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Art Therapy Interventions that Facilitate Non-Verbal Expressions and how Art Therapy Can Improve Communication for Children with Autism

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Art Therapy Interventions that Facilitate Non-Verbal Expressions and how Art Therapy Can Improve Communication for Children with Autism

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Abstract

Autism prevalence in America has increased rapidly over the years and numerous research studies have been conducted to measure the benefits of art therapy practice within this community. Advances in the mental health field have been also made to help offer improved treatment. Art therapy uses the process of engaging in artmaking with various mediums to make products that can be used in both assessment and treatment. The art can serve as a reflection of a person's development, abilities and personalities. In this paper, the literature review will cover: Autism, communication, available treatments, and art therapy. The research methodology employed is qualitative research in the form of a single case study. The case study illustrates art therapy interventions used with a child, to help increase social skills and attention span in classroom activities. This paper discusses how art therapy interventions help facilitate non-verbal expression in children with autism and how art therapy improves communication among this population.

Keywords: Autism, Asperger's Syndrome, Pervasive Developmental Disorder, DSM-IV, Expressive Therapies, Art Therapy

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Art Therapy Interventions that Facilitate Non-Verbal Expressions and how Art Therapy Can Improve Communication for Children with Autism

Introduction

Autism prevalence in children in America has increased by 119.4% since the year 2000. This number grows annually by at least 6-15% (Autism Society, 2016). According to the Centers for Disease Control, Autism is the fastest-growing developmental disability (Christensen et al., 2017). More than 3.5 million Americans live on the autism spectrum, and autism services cost families about $236-262 billion each year (Autism Society, 2016). ASD occurs in all racial, ethnic, and socioeconomic groups (CDC, & Autism Society of America, 2014). It affects 1 in 68 kids, and 1 in 42 boys specifically, as they are 5x more likely than girls to be on the Autism Spectrum. (Autism Speaks Inc., 2012). There is no known detection or cure for autism, so it is important that we as a society stay up to date on knowledge of this neurological disorder.

Literature Review

I. Autism

Autism, or Autism Spectrum Disorder (ASD), refers to a range of conditions characterized by challenges with social skills, repetitive behaviors, speech and nonverbal communication, as well as by unique strengths and differences. The manifestations and symptoms of Autism Spectrum Disorder (ASD) present themselves in different ways. Commonalities within the spectrum include, "atypicalities in eye contact, visual tracking, disengagement of visual attention, orienting to name, imitation, social smiling, reactivity, social interest and affect, and sensory-oriented behaviors. "Individuals with autism also have a prolonged latency to disengage visual attention; a characteristic pattern of early temperament, with marked passivity and decreased activity level at 6 months, followed by extreme distress reactions, a tendency to fixate on particular objects in the environment, and decreased expression of positive affect by 12 months; and delayed expressive and receptive language" (Zwaigenbaum et al., 2004).

Cognitive functioning differs in each individual with ASD. Some may display a wide range of abilities such as super intelligence, while others may have severe intellectual disability (ID). Studies have shown deficits in cognitive functioning are more prevalent in females, as well as individuals with known genetic abnormalities and dysmorphic features (Grzadzinski et al., 2013).

DSM Diagnosis

There are three different types of autism: "Classic" Autistic Disorder, Asperger Syndrome, and Pervasive Developmental Disorder, not otherwise specified (PDD-NOS). Deficits in social communication and nonverbal skills also come into play when on the

spectrum. These “cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others” (Autism Speaks Inc., 2012, p. 4,). There is evidence that autism is a result from abnormal brain development (Castelli et al., 2002). The DSM-IV criterion also includes RRBs (rituals and repetitive behaviors) as a noted symptom in individuals with ASD, as it is considered an unusual sensory response and it is helpful in distinguishing ASD from other disorders. The RRB features unusual communication and stereotyped language (Grzadzinski et al., 2013).

DSM-IV provides 12 explicit criteria for autistic disorder, divided over the domains of social interaction, communication, and stereotyped interests and repetitive behaviors. A child must display at least six criteria for a diagnosis of autistic disorder to be assigned. For a DSM-IV diagnosis of PDD-NOS, criteria are not explicit and are somewhat ambiguous (Bruin et al., 2006, p. 1). The DSM-IV criterion for ASD has changed many times throughout the past two decades. The change that received the most attention from the media was the removal of DSM-IV clinical subtypes, as well as content changes and new symptom structures. This change was due largely to the fact that researchers have found, in many cases, that ASD symptoms are “best represented in a two-domain model of social-communication deficits and restricted and repetitive interests/behaviors, rather than by the DSM-IV triad of symptoms that models communication deficits separate from social impairments” (Grzadzinski et al., 2013).

According to the DSM-IV Diagnostic Criteria for Autism Spectrum Disorder, children with ASD have amplified cerebral volumes compared to children with typically developing (TD) brains and developmentally delayed (DD) brains. Overall,

"measurements of amygdalae and hippocampi in…young children with ASD reveal enlargement for both girls and boys with ASD. For sub-region analyses, structural abnormalities were observed primarily in boys, although this may reflect low statistical power issues because of the small sample (seven girls with ASD) studied" (Sparks et al., 2001, para. 3).

> In the first histopathological studies, Bauman and Kemper (1994) described cellular abnormalities, in particular reduced neuronal cell size and increased cell packing density in the hippocampal complex, subiculum, entorhinal cortex, amygdala, mamillary body, medial septal nucleus and anterior cingulate gyrus. Outside the limbic system, reduced numbers of Purkinje cells were found in the posterior and inferior regions of the cerebellum. In a more recent neuropathological study, abnormalities in the limbic system were not investigated, but pathology was found in various cortical regions including the cerebellum and the brain stem (Bailey *et al*., 1998). This study also documented enlarged brain size in autism. (Castelli et al., 2002, p. 1840)

The DSM diagnosis of Autism Spectrum Disorder has changed over the years and now includes a single diagnosis with variable levels of severity. "This umbrella spectrum contains many different levels of classification ranging from highly functioning verbal children to children with no verbal communication." ASD is unique for each individual who has it, so symptoms vary among person to person. Thus, the DSM-IV criterion for ASD is continually changing to "compensate for each individual's personal symptoms rather than a child being grouped into one of the four categories previously used for diagnosis in the DMV-IV" (Shaffer, 2014, p. 3-4).

It is important to note that although Autism does have specific indicators, the DSM recognizes that the disorder manifests itself differently in each individual. Some persons may exhibit non-ASD symptoms such as "cognitive ability, expressive language ability, onset patterns, and comorbid psychopathology" (Grzadzinski et al., 2013).

Autistic Disorder

Those with Autistic Disorder (AD), also known as "classic" autism, usually have an intellectual disability, language delays, challenges in communication and social settings, and unusual behaviors and interests (CDC, 2014, p. 2; Autism Society of America, 2014, para. 1). They are known to exhibit substantial variation in the presentation of sensory abnormalities to the environment, sensory reactivity, or unusual sensory interests (Grzadzinski et al., 2013). These children tend to have problematic emotional reactions, including "disturbances of emotion, attention, activity, and thought" (Sparks et al., 2001). These behavioral problems occur in children with autism of all ages (Sparks et al., 2001).

Autism is difficult to diagnose because there are no known biological markers and the symptoms are hard to measure, especially among those with cognitive deficiencies (King et al., 2009). Many people with Autism Spectrum Disorder have other comorbid disorders as well. These disorders can cause severe clinical impairment along with illnesses and other everyday difficulties. Problematic behaviors are considered to be a manifestation of comorbid disorders, as it goes much deeper than the "typical" isolated behaviors associated with ASD (Leyfer et al., 2006).

Asperger Syndrome

Those with Asperger Syndrome (AS) usually have milder symptoms of AD and are higher functioning. They may experience challenges in socialization or express strange interests and behaviors, but they usually don't have problems with language or intellectual disability (CDC, 2014, p. 2; Autism Society of America, 2014, para. 2). Unlike other pervasive developmental disorders, those with AS have intelligence and language within the normal range of functioning. General cognitive functioning is preserved, but social skills are impaired, and this is a key feature of AS. The social skill deficits that come with this disorder affect interactions with family, peers, and other adults. Limited social abilities can inhibit their ability to "achieve normal developmental milestones and establish satisfying peer and familial relationships" (Rao et al., 2007).

Social skill deficits in this community include: "lack of orientation towards a social stimulus and inadequate use of eye contact, problems initiating social interactions, difficulty interpreting both verbal and non-verbal social cues, inappropriate emotional response, and lack of empathy to others' distress." These individuals usually have difficulty expressing their own emotions, as well as understanding others' emotions and sharing emotions. These are skills that are vital to developing relationships and social reciprocity. Social skill deficits can manifest themselves as early as preschool, so it becomes easy to distinguish those with AS from their typically developing peers (Rao et al., 2007).

In individuals with Asperger Syndrome, "small neuronal cell size and increased cell packing density were found throughout the amygdala and the entorhinal cortex, while other parts of the limbic system appeared to be normal" (Castelli et al., 2002, p. 1840, para. 3).

Pervasive Developmental Disorder

Pervasive developmental disorder, aka "atypical autism," "meet some of the criteria for AD or Asperger, but not all, [and] may be diagnosed with PDD-NOS. People with PDD-NOS usually have fewer and milder symptoms than those with AD, [and may] cause only social and communication challenges" (CDC, 2014, p. 2; Autism Society of America, 2014, para. 3). A diagnosis of PDD-NOS applies when an individual fails to meet specific criteria for autistic disorder or another explicitly defined pervasive developmental disorder (PDD), "but has similar difficulties in social interaction, reciprocal communication, and/or stereotypical behavior" (Bruin et al., 2006, p. 1).

While all fall under the spectrum, there are some variations in the signs and symptoms of each (CDC, 2014, p. 2; Autism Society of America, 2014, para. 4). ASDs begin before the age of three and lasts throughout the individual's lifetime. Symptoms may not begin to manifest until 24 months or later, and the child may seem to develop normally until about 18 to 24 months of age. Symptoms may improve over time, but there is no known cure for the disorder (CDC, 2014, p. 2; Autism Society of America, 2014, para. 4).

There are some identifying signs of autism in a child as they grow. By 12 months, 14 months and 18 months, there are certain developmental milestones normally developing children should reach. A child with autism at 12 months may not respond to their name. At 14 months, they may not point to objects to show their interest in them. At 18 months, a child with autism may not be interested in playing pretend games. Children with ASD typically

- avoid eye contact and want to be alone;

- have trouble understanding other people's feelings or talking about their own feelings;
- have delayed speech and language skills;
- repeat words or phrases over and over (echolalia);
- have obsessive interests;
- flap their hands, rock their body, or spin in circles;
- and have unusual reactions to the way things sound, smell, taste, look, or feel. (CDC, 2014, p. 2; Autism Society of America, 2014, para. 4)

Everyday Life

Autism Spectrum Disorder interferes with three major functioning components of everyday life: communication, behavior, and social skills. Symptoms of ASD include repetitive movements, flapping arms, difficulty adjusting to un-routine events, and sensitivity to overstimulation. Responses to normal social queues prove to be difficult, and this is considered to be a significant identifying feature of autism. This characteristic results in "disliking of affection, unstable emotions, poor pragmatic skills, and poor eye contact with people," also making the individual with autism prone to stigmatizations from others (Shaffer, 2014). This issue stems from the inability "to translate cognitive potential into real-life skills, defined as adaptive behaviors. These include a person's capacity for conversing with and understanding others, for taking care of one's health, grooming and domestic chores, participating in group and community activities, as well as interacting with others and developing relationships among many other skills necessary to successfully navigate the social world" (Klin et al., 2007, p. 748, para. 3).

In a study done by Kathleen Macintosh and Cheryl Dissanayake, two authors for the *Journal of Autism and Developmental Disorders,* "teachers and parents rated children diagnosed with ASD as significantly more deficient in cooperation, assertion, and self-control than a matched group of their typically developing peers" (Rao et al., 2007). Children on the spectrum are very intelligent, and often times are uncomfortably aware of their lack of social skills (Rao et al., 2007).

Kids with ASD rely greatly on structured routines in their everyday lives as it is vital for their well-being. This not only affects the individual with autism, but the entire family. Any ordinary daily routine can be stressful making things much more complex for all involved (Shaffer, 2014). A study was conducted with parents of children with ASD and they reported greater negative impact of having a child with a disability and poorer well being compared to parents with kids of other developmental disorders (Smith et al., 2009).

II. Communication

Inappropriate/Unhealthy Expressions

The autism spectrum disorder-behavioral problems for children (ASD-BPC) "consists of 18 items pertaining to disruptive, aggressive, self-injurious, and stereotypic behaviors commonly reported as challenging behaviors in children with ASD" (Matson, 2008). The ASD-BPC scale ranges from 0-2: "0 (not a problem or impairment), 1 (mild problem or impairment), or 2 (severe problem or impairment)" (Matson, 2008). This is to help measure problem behaviors to see if further assessment or clinical observations are needed.

Challenging behaviors occur regularly for individuals with ASD. Many deal with repetitive motor and verbal behaviors, self-injuries, delayed speech and language skills, and unusual interests and reactions to the things around them. Repetitive and "stereotyped" behaviors are the most common associated with ASD and are ranked at a higher intensity. It is important to note, though, that these behaviors are primary symptoms of ASD, and each individual may need to be handled and cared for differently as symptoms vary case by case (Matson, 2008).

Verbal/Nonverbal

"Autism spectrum disorders are characterized by deficits in social interaction and communication, as well as the presence of stereotyped behavior and restricted interests" (White et al., 2009). Early language and nonverbal skills are considered to be indicators of ASD. Social disabilities are correlated directly with verbal inability among this community, as social communication and social queues can be hard to adapt to. In a study done by the *Autism Diagnostic Observation Schedule (ADOS),* "Lower levels of

nonverbally mediated intelligence were predictors of greater social disability in…younger but not…older children, although in the latter group the size of the discrepancy between nonverbal and verbal intelligence was an even stronger predictor of social impairment" (Klin et al., 2007, p. 750, para. 5).

Anxiety

High levels of anxiety among the Autism Spectrum community are very common. This has been found to be a huge reason as to why individuals on the spectrum may have compulsive disorders to repetitive behaviors. In a study done by Simon Baron-Cohen, "high-functioning kids with autism were compared with two control groups on measures of anxiety and social worries," compared to other control groups with children with specific language impairments (SLI) and normally developing children. Those with autism were found to be more anxious on both measures. "High anxiety subscale scores for the autism group were separation anxiety and obsessive-compulsive disorder" (Gillott et al., 2001). Children with autism not only demonstrate higher levels of anxiety, but also depression problems as they age. These problems can have a significant impact on their overall development and adaption skills. Psychiatric and verbal/non-verbal skills were also found to be correlated in individuals on the spectrum (Klim et al., 2000).

In individuals with autism, anxiety may worsen during young adulthood and poor stress management becomes a concern. Adolescents become more aware of their differences and social inabilities. Recognition of this problem among the community is not a new finding. It is often stereotyped that all individuals with ASD prefer isolation and low social communication, and while this is true much of the time, it is because of social anxiety. Many do wish they had the ability to connect with others and are aware of

their “social disconnectedness” and wish the situation could be different. As one can imagine, this can be extremely stressful and frustrating, especially among those who are higher functioning on the spectrum. “Social anxiety may contribute to avoidance of social situations, awkward interactions with peers, and promote further isolation from same-age peers” (White et al., 2009). This makes those with ASD prone to bullying and is why many end up in isolation.

III. Treatments

Cognitive Therapy

Many behavioral therapies have been used to treat young children with autism spectrum disorders, including Applied Behavior Analysis (ABA) and Pivotal Response Training (PRT). Older individuals with ASD may better benefit from Cognitive Behavioral Therapy (Anderson, 2012).

Applied Behavior Analysis. Studies have shown that ABA has positive long-term effects for behavior intervention, intellectual functioning, language development, daily living skills, and social functioning in children with autism (Virués-Ortega, 2009). Although there are several models of ABA intervention in autism and developmental disabilities, all bonafide programs should share a common set of core features:

- treatment may begin as early as 3 to 4 years of age,
- intense intervention (20-40 hours a week),
- incidental teaching and practice goals may be operating during most waking hours,
- interventions are individualized for the child targeting their specific needs with a wide range of skills,
- multiple behavior analytic procedures are used to develop adaptive repertoires,
- treatment is delivered in one-to-one format with gradual transition to group activities and natural contexts,
- treatment goals are conducted by normal developmental practices,
- parents are trained to become active co-therapists

(Virués-Ortega, 2009, p. 388, para. 2)

Pivotal Response Training. Pivotal Response Training, or PRT, is "a set of procedures designed to increase motivation and promote generalization" by engaging in a multitude of involved social behaviors. This includes modeling, role-playing, and moralistic instruction, much like play therapy. This has been proven to help children with autism maintain interactions with peers, play and hold conversations, and increase language skills and attention span. Teachers have even been known to report positive changes in classroom and social behaviors (Pierce et al., 1995).

Expressive Therapy

According to the Research Autism corporation, "Creative and expressive therapies are any interventions in which a therapist uses a creative or expressive art form to help a client." This is based on the notion that all people have the ability to respond to innovative activities and that this can lead to positive changes in behavior and emotional regulations. One of the benefits of creative therapies is that there is no need for already present skills to engage in activities. It is a less threatening form of therapy and should be seen as a more relaxed and fun approach for the client. These therapy practices include Art Therapy, Dance and Movement Therapy, Drama Therapy, Music Therapy, and Play Therapy (Research Autism, 2015).

Expressive therapies are known to introduce *action* to traditional psychotherapy, and that action is not limited to one specific "mode" of expression. This is beneficial, because just as certain people learn in different ways, we can also accept the benefits of therapy differently. Expressive therapies allow for different expressive styles; so while one individual may be more visual, another can be more tactile, etc. When a therapist can introduce a multitude of methods, this may better help the client. Some may argue that

the traditional "talk therapy" is best, but the expressive therapies have been known to yield positive results as well (Malchiodi et al., 2007).

Expressive Therapies, a book edited by Cathy A. Malchiodi, talks about the creative art therapies extensively. She explains that while expressive therapies can be considered a specific domain of psychotherapy and counseling, the domain exhibits a set of individual approaches. Here are some practices Malchiodi talks about:

> *Art Therapy* uses art media, images, and the creative process, and respects patient/client responses to the created products as reflections of development, abilities, personality, interests, concerns, and conflicts. It is a therapeutic means of reconciling emotional conflicts, fostering self-awareness, developing social skills, managing behavior, solving problems, reducing anxiety, aiding reality orientation, and increasing self-esteem. (American Art Therapy Association, 2004, p. 2)

Music therapy uses music to effect positive changes in the "psychological, physical, cognitive, or social functioning of people with health/mental or educational problems" (American Music Therapy Association, 2004).

Drama therapy is the methodical and deliberate use of drama exercises and theatre processes to gain therapeutic goals of "symptom relief, emotional and physical integration, and personal growth." It is an active practice that helps clients tell their story and act out solutions to solve problems and provide a release troubles in a healthy outlet understand the meaning of images, strengthen their ability to realize their personal roles in everyday life and increase flexibility for new

roles, and "extend the depth and breadth of inner experience" (National Drama Therapy Association, 2004). (Malchiodi et al., 2007).

Expressive therapies have been falsely labeled as strictly "non-verbal" therapies, and this is not correct. Expressive therapies, such as art therapy, incorporate both verbal and non-verbal communication. Verbal communication of thoughts, feelings, and ideas is a fundamental part of most therapies. However, for a child who has limited language skills, an elderly person who has lost the ability to converse with others because of a stroke or dementia, or a trauma victim who may be unable to put ideas into speech due to crippling fear, "expression through art, music, movement, or play can be ways to convey oneself without words and may be the primary form of communication in therapy" (Malchiodi et al., 2007).

Art Therapy

Art therapy within the Autism Spectrum community is a very common practice used. It is designed to effect change and promote growth in a personal, non-threatening manner, through the use of various art materials in a protected environment. Art therapists should promote healthy outlets and habits for their clients to engage in and encourage the individual with autism to express themselves in appropriate ways (Research Autism, 2015). Art therapy is especially beneficial to this population as it offers a variety of outlets for expression.

> Imagine being chronically over-stimulated, with inadequate communication tools, difficulty focusing, and anxiety. This is the world of a person with autism. Art therapy provides real relief; a visual tool for communication, a window to the imagination, and a motivation to make connections. Art therapists are fluent in

> providing high-quality, visual, sensory-rich opportunities for learning for individuals with Autism Spectrum Disorders. (Martin, 2012, para. 2)

According to Kathy Evans and Janek Dubowski, there are different modes to art therapy. They range from "working developmentally by helping individuals to move from one stage of drawing development to the next, to intervening psychotherapeutically with a focus on the alleviation of psychological problems and distress" (Evans et al., 2001).

A study was conducted through Florida State University (FSU) by researcher and professor, Theresa Van Lith, working with art therapists to find better ways to help children with ASD. She found there wasn't a consensus for one specific approach, but there were a number of theoretical approaches together that worked differently for different people. Although the results varied, the researches came up with a set of guidelines that they found beneficial to this community. Some of the best practices found were: "use the same routine to begin each session, explain instructions in a consistent manner, spark curiosity to teach new skills and be aware of transitions between activities" (Florida State University, 2017).

Although art therapy is known to be a less threatening form of therapy and allows for creative expression, there still needs to be guidelines. Especially with the ASD community, a routine should be set in place. Also, being overly directive or too loose with direction can be harmful. The therapist must keep in mind sensory issues the client may have. Using over-stimulating art materials or forcing communication while the child is being restrictive may yield negative affects (Florida State University, 2017).

Ways Art Therapy can help with Autism. According to Diane Safran, an art and marital/family therapist, for those with Autism and ADHD, "art acts an active medium that uses this population's strong visual learning skills with structured directives as a way to elicit expressed feelings." It helps increase social skills reducing isolation tendencies, and promoting better verbal communication (Oster & Crone, 2004).

Art therapy has been known to help assist those with autism and ADHD in relieving symptoms and enhancing self-esteem. Autism and ADHD impact home and school life and maintaining friendships. According to Safran, "drawings often portray the emotional pain, social isolation, and unhappiness due to symptoms, such as inattention, impulsivity, and hyperactivity." When dealing with this population, final sessions on how to resolve problems should be "structured through drawing personal and interpersonal obstacles and creating images and symbols to illustrate their resolutions." Art therapy should help promote feedback, and even role-playing with the client as suggestions for different problem solving skills for rejection or acceptance. New behaviors should form and be encouraged, and more risks be taken (Oster & Crone, 2004).

Art therapy can address Sensory Processing Disorder (SPD),

> a pervasive problem in autism, which contributes to a great deal of difficult emotions and behaviors, yet is too often overlooked. Seemingly innocuous sensations, such as the texture of carpet, fluorescent lighting, crunchy foods, the hum of a refrigerator, may be irritating, or even excruciating, to people with autism. When thus over-stimulated, people with autism may become agitated, avoidant or simply "shut down" and become impassive in order to escape the unpleasant stimulus. (Lacour, 2017)

"One of the most common goals in art therapy is to increase tolerance for unpleasant stimuli, while channeling self-stimulating behavior into more creative activity" (Lacour, 2017). Because art is naturally enjoyable, a child with autism may be more likely to endure textures and smells they might otherwise avoid if it was not part of a fun art process. Regularly confronting stimuli they would usually prefer to avoid helps to desensitize the children to them, making it more tolerable when they encounter these sensations in everyday life and situations. "A child who learned to deal with paper mache, for instance, might then find that handling slimy hand soap was no longer so unpleasant" (Lacour, 2017).

Sensory fixations are another common feature of autism. Some people may stare in rapt attention at their fingers as they flick them back and forth or endlessly twisting tiny strips of paper. Repetitively engaging in such self-stimulating behaviors (or "stimming") can make people with autism stand out, prevent them from interacting with others, and can distract them from other activities, such as school work or play. On the other hand, these sensations may provide some calming, soothing feelings when the person is agitated. In art therapy, the goal is to channel non-functional or inappropriate stimming into socially acceptable, creative outlets. (Lacour, 2017)

Individual/Group Formats

Many children on the autism spectrum experience a plethora of disabilities that require specific assistance, either in a group setting or individual setting. Debates have been made whether one may be better beneficial over the other, although there is no existing literature examining this theory. McKinzie Craig Sheridan, a Graduate student of the University of Kentucky in 2012, conducted a case study to compare these two

formats. This case study was conducted with a six-year-old girl, Nancy, with moderate autism spectrum disorder to investigate the "relative effectiveness of individual versus group therapy" (Sheridan, 2012).

The effectiveness of individual versus group therapy typically depends on the person. Some may yield better results when being with others who are easy to relate to, while some may work better with individualized one-on-one attention. In this specific case study conducted by Sheridan, "results [indicated] that individual sessions yielded larger improvement with syntax and semantics, while group sessions produced greater progress with pragmatics and social skills, suggesting that a combination of both therapy types may be most beneficial. Social validation of group therapy also signified high parent satisfaction with overall growth during the semester" (Sheridan, 2012).

In this specific case study, results yielded that for this child, group therapy presented to be more beneficial. The group format helped in the child's overall social skills and communication skills. Her imaginary play became more inclusive, and positive changes were occurring at school, claiming the child was able to sit calmly with others and better interact with her peers. When individual sessions were conducted with the child, Sheridan reported "often times Nancy would sing the group welcome song to the clinician or ask about the activities for the next group session during the concluding minutes. It became evident that she was growing to love the social experience as well as her new friends" (Sheridan, 2012).

The overall conclusion of the case study conducted by Sheridan provided confirmation that "group therapy not only greatly impacted [Nancy's] pragmatics, but it

also contributed to improved syntax and semantics as well". This contributes to the theory that,

> Individual therapy sessions [with the Autism Spectrum population] are typically used for direct teaching of language [and interpersonal skills], with an emphasis on syntax and semantics…[while] group therapy appears to be a more appropriate setting for addressing pragmatic skills because it is more feasible to address social language skills with a group of people (Sheridan, 2012).

IV. Research Methodology

Qualitative Research

Qualitative research is defined as research that is primarily exploratory. "It is used to gain an understanding of underlying reasons, opinions, and motivations. It provides insights into the problem or helps to develop ideas or hypotheses for potential quantitative research" (DeFranzo, 2011). Qualitative research seeks patterns, but accommodates and explores differences within data. It is theory generated, inductive, and values personal involvement, which is why it is a crucial part to any case study (Braun, 2013). It encompasses many different methodologies, but ultimately focuses on phenomena that occur or have previously occurred in the real world. Lastly, qualitative research involves capturing and studying the complexity of said phenomena (Leedy et. al, 2010, p. 251).

According to Leedy, to evaluate the qualitative research, there must be purposefulness, explicitness of assumptions and biases, rigor, open-mindedness, completeness, coherence, persuasiveness, consensus, and usefulness.

Single Case Study

According to recent research, a single case study, or single case design "is an evaluation method that can be used to rigorously test the success of an intervention or treatment on a particular case (i.e., a person, school, community) and to also provide evidence about the general effectiveness of an intervention using a relatively small sample size" (Ryan et al., 2012). Generally, single case studies use graphic investigation of data to methodically compare individuals' target behaviors before they receive an intervention. Sometimes the individuals change only after the mediation is initiated, and

this suggests that the intervention was responsible for the behavior change (Ryan et al., 2012).

Case studies are beneficial for learning more about a little known situation or diagnosis. It is also helpful for investigating how an individual or program changes over the years due to conditions or interventions. It is most useful for "generating preliminary support for one or more hypotheses regarding the phenomenon being investigated" (Leedy et al., 2010, p. 254). The one downside to a single case study is that we cannot be sure that the findings are the same for all other situations.

Data Collection

Data collection is defined as "a systematic approach to gathering and measuring information from a variety of sources to get a complete and accurate picture of an area of interest" (Rouse, 2016). There are many different methods to data collection. Some include surveys, interviews, and focus groups, which is why a case study is an effective approach to collecting data.

In qualitative research, methodology often involves an iterative process, where the researcher goes between data found, and data analysis, which is sometimes called the constant comparative method (Leedy et al., 2010).

> For example, the researcher might collect some preliminary data in a natural setting; inspect the data for possible patterns; return to the setting to collect additional data that might substantiate, clarify, or contradict those patterns; and conduct a more thorough, detailed analysis of the data. (Leedy et al., 2010, p. 259)

Many qualitative studies are characterized by emergent design. Emergent design is when data is collected early in the investigation of the case study. While doing this, having a

pre-determined plan already set forth is essential. Also, data collection methods "must be consistent with ethical principles." The individuals being studied must know the nature of the study and be willing participants (Leedy et al., 2010, p. 259).

Facility. Kid Esteem Montessori School is a private school for children ages 5-12, aimed at "helping children and families learn social skills, emotional intelligence, anxiety management, ADHD behavior strategies, and Autism Spectrum Disorder integration through fun kid-centered programs and creative arts" (The Kid Esteem School). Most of these children fall on the Autism Spectrum and exhibit difficulties in social and verbal communication, anger management, and hyperactivity. Some are higher functioning, while many others have severe intellectual disabilities.

This school incorporates many different expressive therapies to help the children with their specific needs including art therapy and drama therapy, as well as special services such as occupational, physical, and speech therapy. Most children in the school are on the autism spectrum, while others struggle solely with behavioral issues and no link to autism. Many of these kids have individualized education plans (IEPs), as well as one-to-one aides to help assist in classroom activities.

V. Results: Case Study

General Information

During the summer of 2017, I had the privilege to work with a child, who will be given the pseudonym of BM for this paper, at Kid Esteem Montessori School. BM is an 8-year-old Caucasian boy who lives with his parents and younger brother in Lindenhurst, NY. Both BM and his brother attend Kid Esteem Montessori School. My goal while working with BM was to help improve his concentration skills and reduce anxious behaviors.

Overall, the client seemed to be well cared for and well nourished. BM presented many anxious behaviors while in class and in sessions. He had repetitive motor movements such as flapping his hands or shaking, tensing his body and placing his hands to the side of his head, as well as jumping or running back and forth on his toes. BM's concentration was very limited and he needed help with refocusing and redirection during classroom activities.

IEP

BM was in the third grade. He had a one-to-one aide to help assist him in academic activities and attended services such as resource room and occupational therapy once a week, and speech/language therapy twice a week. While working with BM in his art classes and some individual one-to-one time, BM could not sit still. Even if interested in the presented task, he would get up from time to time to walk around or engage in his repetitive motor behaviors. When fully occupied in an art directive BM enjoys, he took his time and focused on specific colors (usually aquamarine, pink, and purple). BM's attention to detail and color is very interesting. According to Diane Safran, for those with

ADHD, “art acts an active medium that uses this population’s strong visual learning skills with structured directives as a way to elicit expressed feelings” (Oster & Crone, 2004). In doing this, it can help increase his concentration.

BM took to working with me very quickly. Most times, he would enjoy sitting on my lap or very close next to me with my face beside his. He would wrap his arms around my body many times throughout our sessions and stay in a lingering hug.

Family History, Interpersonal Relations

BM had a very close relationship with his father. He spoke about him many times in our sessions together. BM loved playing with Dad and stated that he wished he worked at home so they could spend more time together. In school, BM preferred to play in isolation. During lunch, he rarely interacted or talked with peers. BM told me at home, he doesn’t enjoy playing with his younger brother because “he plays games wrong,” and doesn’t listen to BM’s directions. I noticed BM enjoyed talking with adults more than with kids his age.

This tendency toward social isolation could be related to his need for closeness when working with me. It has been shown that art therapy helps those with autism increase their social skills (Oster & Crone, 2004), and that was one of my goals while working with BM.

Current Functioning

BM is a very bright child. He uses his language for a variety of communicative functions, such as commenting, responding, asking permission, acknowledging, and clarifying when communication breakdowns occur. He is interested in talking and learning about a variety of topics, shares information in group discussions, as well as

sharing personal experiences. BM speaks in full sentences, but has difficulty formulating longer, more complex thoughts in connected speech, resulting in hesitations, repetitions of words/phrases, and grammatical errors.

BM is able to initiate and maintain conversational topics appropriately for several speak-listener turns with moderate assistance during structured activities. He requires prompting to use appropriate non-verbal communication behaviors, such as facing forward, eye contact, and remaining close to the peer he is talking with. His ability to follow oral directions is inconsistent, and he needs help with refocusing and redirection during classroom activities.

Goals of Art Therapy Interventions

My goal while working with BM was to help him increase attention during class and reduce anxious activities. This will better his classroom and academic experience as he continues through school, and will help both him and I better understand how his diagnosis impacts his everyday functioning and interactions. Art therapy has been known to help assist those with autism and ADHD in relieving symptoms and enhancing self-esteem. Autism and ADHD impact home and school life and maintaining friendships (Oster & Crone, 2004). This definitely plays into BM's social isolation. According to Safran, "drawings often portray the emotional pain, social isolation, and unhappiness due to symptoms, such as inattention, impulsivity, and hyperactivity." When dealing with this population, final sessions on how to resolve problems should be "structured through drawing personal and interpersonal obstacles and creating images and symbols to illustrate their resolutions" (Oster & Crone, 2004). I wanted to promote concentration in our art making tasks, as well as show BM how to work/play with others by working and

playing with me. Safran says, “through feedback and role-playing suggestions of problem solving for acceptance or rejection, new behaviors should be formed, and more risks be taken between sessions” (Oster & Crone, 2004). I wanted to see BM honing his anxious tendencies into his art and walk through them while improving communication, as well as developing healthier behaviors as new coping mechanisms.

Other goals while working with BM included providing a safe expressive outlet, expanding emotional vocabulary (BM hardly expressed emotions outside of happiness, excitement, or boredom), supporting and increasing attention span, strengthening self-esteem, and developing expression of mood.

In my four months of working at Kid Esteem with BM, I was able to conduct individual sessions with BM, as well as work with him during group activities. It allowed me to see how he functions and cooperates with others and on his own.

Session 1: HTP

For this first session, I wanted to get a better grasp of BM’s personal life. The HTP is a great tool to use with clients because “the three objects were chosen due to their common familiarity to very young children, their acceptance by people of all ages, and their ability to stimulate an enhanced fund of free associations.” Drawings of these objects have been known to be helpful as a screening device for detecting maladjustment, and an evaluative aid for kids beginning school (Oster & Crone, 2004).

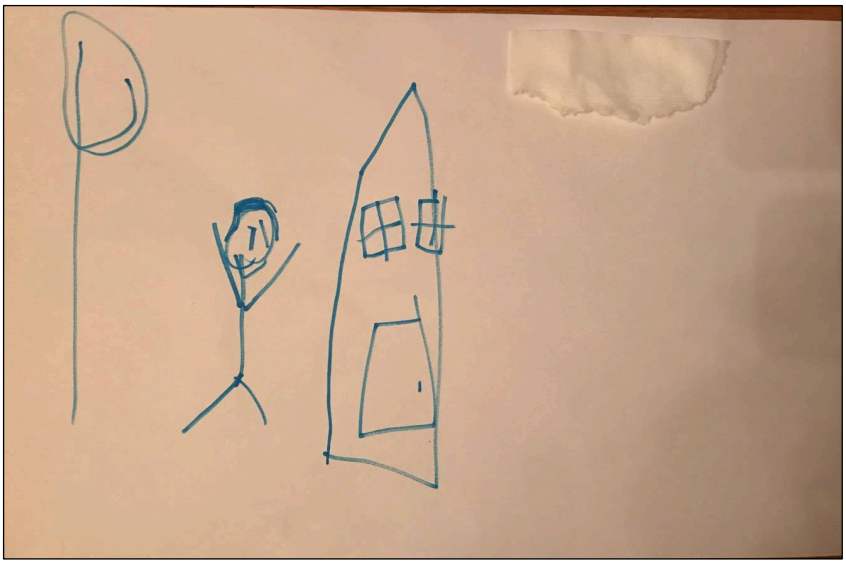

Figure 1: Me and my House

Results

BM was not very interested in this directive and completed the drawing within 5 minutes. It lacks detail and consists of basic, messy lines. BM was very adamant on using just one of his favorite colors, blue, for the entire picture. While drawing, BM was disconnected, stopping after creating each item and tensing his body, raising his hands to his head. He kept leaving his seat to walk around the room.

Analysis/Graphomotor factors

- Sequence: BM worked from right-to-left, drawing his house first, himself as a stick figure, and then the tree. This process of moving opposite on the page can possibly indicate disorganized or scattered thinking (Oster & Crone, 2004). When having discussions with others, BM does have a tendency to jump from one subject to another very quickly, and are most times completely unrelated. This relates to the way a brain affected by autism works. It is less flexible than other brains. When a child with autism is fixated on something

he enjoys, the brain has a hard time allowing new information to come in. This can result in a switch of topics easily if something else enjoyable comes up ("Why Do Kids with Autism Do That?", 2017).

- The lack of details in the drawing can indicate withdrawn tendencies, feelings of emptiness or depression (Oster & Crone, 2004). As I've been working with BM, I do not see any signs of depression.
- Placement/Orientation: The picture is oriented to the left of the page and is hovering above the ground line. Orientation to the left of the page can indicate a link to the past, and hovering over the ground line can mean the client has a higher degree of fantasy thinking or is less reality-based (Oster & Crane, 2004). BM does tend to lack a sense of reality, at times forgetting the settings he's in. He has a great connection to cartoons and loves talking about them. It is, although, important to take into consideration that BM is only 8, and most children do have a higher degree of fantasy thinking.

Session 2: Free Draw

In my next directive, I asked BM to do a free drawing to see what some of his likes and dislikes are. BM was provided with a big sheet of paper and an array of markers and crayons to use. I again wanted to do a drawing since drawings "act as an active medium that uses [the ADHD] population's strong visual learning skills" (Oster & Crone, 2004). BM's favorite TV show and cartoon character is "Bunsen is a Beast." This eventually became a reoccurring theme in much of BM's artwork. Many times, he would relay whatever he was currently making to represent Bunsen, or he would end up talking about him during the session. BM has a strong connection with this imaginary television

character, and he later explained to me during the directive how and why he relates to Bunsen.

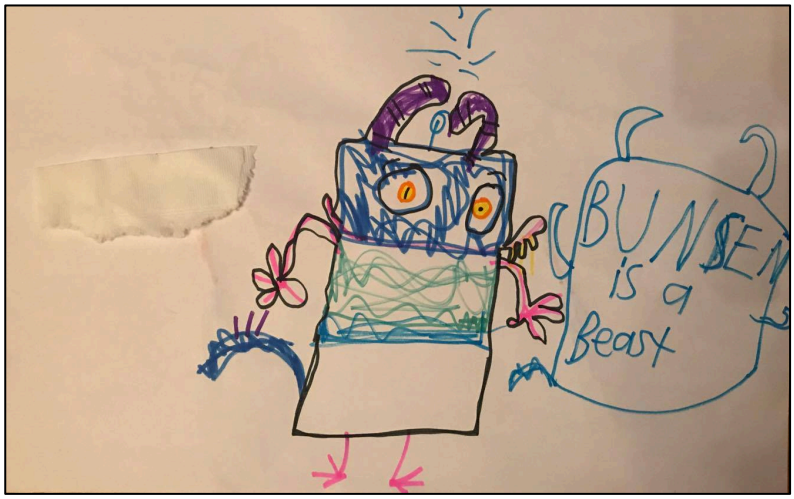

Figure 2. Bunsen

Results

BM was very invested in this drawing, taking about 20 minutes to complete. He kept total concentration in his process, focusing on details, making sure he had all the correct colors to create his beast (this plays into BM's strong visual skills). Being very engaged in this project, BM's repetitive motor behaviors were to a minimum, and he didn't leave his seat to roam around the room, showing me he was *much calmer.* It was during this drawing I got to learn a little about BM's family dynamic at home. BM told me he does not enjoy playing with his younger brother and prefers playing alone, which has been stated earlier.

BM expressed how Bunsen looked "exactly like him!" BM explained to me the premise of the TV show "Bunsen is a Beast." He explained that Bunsen is a monster who tries to fit in the human world, but once given a specific food, turns into a monstrous

beast who tries to eat his friends. BM said he's like Bunsen when he gets angry and that sometimes he "runs around wild" too. But most of the time, BM is perfectly pleasant.

Analysis

This drawing was made on the ground line and oriented in the center of the page. Center placement can be an indication of the present (Oster & Crone, 2004). I feel as though this TV show for BM is a huge focal point in his life, as Bunsen has become a reoccurring character in our sessions. It may be important to note the attention to detail with the use of colors in BM's artwork. He stuck with using dark blue, turquoise, pink, purple, and black for the outline. Following this session, these colors also became a reoccurring theme in many of his artworks. Whether that is because he relates these colors directly to Bunsen, or because he naturally enjoys them on his own, he never really specified except to say, "I like them!"

Graphomotor factors

- Sequence: BM began his drawing from the bottom up. He then colored the middle portion first, the head, and then the horns. After coloring, he added the arms, tail, and legs. Lastly, he did the "Bunsen is a Beast" TV bubble. It struck me as interesting that he started his drawing from the bottom rather than top. This can be an indication of disorganized thinking, much like moving from right to left on the page, which BM has done before.
- Placement/Orientation: As mentioned earlier, this picture is oriented in the center of the page and on the ground line. Although it is centered, it does slightly move more toward the right with "Bunsen is a Beast" logo. This could be an indication of moving from one's present into the future. BM

many times would talk with me about his plans for the weekend with his dad, but would then always return to the present moment to focus on and talk about what he was working on. So this is very prevalent to me in this piece of artwork.

Session 3: Family Drawing

BM expressed that he would like to draw a picture for Dad for Father's Day. Family drawings are a helpful and insightful tool in art therapy. They provide a better understanding on family structure in the client's life. The family drawing tends to "reveal attitudes toward family members and perceptions of family roles." This can be expressed by the size and placement of figures, and by substitutions or exaggerations of certain family members (Oster & Crone, 2004).

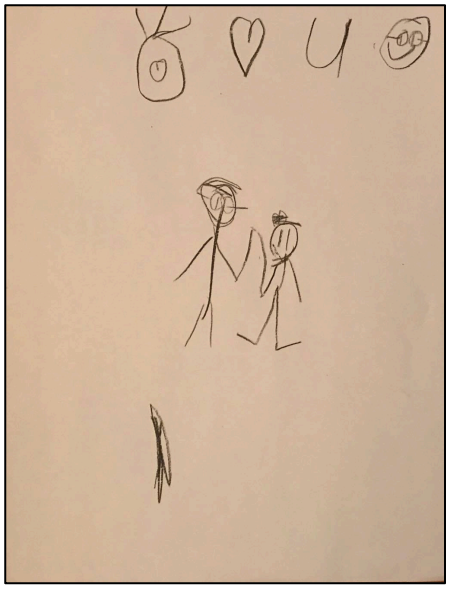

Figure 3. Me and my Dad

In BM's drawing, he only drew himself and his father. He spoke a lot about his father during the activity, but not much about his mother or brother. BM drew himself and his father as stick figures, holding hands and smiling. At the top of the page, he

wrote, “I Love You, Dad,” by drawing an eye, a heart, the letter “u”, and a smiley face as his father. BM expressed that although he prefers playing alone usually, he loves playing with dad and wishes he worked at home so they had more time to play together.

Results

BM, again, was much calmer while creating this picture, with repetitive motor behaviors to a minimum. He did create the drawing quickly, and as soon as he was done he wanted to roam around the room. This did prove to stimulate conversation and BM was able to maintain eye contact with me during several speak-listener turns.

Analysis

The substitution of BM’s mom and brother could indicate a lack of closeness with these family members, and the emphasis on the “I love you, Dad” represents the great importance BM’s dad plays in his life. BM drew the two standing very close together and holding hands. The proximity of the figures suggests a strong relationship between the two (Kerr, 2015).

This drawing is also centered with no ground line, and has little attention to detail. Although we can clearly see this is a pleasant picture, there is a lack of expression in the faces, with just faint smiles drawn. There is nothing represented in the background to suggest where the two may be, and it lacks color. There is also a scribble toward the bottom of the page. Based on previous experience, most times, when children make mistakes in drawings or paintings, they want to cover it up. BM was unbothered by his mistake mark and chose to leave it on the picture. Rather than feelings of apathy toward his artwork, this seems to stem from disinterest in the directive. Although he wanted to make something nice for his father, he wasn’t fully engaged in what he was doing.

Graphomotor factors

- Sequence: This drawing only takes up a small portion of the page, leaving much of the page blank. BM began by drawing his father first and then himself, and added the words at the top of the page last. This was my first time seeing BM move from left to right on the page, or in a "sequential" manner, as opposed to his HTP drawing and his Bunsen drawing where he worked from bottom to top. Moving out of order is usually a sign of scattered thinking, but I believe BM's adoration for his father is very present in his life and something he sure of, maybe making this piece more relevant and concrete to him.
- Placement/orientation: As discussed earlier, this drawing is centered on the page. It is hovering way above the ground line, lacking a base. Once again, hovering over the ground can indicate a degree of fantasy thinking, which BM most certainly does frequently.

Session 4: Self-Portrait

During this session, BM was asked to create a self-portrait using a paper plate, pom-pom balls, and pipe cleaners. The rationale for creating a self-portrait was that "person drawings" can provide the therapist insight as to how the client sees himself, or who he wishes to be. It also stimulates conscious awareness of "bodily image and self-concept, both physically and psychologically" (Oster & Crone, 2004). In this session, the focus was only on the face.

BM really took his time creating this self-portrait, laughing often as he worked. I believe this was a good outlet for BM to view himself in a different way, and it allowed

him to express his creativity. I also wanted to stray away from the drawings we were continually working on, as I wanted to encourage BM to think abstractly. Due to the autism, BM can be very technical and "two-dimensional" in the way in which he approaches things. I knew BM enjoyed play-doh, but even with that, he would handle the media in a 2D way, creating an image flat on the table. This self-portrait was a good way to challenge BM in his traditional, concrete thinking and allow him to explore and work with different materials.

Figure 4. I am Bunsen

Results

BM was very interested in this project and had a lot of fun making it. His concentration remained on the art while he sat in my lap giggling, rarely raising his arms to his head or tensing his body. He began taking the biggest pom-pom balls for his eyes, then making sure to pick two smaller black pom-poms for his pupils. He chose yellow for the eyes because it is one of his favorite colors. BM chose pink pom-pom balls for his

lips since his lips are pink. The three yellow pom-poms to the side below his mouth are his teeth. He again chose yellow because he likes the color.

Analysis

The two purple pipe cleaners on the top of the plate are BM's eyebrows. BM expressed, "he loves that his purple eyebrows look just like Bunsen's ears!"

At the end of the project, I asked BM how this portrait made him feel. He expressed that he was very happy and excited and said, "I love it because it looks *exactly like me!"* This was an effective directive with BM as it really allowed him to engage in more tactile practices, sparking more of his interest.

Graphomotor factors

- Sequence: BM began by choosing all the pom-poms he would need to complete the piece. He then placed the two big yellow pom-pom balls for the eyes, then the pink for the lips. After, he returned to the eyes adding the two black pom-poms for the pupils and when finished said, "Oh! I need to add his teeth," and then put the three yellow pom-poms below the mouth. The last thing he added was the "eyebrows." BM did move in a somewhat sequential manner, but did not focus on finishing one detail at the same time. His approach to this was seeing the portrait as a whole, almost like an outline, and going back to the details later (such as adding the black for the pupils and yellow for the teeth).

Conclusions – Individual Art Therapy Sessions

BM much preferred working in a one-to-one setting rather than in group settings. It was easier to hold his attention and keep him engaged. If the directive was not

something that particularly interested him, BM would tend to work quickly and ask what project would be next. If it was something that really excited him, he would engage himself in the whole process, focusing much of his attention on detail to colors.

During each individual session, BM liked to sit close to me or on my lap with our faces touching. BM is a very affectionate child, but that affection lacks in his artwork and lacks in his play with other classmates. He doesn't typically depict other children or creatures in his drawings (besides the one of him and his father). Everything is made by itself. I learned in my sessions with him that he does enjoy partnership, but not with peers his age, and this was one of the things I continually tried working on with him in our time together.

A reoccurring topic in our sessions together was his father. BM had a very close relationship with his father and always spoke about how he loved to play with him and wished he worked at home so they could spend more time together. It was this need for partnership that I tried to encourage and advance in BM when it came to playing with his peers, but he struggled with this. He was always much more interested in playing with me or with another adult.

Group Protocols

Each week during the summer camp that the school offered, there was a new theme. I was instructed to create protocols based on the theme for the week. Group protocols were geared toward promoting socialization and helping children to work and play better with peers, while providing an outlet for anger management issues. Other goals within the group were to support creative group expression and sharing with others, increase attention span while working with others, support decision-making and coping skills, improve mood, develop empathy, and improve ability to function in a group. Many times during group sessions, children would speak over one another and yell, and even sometimes make fun of others for their ideas or creations. These protocols were centered on having the children communicate better with everyone, making sure all ideas were heard.

Session 5: Bottle-Bot

During this week at the summer camp, the theme was "Mad Scientist." Many of the children at the camp struggled with anger management, along with symptoms of ASD, and many had trouble working or playing together. This art therapy directive was geared toward teaching the students how to work collaboratively on a project by making known their ideas to the group, while also listening to others. The end product resulted in a very tall robot, which the children named, "Bobert the Bot."

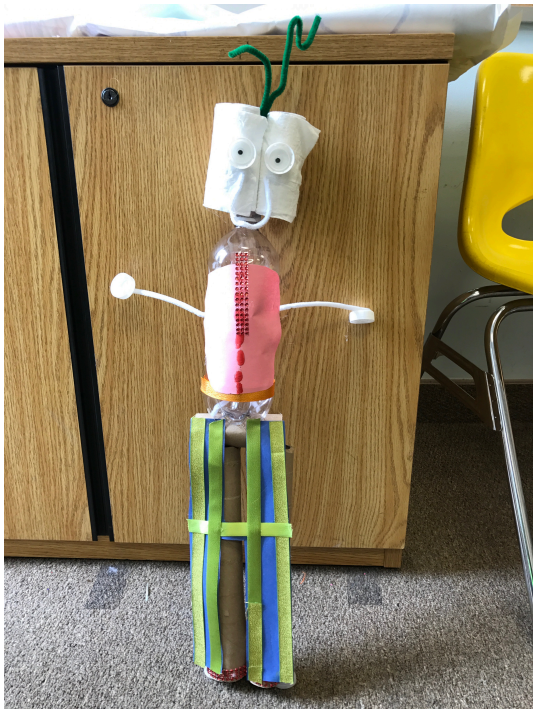

Figure 5. Bobert the Bot

Results

BM very much enjoyed this project, but took to it with isolation. He preferred to sit off on his own and create his own separate robot rather than making one large one. I then directed him to create his own part of the robot, i.e. a leg or arm, etc., which we could then add to the whole. BM liked this idea. He created the torso of the robot using pink construction paper as a vest and colored red circles for buttons. BM then added sparkly red string as a tie. He was very pleased with the outcome.

Analysis

BM's choice in coloring was very specific. He insisted on using pink and red for the robot's shirt. When asked as to why he wanted to use those colors he replied, "because they are very pretty." BM typically wore colors such as blue or green to school, so I found this choice is opposing, or supposedly more "girly" colors to be very

interesting. This could maybe be due to the fact of social norms that are generally placed on children growing up such as, “blue is for boys, and pink is for girls.” I don’t see this as an act of rebellion on his part, but just as a way to show what colors he truly enjoys.

Again, there was specificity in color choices as he had done many times before. The pink could be partially representative of Bunsen, or possibly representative of his mood this day. BM was particularly very happy and upbeat on this day, roaming around the room wanting to play, but he did not want to play with others – just with this writer or by himself. This could have been due to overstimulation, being surrounded by so many children and art options. Although it was exciting and fun, it was maybe too much to handle. The closeness in colors (the similarity between pink and red) may possibly showcase this emotion.

Graphomotor factors

- Sequence: BM started by first folding the paper around the bottle and asking me to lay down the glue, rather than putting the glue on first and sticking the paper down. He then drew on the buttons and lastly added the tie. His approach was a bit more scattered compared to the way the other children made their parts of the robot, first placing glue down and working around it. The more I worked with BM, the more I saw this tendency toward disorganized thinking.

Session 6: Nature Portrait

The weekly theme for Session 6 was nature. For this directive, materials from nature were provided, including leaves, twigs, and flowers,. The children were directed to create portraits using these items. Portraits could represent themselves, or anyone else

that they would like. The children then shared with the group, explaining who they made and why.

Figure 6. Miss Rachel

Results

BM expressed that he would like to create a portrait of me. He was very hesitant to work on it on his own and asked if I could create it. I first encouraged him to create it on his own, but he became very distracted and wanted to run around the room. I then told him he could tell me what items he would like where and exactly how he wanted the portrait to be portrayed.

He chose flowers for my hair, an orange peel for my face, and a long stem of leaves for my body creating a dress. I told him my favorite color was purple, so he chose a purple flower to stick in my hair. Lastly, he asked me if I could draw on the face with a sharpie marker.

Analysis

I think BM's choice to create myself for the portrait project was due to the positive therapeutic rapport and the closeness he felt as a result of the numerous one-on-one sessions together. He grew to be very comfortable and verbal in interactions with me, which could demonstrate his feelings of safety within the environment and trust established. He portrayed me in a very pleasant demeanor, which may signify that he experienced a positive therapeutic relationship and had an overall enjoyable experience with art therapy.

Graphomotor factors

- Sequence: BM's approach to this project was a bit more organized. He first gathered all the materials he would use before creating, and the first thing he said was, "I want an orange peel face!" He then built off that, choosing a long stem with leaves on it because "it looks like a dress!" and, "girls wear dresses." BM asked what we could use for the hair, so I asked him what he thought looked like my curly hair. He pointed to the tiny white buds on a thin stem. Lastly, he chose two thin stems for my arms and said, "We have to make it look like you're about to give me a hug!" We then began gluing the pieces down. BM told me to make sure the glue reached the bottom of the page and asked if I could draw on the face and glue the arms to stretch outward. Once looking at it, BM asked me, "Miss Rachel, what's your favorite color? And do you like flowers?" I told him my favorite color was purple. After saying this, BM took a purple flower and said, "We're going to add this to your hair. You like purple flowers,

right?" I said yes, and we then proceeded to add it to the piece. Once finished, BM explained, "Look! It's you, Miss Rachel!" He was very happy with the outcome.

- Placement/Orientation: Much like BM's drawings, he made this piece centered, although it is set on the ground line. The only drawing I saw of BM's that was placed on the ground line was his Bunsen creation, so this was surprising to see, especially since he directed me to make the glue reach the bottom of the page. I think this is an indication that I was a very present reinforcement in his life at this time.

Session 7: Recyclable Animal Friends

With this directive, I instructed the children to create an animal friend using recyclable objects such as toilet paper rolls and construction paper, following the "Recycle" theme of the week. Children were told they could create any animal or creature that they wanted.

Figure 7. Squid Buddy

Results

BM created what appeared to be a squid-like creature, using pink construction paper to cover the toilet paper roll, brown paper for the legs, and drawing in two circles to place the googley eyes. BM exclaimed, "This is my little pet! This is Squid Buddy!" and was very pleased with the result.

Analysis

We see again the use of the color pink, suggesting BM really likes this color. And his decision to draw two circles to place the googley eyes in rather than just gluing them down by themselves I found to be interesting.

Graphomotor factors

- Sequence: Much like the robot, BM began by first bending the pink paper to create the shape around the toilet paper roll, and then asked me to add the glue to secure it down. It was after doing this that he decided to add the tentacles. He asked if I could help him cut eight even slits into a brown piece of paper. I encouraged him to do it himself, and he was very meticulous in the way in which he cut the paper to make sure it came out exactly how he envisioned it. He was successful in his independent development of materials and the result was smooth, even cuts. We then glued this brown piece to the inside of the roll, so it appeared to be beneath the pink. Lastly, BM drew two circles for the eyes and said, "now we add googley eyes!" Lastly, he drew the mouth. BM was very specific in what he wanted done for this piece, but his approach was a bit freer, not doing so much planning beforehand. He made decisions as he progressed

along with the project. Once finished, he said his squid was "very cute" and wished he could have a real pet that looked exactly like him.

Conclusions – Group Art Therapy Sessions

From all my sessions with BM, I found he did not work well in group settings. He becomes easily distracted and still looks for one-on-one time with me or another adult nearby. He requires specific attention to keep focused on the task being presented. As mentioned earlier, I think his inability to take to group projects and working with others is an over-stimulated environment. Many children on the autism spectrum cannot handle lots of noises or even an array of choices if brought in front of them. This could also be as to why many times BM feels the need to leave his seat and roam around the room on the tips of his toes as a way to somewhat "escape" the environment. For BM's benefit, I think more one-on-one sessions are more beneficial for him.

Overall, group art therapy sessions with this population did prove to be very difficult at times. Due to most of the older children (ages 8-12) struggling with anger management issues, many kids felt the need to shut others' ideas down or were too impatient to wait for certain supplies or listen to their classmates talk and express themselves. As the sessions evolved, group cohesion developed more, and the children became increasingly compliant and understanding. Group protocols with the younger children (ages 3-7) were much more successful. The younger children derived a high level of enjoyment from arts and crafts and were typically engaged both in the project and with one another. At the end of groups when the children would share with one another, it would sometimes raise a problem or one child would not want to wait for the other to finish speaking and everyone would grow loud, but as a whole they all did well

in this type of group setting. Those in the younger group were all typically higher functioning, while many of the children in the older group were lower functioning (symptoms of ASD much greater interfering with socialization/interactions more). Although BM was 8-years-old, he was still placed in the younger group because his level of functioning matched the littler kids better.

VI. Conclusions

General Conclusions

Through experiences interning at Kid Esteem, working with the Autism Spectrum community, and one-on-one with BM, I found art to be very beneficial to this population. Symptoms of ASD range for all those who have it, so art therapy protocols should be tailored to the client's specific needs. For BM, art helped reduce his anxious tendencies, as long as he was interested in the presenting project. It helped improve communication skills, as he was able to verbalize what he created and why.

The results in group art therapy directives with BM were more varied. Due to overstimulation, BM had difficulty concentrating, even if he was interested in the directive. He required one-on-one attention, which was provided to him either by myself, or his aide. BM was always encouraged to engage with his peers, which proved to be difficult at times. However, he displayed improved communication when it came to sharing in the groups. He was able to verbalize how he contributed, as well as listen to others. Sometimes when sharing, he would look directly at me as if speaking to only me, but as time went on, he would engage eye contact throughout the group with his other peers, even if only for a short amount of time. This later translated into our individual sessions as well, maintaining good eye contact. BM greatly struggled with eye contact in the beginning, so this was a vast improvement for him.

Limitations of the Study

Although this research provided the opportunity to work in a school setting and with other students, this case study was centered around one individual and his specific

needs. I did not get to work one-on-one with other children on the spectrum to see how art therapy may be beneficial for them on a deeper level other than in group sessions.

It is very important to note that Autism Spectrum Disorder manifests itself differently in everyone who has it. Symptoms are not always the same across the board. Techniques and protocols that worked with BM may not work with another child; and what works well for another child may not be beneficial for BM. I noticed frequently throughout my internship that much of what BM enjoyed did not meet the other children's satisfaction needs. BM was higher on the spectrum, so when working with him, I had to create protocols that were less developmentally challenging, whereas some others could handle more involved activities. This is just one example of how ASD is different for all those who have it.

Many children with ASD have sensory issues and problems with overstimulation. Because of this, certain mediums may not work well with this population. Directives should be tailored to meet the client's special needs. Many of the children at this facility would sometimes become overwhelmed if there were too many craft choices available, while others appreciated the array of options and colors.

This study was also conducted with a child in elementary school. Results may yield differently for an individual with autism in middle school or high school, or an adult with autism. Different protocols would have to take place as well, as these directives were geared toward children.

Recommendations for Future Research

For future research, this study can be conducted with several individuals with autism to see how the art therapy correlates with the population. As mentioned earlier,

this case study focused on one specific client and his individual needs. It could also be conducted amongst a greater age range, moving into teenage-hood to see how development changes as a person with autism grows.

Another suggestion would be to work with this population outside of a school setting. All protocols were conducted either in the classroom or art room. It would be interesting to see how this could differ in a private practice or even home setting. Art therapy interventions within this population can also differ greatly in a hospital setting or a disabled living facility. Those under restricted confinements may not respond as well to strict guidelines, which would call for more free art expression. It is important to let the client feel as though they are still in control while therapeutically guiding them. An effective protocol for individual with these needs could be wall art, hanging a large piece of paper or canvas on a wall and allowing the children to splatter paint or color or draw on a large surface. Directives and media will vary depending on population, setting, and individual needs.

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APPENDICES

Appendix A – Consent Form

LIU

720 Northern Boulevard
Brookville, N.Y. 11548-1300

Clinical Art Therapy Program
Artistic Release Form

Date 06/05/17

Client Name Caiden Cohen

Consent and permission is hereby granted to Rachel (Art Therapy Intern),
at Kid Esteem (Name of Internship Site), in order to facilitate the educational needs of the students, artwork is required to be brought to the class during the semester.

Artwork may also be used for portfolio and thesis development. Access to client's work is only for educational and professional purpose. If applicable, the students will be granted authorization to take photography of client's artwork. This consent states that the use of client names will be strictly prohibited.

Signature of Client [signature]

Signature of Intern Rachel Pilliere

Site Supervisor Approval R. Lee R Chasen RDT, LCAT

Appendix B

Table 2. Severity levels for autism spectrum disorder

Severity level	**Social communication**	**Restricted, repetitive behaviors**
Level 3 "Requiring very substantial support"	Severe deficits in verbal and nonverbal social communication skills cause severe impairments in functioning, very limited initiation of social interactions, and minimal response to social overtures from others. For example, a person with few words of intelligible speech who rarely initiates interaction and, when he or she does, makes unusual approaches to meet needs only and responds to only very direct social approaches.	Inflexibility of behavior, extreme difficulty coping with change, or other restricted/repetitive behaviors markedly interfere with functioning in all spheres. Great distress/difficulty changing focus or action.
Level 2 "Requiring substantial support"	Marked deficits in verbal and nonverbal social communication skills; social impairments apparent even with supports in place; limited initiation of social interactions; and reduced or abnormal responses to social overtures from others. For example, a person who speaks simple sentences, whose interaction is limited to narrow special interests, and how has markedly odd nonverbal communication.	Inflexibility of behavior, difficulty coping with change, or other restricted/repetitive behaviors appear frequently enough to be obvious to the casual observer and interfere with functioning in a variety of contexts. Distress and/or difficulty changing focus or action.

Level 1 "Requiring support"	Without supports in place, deficits in social communication cause noticeable impairments. Difficulty initiating social interactions, and clear examples of atypical or unsuccessful response to social overtures of others. May appear to have decreased interest in social interactions. For example, a person who is able to speak in full sentences and engages in communication but whose to- and-fro conversation with others fand whose attempts to make friends are odd and typically unsuccessful.	Inflexibility of behavior causes significant interference with functioning in one or more contexts. Difficulty switching between activities. Problems of organization and planning hamper independence.

(Autism Speaks Inc., 2012).