotions, and developing appropriate peer relationships (D'Amico & Lalonde, 2017).

Children with ASD and their characteristics

Epp (2008), stated the characteristics of ASD can be difficult to identify because the exact mechanism of social interaction skills is not known yet. Social skills deficit is one of the

features of autism spectrum disorders that researchers believe is the defining feature of the individual with ASD (Kozlowski et al., 2011). Epp (2008) also mentioned that some of the qualities include a tendency to withdraw from social contact and increased sensitivity to crowds. They are often stressed by demands for social interaction that they cannot manage. These children can be victimized by children with aggressive tendencies more than other children. Children with ASD live in individual worlds of their own and can be socially disengaged from others. As mentioned in the previous section, children with ASD have more difficulty developing conversation skills, because eye contact, facial expression, and tone of voice in speaking can be restricted for them. Children with ASD are also more likely to suffer from depression. There are many different areas of social skills deficits in children with ASD that have been researched including social behavior in terms of orientation, communication, social contact, and insight problems (Kozlowski et al., 2011). Epp (2008) explained that children with ASD have trouble understanding other peers or adults who have thoughts, ideas, and ways of thinking that are different from theirs, and this group of behavioral actions is called a theory of mind. In other words, children with ASD are not able to connect emotionally through empathy with others. Overall, these children are often described by others as awkward, emotionally flat, socially unaware, self-absorbed, and insensitive to verbal and nonverbal social cues (Epp, 2008). There are children whose symptoms integrate with ADHD, but they are often solely diagnosed with ASD and not both. That is why in clinical practice, it is sometimes difficult to differentiate between those two diagnoses (Sokolova et al, 2017). The next paragraph will include more information about the comorbidity of both ADHD and ASD and how their entanglement of symptoms affects individuals, in this case, children.

Comorbidity symptoms of both ADHD and ASD

According to Antshel and Russo (2019) from Syracuse University, one aspect that is important and clinically relevant to diagnosing comorbidities between disorders is the validity of using diagnostic scales that are best practices for ASD or ADHD. Autism spectrum disorder (ASD) and attention-deficit/hyperactivity disorder (ADHD) are neurodevelopmental disorders that typically onset in childhood. In the previous versions of the Diagnostic and Statistical Manual for Manual for Mental Disorders- 5th edition (DSM-5), the clinician was not able to make an ADHD diagnosis in the context of ASD and it was assumed that symptoms of inattention and/or hyperactivity were secondary to ASD and not due to an additional ADHD diagnosis. In the education setting about 8% of children with ASD and 13% of children with ADHD receives school-based services under the Individuals with Disabilities Education Act or IDEA (Antshel & Russo, 2019). Sokolova et al. (2017) from the Netherlands said even though, ASD and ADHD are regarded as distinct disorders in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), they are often comorbid. There are three distinct pathways between ASD and ADHD: from impulsivity to difficulties with understanding social information; from hyperactivity to repetitive behavior; and lastly, from a pairwise pathway between inattention, and difficulties with understanding social information. Children with ASD experience impairments in interaction, communication, and restricted, stereotyped, and repetitive behavior, whereas ADHD is characterized with symptoms of inattention and hyperactivity, and impulsivity. ADHD symptoms usually appear before age 12, are present across two or more settings and cannot be explained by any other condition (Antshel & Russo, 2019). There is recent research that recognized clinical, genetic, and neuropsychological links extending between ASD and ADHD. Sokolova's et al. (2017) findings suggested the strongest link was between social communication

difficulties, inattention and impulsivity. Sokolova et al. (2017) also mentioned that there are studies that have shown the genetic overlap was strongest between communication difficulties of ASD and ADHD, while repetitive behavior and social difficulties showed moderate genetic overlap. In clinical practice, correlation is often unclear: ADHD impulsivity could be causing the social problems, or repetitive behaviors are mistaken for hyperactivity. Impulsivity has an effect on social clumsiness for this population. Impulsive symptoms may lead the child to miss social cues, because they may interrupt the other child or peer, talk excessively, interrupt others, and not listen to what is being said. (Sokolova et al. (2017)). The following sections will discuss more research on it and how the brain is connected with those symptoms.

According to Epp (2008), there are research studies that show the brain systems that control communications and social skills do not function normally in this population. That is why it is important and necessary to train other parts of their brain to take over these functions. If these children are taught social and communication skills, it can give them the ability and the opportunity to fulfill their need for friendship and companionship. Sokolova et al. (2017) stated that part of the association between ASD and ADHD may be due to their shared attention-related problems. For example, problems in attentional shifting and disengaging impairments. Repetitive behaviors can interfere with children's ability to switch attention from one task to another, which is related to inhibitory control that is associated with impulsivity. Children who are hyperactive and less able to inhibit motor behaviors may engage in various motor behaviors that are classified as stereotypic, for example flapping their arms or hands when they are excited and making odd and fast movements with their fingers or hands.

Antshel and Russo (2019) mentioned that there are researched and effective interventions that are accessible for both ASD and ADHD, depending on the child's age. For

children with ADHD, organizational interventions and parent/teacher training in contingency guidance are recommended. Even though there are evidence-based options, there is little knowledge about what constitutes an effective intervention for individuals with ASD and ADHD. Here is what has been recently published about treating the comorbid condition of ASD and ADHD (Antshel & Russo, 2019). About 86% of children with ASD and ADHD have been prescribed a medication for ADHD symptoms. Even though, stimulants are recommended as front-line pharmacological therapy for ADHD in ASD, most professional practices recommend a combination of medication and psychosocial interventions for managing ADHD in the context of ASD. The British Association for Psychopharmacology recommended social communication interventions for children with ASD, however, social skills training has not proven effective in children with ADHD. It is unclear the extent to which these ASD evidence-based interventions are effective in children with both ASD and ADHD. It is significant for future researchers to consider, “ASD and ADHD to be ‘cousins’ to each other, possibly even siblings. However, we do not believe that ASD and ADHD should be considered twins” (Antshel & Russo, 2019, p.7). It is also important to know and recognize that art therapy can be as effective for interventions and treatment options for individuals with ADHD and ASD. This is discussed in the next section providing brief information about art therapy, its history and ways it has been effective for this population.

Art Therapy

According to American Art Therapy Association, (2017), art therapy is a combination of mental health and human services that helps enrich the lives of individuals, families, and communities through artmaking, creative process, and applying psychological theory and human experience inside the psychotherapeutic relationship. There has recently been an increased used

of art therapy approaches to treat a range of mental illnesses (Losinski & Hughey, 2016). Art therapy is a well written, respected modality accepted by mental health professionals in a multimodal approach to the diagnosis and treatment of a wide variety of psychiatric disorders. It has been an effective modality over a long period of time and with a variety of populations, such as women, men and children, all ages and all educational and socioeconomic levels (Safran, 2002). Habib and Ali (2015) from Pakistan stated art therapy (AT) is a new profession in comparison to the traditional methods of treatment. Art therapy has two places of thought ‘art in therapy’ and ‘art as therapy.’ It is important to make the distinction that art in therapy is part of a licensed therapist’s approach to counseling. In contrast, art as therapy refers to therapeutic effects of creating art without requiring a therapist interpretation or any other involvement (Losinski & Hughey, 2016). Art therapy has been used as an intervention tool with children to promote positive social skills, increased academic achievement, and expression of emotions. AT can be beneficial to all children, and it is most accepted by children with emotional, developmental, and behavioral problems (Habib & Ali, 2015). In this case, this would be children with ADHD that display some of those problems which are discussed further in the next section.

Art therapy with children with ADHD

Habib and Ali (2015) stated that a study conducted by Henley in 1998 mentioned that aggressive or impulsive behaviors related to hyperactivity or social anxiety can be adjusted into socially productive forms of self-regulation through advanced creativity. Ten et al. (2020) stated that creative people have trouble concentrating and paying attention and this trait is associated with the characteristics of people with ADHD. The study concluded that creative individuals have a higher responsiveness to additional stimuli. Some scholars believe that ADHD patients

have better divergent thinking (Ten et al., 2020). The symptoms of impulsivity, inattentively, and poor self-control are associated with creativity, but some of these symptoms are questioned this point. On the other hand, there are studies that have found evidence regarding which medications have lowered fluency and originality in creativity. The Taiwanese study used open-ended assessment and closed-ended assessments. They found that unmedicated children with ADHD have better performance in open-ended creativity assessments than medicated, and unmedicated children with ADHD have lower performance in closed-ended creativity assessments. Many researchers examined the effectiveness of art integration and have noted positive behavior changes in children (Habib & Ali, 2015; Ten et al., 2020). Habib and Ali (2015) mentioned how art therapy is a crucial intervention method for children with ADHD as it can provide the therapist with the status of the child and help keep in track of the development and positive changes through the course of the intervention. Art therapy is an effective treatment method in the reduction of inattention and impulsive behaviors, however, there is limited research with references about art therapy or approaches to art therapy as treatment for this combination of disorders. There is still a need for an extensive amount of research on all aspects of this disorder especially regarding behavioral symptoms and treatment of those symptoms. Habib and Ali (2015) also mentioned a study by Smitheman-Brown and Church (1996), where they investigated the visual measurement of creative growth and behavioral changes due to art therapy. Their findings indicated that the efficacy of the art activity increased attentional abilities, better decision making, growth, completion of the task, and decreased impulsive behaviors. Another research finding by Dalebroux et al. (2008), stated that individuals with ADHD find it difficult to slow down and concentrate on basic activities, but art can engage the mind and emotions more effectively than other forms of therapy. Their mood and thoughts can

be stabilized by various art activities, they can attain their flow in art and daily life and were feeling happy and free from anxiety.

After an ADHD diagnosis, a typical art therapy session could be consist of two sessions per week with a duration of 50 minutes each session. In the first session, the therapist can let the child draw freely to understand the child's mental maturity and artistic developmental level. Then in other sessions, art therapy and behavioral techniques would be used. Throughout the art therapy process, the use of positive reinforcement is a fundamental component; the use of verbal appreciation, clapping, tap, nonverbal gestures, and cues can help encourage the child to continue the art-making process and assist in developing a therapeutic alliance. The art therapist can use interventions that will have an impact by providing modeling and prompting; they also can introduce art materials and mediums such as clay or crayons that can create interest and involvement in the process (Habib & Ali, 2015). Art therapy interventions and techniques can also be used with children with ASD. The following paragraph discusses this further and tools/instruments that were developed to help evaluate the efficacy of art therapy with this population.

Art therapy with children with ASD

Schweizer et al. (2019) from the Netherlands stated children diagnosed with Autism Spectrum Disorders (ASD) are often referred to art therapy (AT), even though there is very little hands-on evidence about this treatment and its results. Epp (2008) stated that AT is one form of therapy for this population that has not been extensively explored. AT is appropriate for children on the autism spectrum because they are visual and concrete thinkers. AT in social skills training could increase the willingness of children to get involved since art is an activity that they find acceptable and because AT offers this population a way to solve problems visually. It helps

children with autism to be less literal and concrete in self-expression, and it is a non-threatening way to deal with rejection. It also replaces misbehaviors since it offers a more acceptable way to discharge aggression. An example of an art activity is to draw a comic strip, which becomes a venue of expression for children with ASD with practical language skills difficulties. AT does not have to just focus on comic strips but can be explored in many forms such as drama and music. Art can help these children who often experience anxiety in social situations to relax and enjoy themselves while they are learning social skills.

Schweizer et al. (2019) developed two instruments to enable treatment evaluation for art therapy with children diagnosed with ASD. The first instrument was Observation in Art Therapy with a child diagnosed ASD or OAT-A, the other was called Evaluation of actions of the Art Therapist during treatment of a child diagnosed with ASD. Observational instruments may improve knowledge about the effects of AT on children diagnosed with ASD. The process of artmaking in the art therapy session is assumed to offer experiences that influence the needs and expressive behaviors of children with developmental disorders in a positive way. In this study the children with ASD are expected to develop more creative skills, coping strategies, and expressions. The collaboration between the child and the therapist offers many opportunities for communication during artmaking process. The following art therapy assessment instruments are commonly used with children, not specifically for children with ASD but could be used: Draw a Person Picking an Apple from a Tree with Formal Elements Art Therapy Scale (FEATS), and Diagnostic Drawing Series (DDS). The Face Stimulus Assessment (FSA) was used in the study mentioned above for psychosocial development, cognitive and perceptual skills, and neurological functioning of children with communication problems such as those found in ASD. Schweizer et al. (2019) mentioned a sense of self that concerns the awareness of children diagnosed with ASD

of their own experiences during art-making such as acting and feeling, and how these relate to the art. A 'sense of self' is part of Stern's theory, which means when an infant begins to develop its 'subjective self', a sense that other people can and will share its feelings (Goleman, 1986), and "the developmental steps that are assumed to represent the process of getting a grip' on experiences related to oneself. This theory is often applied in AT as well as in music therapy and dance therapy with children diagnosed ASD" (Schweizer et al., 2019, p. 3).

A study conducted by Schweizer et al. (2019) discussed that children diagnosed with ASD have difficulties in creating connections between emotions and situations, are easily overwhelmed by impulses, and normally need time to calm down. During the art therapy session, the art therapist encourages the child to develop social behavior by working together in different ways during artmaking. Children with ASD can work together with the therapist in the AT relation by learning new skills, having successful experiences, working task-oriented, and enjoying making art together. One of the art therapy activities that was used during the study was making an object out of wood, which the art therapist would support the children to organize and shape ideas, and also check if the ideas and initiatives are realistic. The observations from the first instrument called Observation in Art Therapy used in the study with a child diagnosed with ASD are the following: child mirroring body language from the art therapist; the child shows enjoyment during artmaking together with the therapist; the child asks for help from the therapist; the child makes eye contact with the art therapist and watches with shared attention to their artwork together with the art therapist. The two instruments OAT-A and EAT-A made possible the evaluation of the relationship in AT by integrating AT practices with concepts based on theoretical assumptions about a sense of self, emotion regulation, flexibility, and social behavior of the child diagnosed with ASD. During this study, a connection was made between

the behavior of a child with ASD, artmaking, and the behavior of the art therapist. The next section details how group art therapy works with children with ASD and children with ADHD, the benefits of it, and how there could be a group art therapy for dual diagnosis of ADHD and ASD.

Group Art Therapy for children & their parent with ADHD & ASD in School Setting

The use of group therapy in school settings is increasing. In a study by Epp (2008) the goals were to improve students' psychosocial functioning and increase understanding of the disorders for students, school staff, and parents (Epp, 2008). With the number of children diagnosed with ASD rising, it is significant to develop intervention programs aimed at improving social skills (Chou et al., 2016). Since children with ADHD/ASD are unique individuals, art therapy can truly be effective with this population, as art therapist's understanding of these disorders offers alternative creative therapeutic gestures that ultimately aid the client's growth and understanding. This is a difficult population to work with and to see change take place will require patience, creativity, energy, and knowledge of the diagnosis and its chronic nature (Safran, 2002). The following research findings were mostly focused on ADHD, but this writer believes it can be used with children who have both ADHD and ASD, therefore that will be the focus when describing the art therapy groups.

According to Safran (2002) art therapy groups are an effective method for the treatment of ADHD for the therapist, the ADHD patients, and their family members. Safran (2002) also said that "Educational social skills art therapy groups for children allow the therapist a more complete picture of the needs and services that are best for each individual" (p.38). This educational social skills art therapy group can also offer the client a new understanding of their real-life strengths and weaknesses by providing an area in which those strengths and weaknesses

can be played out. This type of group work can offer an opportunity to be exposed to strategies to assist them to become better students and friends as they learn how to plan, organize, share ideas, feelings, space, and materials. All of these things will have allowed them to feel more comfortable in school and at home. It will also be important to have a parallel educational art therapy group for parents, since it enhances their ability to parent, as well understand the impact of ADHD on their child, family, and also themselves. Group work is particularly useful with children, even though it can be applied to adolescents and adult groups. These art therapy groups can provide the client a safe environment in which they can learn social skills needed to effectively participate in the world. It can also allow the therapist the chance to assess the unique difference of each client as their uniqueness stands out within group sessions. The children and parents could gain from the group experience a clearer understanding of how the diagnosis of ADHD/ASD is made, the impact on them, and their families, and helpful strategies to relieve ADHD/ASD symptoms and practice strategies to become more socially successful and enhance their self-esteem (Safran, 2002). The following is what an art therapy group of eight weeks would look like and the structure of it, based on Safran's (2002) book called *Art Therapy and AD/HD: Diagnostic and Therapeutic Approaches*.

Safran (2002) mentioned that on the first day in group art therapy, it is essential for the therapist to make the point that having dual diagnosis ADHD/ASD is not an excuse for poor or unacceptable behavior. But it is also important for the therapist to keep in mind this population is consistently inconsistent. The therapist would lay out the groundwork for understanding the issues that this population goes through will not just disappear and that is an ongoing part of their life. This can help children see a realistic set of expectations and make their diagnosis seem far less threatening. The therapist then would lay out what parents and children can expect from the

group work. Then, an evaluation halfway through would be scheduled in which the educational social skills art therapy group reviews the child's progress with parents and determine if the child can put any of the experiences they have been having in a group to use at home and school. The goals of the art therapy groups are to provide an opportunity for the children to meet their peers in a safe, controlled environment where they can have a successful social and educational experience. The social skills training would be to help these children learn more acceptable ways of interacting with their peers, teachers, and family. According to Safran (2002) each of the rest of the following sessions has a separate theme, which revolves around the drawing art activity presented by the therapist (in this case this will be for both diagnoses, not just ADHD):

- **Week Two:** The therapist asks the group to draw their response to the question 'How do you feel about having ADHD/ASD?' This might be the first time that the children will express their feelings in a group setting without being guarded, or highly defensive, but that is not 100% guarantee some might become defensive. Therapist should ask them to take a picture that shows how they really feel about having this dual diagnosis. In the end of all eight sessions, when the children are done with their drawing, therapist should ask 'Let's look at your drawings'. The children might want to see what other group members are drawing and hear what they are thinking about (Safran, 2002).
- **Week Three** (the other six sessions typically last an hour, but this session might be 90 minutes to two hours depending on the ages of children in the group): The therapist will make sure to give breaks especially after the end of the discussion of the first 'I CAN' drawing exercise. In which the group draws things that they can still do despite of their dual diagnoses. The therapist must always review

prior learnings since it is essential for these populations as it helps them internalize the information. Then they will be asked to draw ‘How does ADHD/ASD get in your way? How do you feel about taking medication?’. Here the children will have the chance to see what ADHD/ASD is like and begin to discuss how it affects them (Safran, 2002).

- **Week Four:** This session is often an important session for this population because it helps them understand the reasons why they feel like the school is a place that makes them feel unhappy. They will be asked to draw ‘How does ADHD/ASD symptoms impacts you at school?’ One of the goals of this session and group, in general, is to help them sustain attention and focus on the important aspects of learning in the classroom. This session will talk about the pressure they feel from their lack of success in school, and strategies for improving school life for them (Safran, 2002).
- **Week Five** (this would be a longer session as well, 90 minutes): The group will be asked to draw ‘How does ADHD/ASD symptoms impacts you at home? How does ADHD/ASD impact you while making and keeping friends?’ The goal of this session is to help these children understand how their symptoms and disorders affect their family, as well as give them some strategies to improve their family relations (Safran, 2002).
- **Week Six:** This session is about teaching strategies to deal with ADHD/ASD. such as ‘Stop and Think and Walk Away.’ For example, the child would not respond to any stimulus until they stopped, taken a pause count to 10, and taken adequate time to think about the consequences of responding. The group will

practice this through teamwork and role playing using a stop sign and prompts given by the therapist. Then, they will use a creative problem-solving technique by writing the word STRATEGIES vertically on large 18 x 24-inch paper. They will be asked to think and write positive words for each letter and draw a symbol that represents it next to the word. In the end each child will draw an issue they encounter a lot and the other children in the group will give solution ideas (Safran, 2002).

- **Week Seven:** ‘The Garbage Can Drawing.’ In which the therapist invites them to think and draw they would like to throw away regarding their ADHD/ASD even though they cannot do this. This drawing will allow for the expression of every children’s wishes, it will also impact their parents and teachers who can understand how painful having ADHD/ASD is when they see the drawings. Many of the drawings were most likely not be realistic but verbalizing their desires could be a very positive experience for them. By sharing their drawings, the group will have the chance to lament together in a playful way and explore and support strengths within one another (Safran, 2002).
- **Week Eight:** According to Safran (2002), by this week, some remarkable changes have taken place in the children’s lives. This session is a review of what has gone through over the seven previous weeks and review their drawings as well. The therapist will initiate the discussion about the future and do the ‘The Bridge Drawing.’ In which is about crossing over a bridge to a new place, a new experience, and a new life. Therapist will explain that this is an opportunity to leave things they do not need or want in their life. They will leave it on one side

of the bridge before they cross. They may cross over the bridge but take only the ideas and experiences that have value. They will draw a bridge to their future.

This art therapy group helps answer the thesis question about how art therapy can improve social and communication skills in children diagnosed with both ADHD and ASD by showing positive outcomes and results after using art therapy methods. For example, in this group, one client began with an attitude saying he is not happy and hates being there, and he will continue to be disruptive, in the end, through the group process, he began to tone himself down and improved his behavior and even participated all the way (Safran, 2002). Even though these were only eight weeks, this writer believe that it could be integrated into an academic year of these children and until they can manage their symptoms inside their classroom. The following are other tools that can be integrated into a school setting to use with children with ADHD and ASD, it was derived from the evaluation of images of self during an art therapy program in the Netherlands for children with autism by Schweizer et al. (2020). If done correctly these tools are a potential key to see how effective art therapy with children with ADHD and ASD is in a school setting. The following section will showcase images of potential art therapy models that can be used with this population and their parents as well.

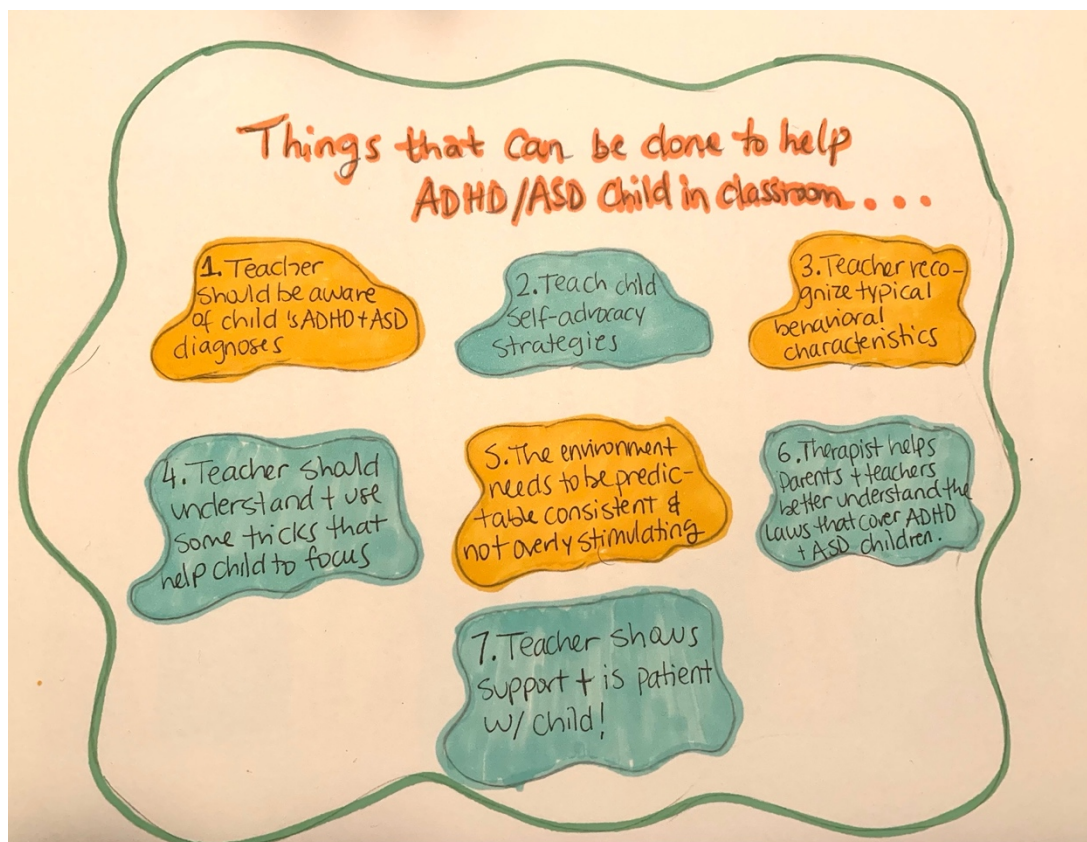
Images of Art Therapy Models for Special Ed. Curriculum, Teachers & Parents

Figure. 1 Art Therapy Model that can be integrated with Special Ed. Curriculum



This model was influenced by Schweizer's et al. (2020). 'Image of Self' Art Therapy program model used for children with ASD, but this writer created this one including children that have both diagnoses of ADHD and ASD. During artmaking, the child may explore and develop preferences and new skills. Using this model, it is expected that the child will be able to build a better self-perception and awareness, which would contribute to improving self-image and self-concept. Then, this would contribute to and help this child improve their social communication skills.

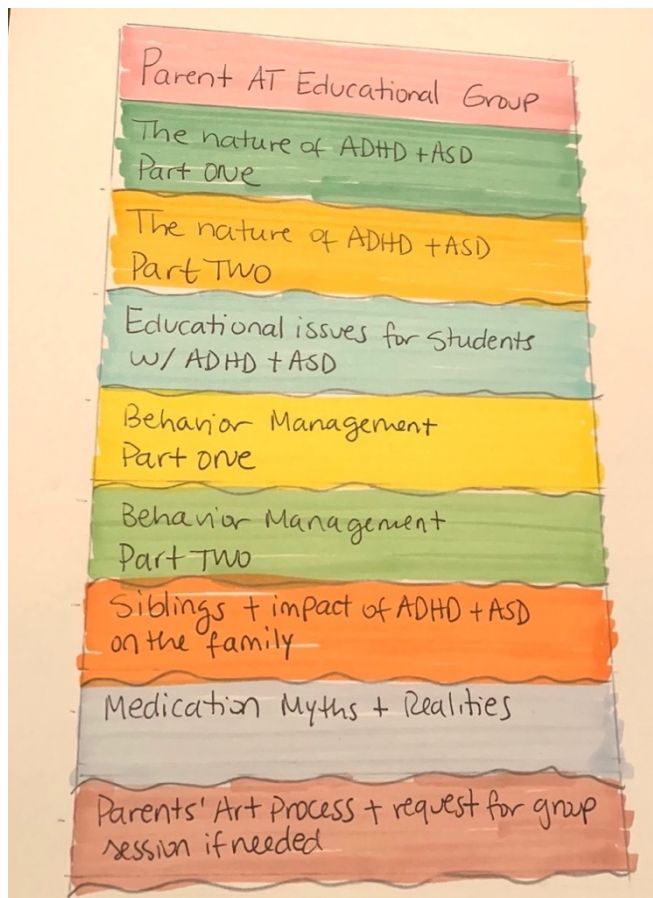
Figure. 2 Classroom Strategies for children with ADHD/ASD



This model was created based on the information collected from Diane Stein Safran's book called *Art Therapy and ADHD: Diagnostic and Therapeutic Approaches* (2002). According to Safran (2002), these strategies were made for children with ADHD, but I believe that they can be integrated for children with ADHD and ASD. One objective for the ADHD population is to

find ways to modify the school environment so that ADHD children can experience academic success without feeling inferior. Even though medication is one important part of the solution for many children, every child with ADHD and ASD needs to learn strategies and tips to be academically and socially successful.

Figure. 3 Parent Art Therapy Educational Group (8 sessions)



This model is also based on information from Diane Stein Safran's book called *Art Therapy and ADHD: Diagnostic and Therapeutic Approaches* (2002). Safran (2002) mentioned that it is important for the parents to be involved and have a role in the therapeutic process. Working with parents is essential if the change is to occur. Art therapists should be helping parents understand that a total cure would not occur right away and to not give up and think it does not or will not work. A strong relationship with parents is also important in facilitating any

behavior modification strategies a therapist may want to introduce at home or school setting. Children diagnosed with both Attention-deficit/hyperactivity disorder (ADHD) and autism spectrum disorder (ASD) encounter difficulties in their life that without interventions, helpful strategies, and family support might have a difficult time managing their symptoms and be successful in life. This capstone thesis described overall the findings from the research articles about these diagnoses with this population. The following is the summary about the overlapping phenomenology of ADHD and ASD in children, how art therapy can be an effective method, the recommendations for educators and school staff, and limitations found in the literature research.

Discussion

According to Antshel and Russo (2019), ADHD and ASD are both increasing in prevalence and commonly co-occur with each other. They are both neurodevelopmental disorders that typically onset in childhood. ADHD is defined by the impaired symptoms of inattention and hyperactivity-impulsivity that occur before age 12. ASD is characterized by continuing and impaired social communication and interaction deficits that occur along with the presence of restricted and repetitive behaviors. The casual links between ADHD and ASD are still unknown, however, both disorders are highly heritable with about 70 to 80% of both phenotypes being accounted for by genetics. Again, one of the main symptoms that focus on this thesis is social skills, which relates to the thesis question: “How art therapy can improve social and communication skills in children diagnosed with both ADHD and ASD?” The social function in these disorders is diagnosed differently. Social difficulties are a requirement for a diagnosis of ASD, but it is not explicitly required for a diagnosis of ADHD, it has several factors for the diagnostic criteria such as: ‘difficulty waiting in line,’ ‘blurts out answers,’ or ‘interrupts others,’ these factors cause the child to have a social impairment. Antshel and Russo (2019)

reported that about 86% of children with ASD and ADHD have been prescribed a medication for ADHD symptoms and that one in four individuals with ASD are treated with medications. The comorbid condition of ADHD and ASD represents a public health problem, children with ASD constitute about 8% and children with ADHD constitute about 13% receiving school-based services under the Individuals with Disabilities Education Act or IDEA (Antshel & Russo, 2019).

Losinski and Hughey (2016) from Kansas State University stated that one approach that is well-suited for schools to address children's mental health issues, is the use of visual arts as a therapeutic agent. Art therapy activities that counter incompetent social skills such as those witnessed in students with ASD and ADHD can be integrated into schools with supplies to organize active participation in counseling and help those students who antisocial refocus on constructive activities. The challenge for schools is how to embrace and integrate visual arts into comprehensive programs for both individual students and groups of students. Art in therapy is unlikely to be used in educational settings since most schools do not have a licensed art therapist and practicing therapy without a license can have legal and ethical issues. The process of creating visual art in conjunction with psychotherapy has evolved into a cohesive unit known broadly as art therapy. The psychological benefits of visual art have been investigated as means to improve children's self-esteem, locus of control, and social loneliness. The following are four recommendations to help educators integrate art therapy within normal school routines. The first one is to work collaboratively with school professionals such as special educators, school counselors, and art educators. The second recommendation is to provide students with 'Art Breaks' throughout the day by using a multimodal model that combines positive psychology, cognitive-behavioral interventions, and art creation. The third recommendation is to permit

students to create visual art from assignment constraints of style or subject matter. The last recommendation is to use research-based instructional strategies.

Even though there were positive outcomes and results from the research, these studies also encounter limitations that are important to keep in mind with this population for future research. In the study done in Quebec, Canada by D'Amico and Lalonde (2017) measuring the effectiveness of art therapy for teaching social skills to children with ASD, they found some evidence that using art therapy could help children with this disorder. However, they had limitations, including: the study had a very small sample size and demographics were mostly from middle-class backgrounds, which limits the generalization of the results. D'Amico and Lalonde (2017) recommended recognizing and implementing effective evidence-based interventions that address the social needs of the children with ASD and that additionally evaluate the effectiveness of art therapy appears to be important in overcoming many of the long-term limitations associated with this disorder. Another limitation encountered in an intervention for children with ASD in New Haven, CT by Richard et al. (2015), used a visual art therapy intervention called Build-a-Face was problems with the administration of the test, and participants found it difficult to remain focused during the length of intervention. The sample size was small and the gender in groups was imbalanced. Future research should consider providing multiple interventions to determine if this would help children with ASD improve their emotional recognition skills. Although these studies focused mostly on children with ASD, it can happen on interventions for children with ADHD and ASD. Another limitation noticed by the writer is that most of these studies were conducted by one singular background in this case white women and men, and the participants were mostly white children, and there was a lack of

mentioning anything about how art therapy could benefit African Americans, Latin or Asian children with either ADHD or ASD or both.

Conclusion

In this thesis, this I have reviewed and made the case for using art therapy with children with both diagnoses Attention-deficit/hyperactivity disorder (ADHD) and autism spectrum disorder (ASD). I have the best interest and intention to look at what helps this population diminish their inattentive/hyperactivity, emotional social, communication issues. Also, to do more research on Stern's theory in which is when infant begins to develop its 'subjective self', a sense that other people can and will share its feelings (Goleman, 1986) and "the developmental steps that are assumed to represent the process of getting a grip' on experiences related to oneself. This theory is often applied in AT as well as in music therapy and dance therapy with children diagnosed ASD" (Schweizer et al., 2019, p. 3). It can be reviewed and reconsidered its integration with art therapy. Based on all research articles read by this writer, art therapy has some effect on this population even for children who were not in medication during the study. Also, much work has taken place in the treatment of ADHD and ASD separately, mostly by medication and cognitive behavioral therapy. I hope that the American Art Therapy Association (AATA) further explores if the ultimate method of treatment for children with ADHD and ASD is just art therapy or if there will be a need to combine it with another method such as cognitive behavioral therapy or medication. I hope that there will be more research into comorbidity of ADHD and ASD, as well as incorporating more rigid and resistant case studies and variety of viewpoints into the work. I also hope that there will be further research exploring creative therapeutic process during art therapy with this population and raise up research of black and

children of color with ADHD and ASD especially those living in low-income communities, which will enrich the art therapy field's depth.

Art therapy being a potential outcome that is seemed to be effective for help decrease ADHD and ASD symptoms, it does appear that these children have the best intentions to take action to improve their social life and create meaningful relationships at home and school. It is important to acknowledge that ADHD and ASD symptoms cannot be cured by art therapy or a miracle would not happen right away. It takes time and patience for parents to see positive changes in their children with those disorders. Additionally, social systems need to consider the harm they can perpetuate through not providing adequate resources and have a positive reaching out to black and children of color. These are things that should not be erased from reality, since it can affect the therapeutic process and outcome for this population.

There is also the use of group art therapy that needs to be considered and integrated on school curriculum. Since it can also help this population improve their social skills, based on my past experiences in working in school settings, there are not enough opportunities and available group art therapy for them. There is a need to at least manage the symptoms of ADHD and ASD temporarily, and also have the ability to connect with those symptoms in order to obtain more insight on how to cope with it further. Today, with the potential of more cases of children with both ADHD and ASD emerging, this art therapy work is important, and there are opportunities where creatively educators and researchers can find better ways to cope and decrease the ADHD and ASD symptoms in a more effective and inclusive way. This can all be possible if there is a safe, creative, therapeutic lens, diversity, and inclusiveness in the space.

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THESIS APPROVAL FORM

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Master of Arts in Clinical Mental Health Counseling: Art Therapy, MA**

Student's Name: Elisandra Lopes

Type of Project: Thesis

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In the judgment of the following signatory this thesis meets the academic standards that have been established for the above degree.

Thesis Advisor: E Kellogg, PhD