

CHAPTER 1

INTRODUCTION

Autism Spectrum Disorder (ASD) had a growth rate of 1,148% from 2005 to 2006, making it the fastest-growing developmental disability that year (Autism Society, 2006). The prevalence rate for ASD is estimated at one in every 100 births (Centers for Disease Control and Prevention, 2009), and growing. As ASD impacts increasing numbers of individuals and their families, the Centers for Disease Control has recognized this spectrum of disorders as an urgent public health concern. Such high prevalence and growth rate warrant an intense and significant national response.

The annual cost of treating ASD in the United States is 60 billion dollars; this figure is estimated to increase to between 200 and 400 billion dollars in the next 10 years (Autism Society, 2006). These high costs also reflect a need for early diagnosis and intervention. With early diagnosis and intervention, it is estimated that the cost of lifelong care could be reduced by two-thirds (Autism Society).

The key characteristics of ASD are disruptions in social interaction and communication (American Psychiatric Association, 2000). An effective treatment for ASD is art therapy (Malchiodi, 2007). Art therapy offers an outlet for both areas of disruption, as it offers individuals with ASD an opportunity for therapeutic process and expression. Art therapy gives individuals the freedom to disclose what they choose, which could serve useful with pre-verbal or non-verbal children diagnosed with ASD (Malchiodi, 2007). As a useful intervention across ages, art therapy could be implemented with very young children upon initial diagnosed with ASD. Art therapy as an early intervention could decrease the cost of lifelong care.

I previously worked with an adolescent diagnosed with ASD as her Supported Community Living and Respite worker (personal experience, 2007). The adolescent could not relate her emotions with environmental stimuli. She would come home from school noticeably unhappy, but would not be able to specifically identify verbally why. Upon examination of her drawing diary, I could see the cause of her unhappiness; other kids at school were making fun of her. This child's verbal communication, as with all people diagnosed with ASD, had a disruption. The disruption that this child experienced prevented her from making the connection between her sadness and the events that occurred at school. These experiences led to the creation of this study.

The purpose of this research was to study the effects of an art therapy protocol on one male adolescent diagnosed with ASD. I examined the participant's abilities to communicate his emotions, and his ability to relate environmental factors to his emotions using the art making process. I used case study with mixed methods design to document the process.

Review of the Literature

The following literature review touches on pertinent information regarding ASD and art therapy. The literature review includes the definition of Autism Spectrum Disorder (ASD), otherwise known as Pervasive Developmental Disorders, and a brief introduction to art therapy. The review then focuses on the use of art therapy with individuals diagnosed with ASD.

Autism Spectrum Disorder

ASD, also known as Pervasive Developmental Disorders, are defined as "severe and pervasive impairment in several areas of development: reciprocal social interaction skills, communication skills, or the presence of stereotyped behavior, interests, and

activities” (American Psychiatric Association, 2000, p. 69). The Autism spectrum includes Autistic Disorder, Rett’s Disorder, Childhood Disintegrative Disorder, Asperger’s Disorder, and Pervasive Developmental Disorder Not Otherwise Specified (NOS).

Impairment in reciprocal social interaction skills impacts nonverbal behaviors, appropriate peer relationships, the desire to share enjoyment or interests, and social or emotional responses (Mesibov, Adams, & Klinger, 1997). Nonverbal behavior impairment may include excessive or avoidant eye contact, flat or inappropriate affect, and/or an absence of nonverbal gestures (head nodding, shrugging shoulders, etc.). Individuals with ASD often lack appropriate peer relations, and present as not wanting friendships or not knowing how to acquire them. A lack of desire to share interests or things one enjoys is another characteristic of ASD. Individuals may not appropriately respond to others; for example, they may prematurely end social interactions, such as prematurely or abruptly leaving a conversation (Mesibov et al., 1997).

A lack of spoken language, inability to sustain a conversation, stereotyped or repetitive language, and an absence of imaginative play impair the ability to communicate with others (Mesibov et al., 1997). Individuals with ASD may focus excessively on one thing or be preoccupied with a part of something. For example, an individual with ASD may become preoccupied with learning everything about World War II after being introduced to it in history class. Strict adherence to nonfunctional routines and engaging in repetitive motor movements (rocking, head banging, etc.) are additional impairments observed in those with ASD (Mesibov et al., 1997).

Disorders on the Autism Spectrum

There are distinct differences in the diagnostic criteria of each Pervasive Developmental Disorder on the Autism Spectrum (American Psychiatric Association, 2000). For example, a diagnosis of Autistic Disorder requires impairment in social interaction skills, communication skills, and the presence of stereotyped behavior, interests, or activities (American Psychiatric Association, 2000). Autistic Disorder is diagnosed if an individual meets all the diagnostic criteria and does not fit into one of the other disorders on the Autism Spectrum. Asperger's Disorder does not include language impairment. Rett's Disorder has only been diagnosed in females and is characterized with a decrease in head growth, loss of fine motor skills, and poorly coordinated lower body movements (standing, walking, etc.). Childhood Disintegrative Disorder is marked by severe developmental regression following two years of normal development. Diagnosing Pervasive Developmental Disorder NOS occurs when one or more of the impairments are present, but the individual does not meet criteria for a specific Pervasive Developmental Disorder (American Psychiatric Association, 2000).

Art Therapy

Art therapy utilizes art making and the therapeutic process to address emotional and mental needs of diverse populations (Malchiodi, 2007). Art provides an alternative to verbal communication, and gives control to the artist to divulge as much as he or she chooses; this provides opportunities for safe expression as the artist controls how much he or she is comfortable revealing. Art therapy helps relieve stress, provides enjoyment or pleasure, and serves as a form of communication. Art therapy is applicable with all populations, from children to elderly, healthy to disabled, and across all diagnoses and

cultures. Because humans generally think in images, art provides a window for thoughts and feelings to be expressed non-verbally.

Art therapy emphasizes two important elements: process and product (Malchiodi, 2007). When an emphasis is placed on process (art as therapy), the process of making the art is seen as therapeutic. When emphasis is on the product, as in art psychotherapy, the end result or art piece is particularly important, and serves as symbolic communication. An art therapist may integrate the functions of both process and product in varying degrees, sharing importance of the healing process and the communicative product.

Art therapy is a beneficial tool or treatment to utilize across diagnoses, especially ones that include symptoms of withdrawing or disconnections in thoughts or emotions. Art therapy can help children who are withdrawn or have behavior problems move toward self-acceptance. It can also be used to help distinguish between reality and fantasy, and to connect thoughts, emotions, and ideas. Art therapy serves as a form of therapeutic communication (Levick, 1983).

Developmental theory and graphic indicators of development stages.

Anderson (1992) identified graphic indicators in the art work of typically developing children, which represent specific developmental styles. The developmental styles include the Scribble, Preschematic, Schematic, Dawning Realism, Pseudorealism, and Adolescence.

The Scribbling Stage is represented by typically developing children between the ages of 2 to 4 years and includes kinesthetic art making and scribbles. The Preschematic Stage is typical of 4 to 7 year-olds and includes drawings of early developed representational symbols, such as a basic stick figure to represent humans. In the Preschematic Stage children will draw stereotypic images and display concrete thinking.

In this stage images often float in space and colors are not representational. The Schematic Stage is typical of children between the ages of 7 to 9 years and includes more developed symbolic representations and details. Children in this stage will start implementing a baseline on the page and develop their own schema or representation of a person or thing (Anderson, 1992).

Dawning Realism is typical of 9 to 11 year old children. It marks the use of depth and natural colors. The Pseudorealism Stage is represented of typically developing children between the ages of 11 to 13 years. Characteristics include increased detail and exaggeration; this stage marks a growing awareness of the environment and figures. The Adolescence Stage is the final stage identified by Anderson (1992). Characteristics include a sophisticated representation of figures and expressions.

Rosal (1996) used a developmental approach in working with a 4 year-old girl named Naomi. Naomi struggled with anger outbursts and a short attention span; additionally, her mother's chemical dependency resulted in Naomi's placement in foster care. When she started the art therapy process, graphic indicators of her development placed her at the Scribble Stage. Naomi's development had been delayed as she was deprived of sensory experiences and verbal communication.

After four months of weekly art therapy sessions in which Naomi engaged in sensory experiences and was encouraged to verbally communicate, the graphic indicators in her art work placed her at the Preschematic Stage, matching her chronological age. This growth affected her behaviors as well, and she displayed a decrease in behavior problems at preschool and in her foster home. This case study supported using a Developmental Approach to art therapy (Rosal, 1996).

Adaptive Theory. Adaptive art therapy, described by Rosal (1996), supported utilizing art with all children, specifically those with communication, behavioral, or learning difficulties; an adaptive approach engages them more fully in their surroundings and aids them in learning. Rosal emphasized art as a normalizing tool which allows children with disabilities to engage and participate in fun, creative, and expressive experiences. Art experiences are altered to fit the needs of the individual child.

Rosal's (1996) case study of Charles, a 10 year-old boy with Autism, demonstrated the positive effects of adaptive art therapy. Charles was very active, nonverbal, and had a short attention span. He presented with poor boundaries, often touched others inappropriately, and would aggressively grab others. Art directives that highlighted Charles' strengths were utilized to practice appropriate boundaries. Adapted directives engaged Charles; encouraged by his teachers and peers he learned about boundaries, which helped normalize his life.

Art Therapy with Individuals with ASD

Art therapy has a number of specific benefits for individuals with ASD; it provides an alternative form of communication, and facilitates the developmental skill of relating things to each other. Art therapy also provides an alternative, nonverbal language for self-discovery (Evans & Dubowski, 2001). These benefits are further discussed in the following sections.

Image use with individuals with ASD. Cimera (2007) discussed the communication difficulties associated with Autism and the function of alternative forms of effective communication. Sign language, picture language, writing, and computers are such alternatives, and each has a visual component. Cimera introduced the Picture Exchange Communication System (PECS), which uses pictures in communication. One

can download and print thousands of images to use in communication. An individual can point to one image or string together several images to form sentences.

Case studies of art therapy with individuals with ASD. Painting, drawing and puppetry may be used to help children with Autism relate to their environment, express their feelings and emotions, and communicate their experiences. Art provides children with Autism a freedom they may not experience in other therapy forms; it facilitates a connection between internal experiences and the ability to bring those to the surface for acknowledgement and discussion (Tubbs, 2008). Puppetry is an example of a non-threatening and non-judgmental tool to assist with communication. Puppets provide a sense of detachment and security. Tubbs (2008) wrote of an 8 year-old client with Autism who could not converse longer than a few seconds; following the use of puppets in therapy for several months, the child's quality and length of conversation improved considerably.

Kellman (2001) discussed the use of the creative process with a boy named Peter. Peter used imagery to communicate, improve self-awareness, express emotion, and regain control. He depicted images of movie characters to follow movie developments and explore individual characters. This strategy helped him understand what he saw. He used images to discuss movies and characters with others. In addition to the movie drawings, Peter created images of his home and family. These drawings expressed what was important to Peter in his environment; this was evident in what he chose to include and what he excluded. Peter's awareness of his position in the family unit and in the home was also demonstrated, and the drawings allowed him to see himself within his own experiences. Peter expressed emotions in his "chaos drawings," which he often created in a matter of seconds when he was feeling stressed. They depicted a number of

dark, violent things, from storms to monsters. After drawing, Peter regained his composure, as if he discharged his anxieties into the images.

Emery (2004) provided another example of art improving ability to relate to one's world. She used art with a 6 year-old boy with autism and poor language skills. The boy progressed from rolling play dough into a ball, flattening it into a circular shape, then tracing the edge of the circle onto a piece of paper, to drawing a disconnected head and body figure. In time, he connected the head and body with a neck. The boy's behavior at home and school improved during the time he started connecting the head and body in his images. Additionally, his language skills improved and he could carry on a conversation. In later sessions, the boy drew a McDonald's sign with arches, a McDonald's playhouse, and a car with him and his mother inside driving to McDonald's. Once completed, he set the McDonald's images side by side and connected them with a line that ran through each. In doing this, the boy expressed feelings of joy and pleasure at his ability to connect the three images.

Henley (2001) worked with two boys, ages 9 and 12, with Asperger's syndrome; the boys used drawing to express emotions of fear, anxiety, and hurt. The 9 year-old suffered intense anxiety; he feared that the planets would collide and the world would end. The boy expressed his anxiety and fear in an image of planets crashing together and fireballs raining down on him. This catastrophic fantasy and image symbolized the boy's fear of the unpredictability of the world. Through drawing, the boy worked on reality orientation. Tim, the 12 year-old, used catastrophic fantasy and obsessive imagery to communicate emotions. Upon his arrival to a therapeutic summer camp, he suffered a severe anxiety outburst. Tim could not verbally or nonverbally communicate his anxieties and fear until he created a drawing of himself at the site of his outburst, entangled in

vines and mud. He then crumpled and disposed of the paper, metaphorically eliminating his catastrophic fantasy. In later sessions, Tim became obsessed with drawing images of Dr. Seuss' *The Cat in the Hat*. One image depicted an exact replica of the cat in the hat, but the posture of the cat mirrored Tim's attitude towards others; the cat turned his back toward the viewer, and walked away with his nose in the air. Tim altered the image by adding three small flaming arrows through the cat's hand and back. The image expressed invasions and disturbances from the outer world that Tim found painful; these images allowed Tim to make small steps in addressing his issues and anxieties.

Social stories help decrease behaviors that preceded tantrums; they are intended to help with social processing to prevent future behavioral outbursts. Composed of a series of images, social stories demonstrate the correct or appropriate way of doing something. Jon, a 12 year-old boy with Autism, provided an example of the use of social stories (Kuttler, Myles, & Carlson, 1998). Images provided Jon an alternative to verbal and environmental cues that would help him respond more appropriately to his environment. At school, Jon used a picture schedule to complete structured, routine activities, but still had difficulty in social situations. Social stories were created for his work time and lunchtime. These social stories depicted situations, important cues, and appropriate responses to specific situations (work time or lunchtime) using words and images. Jon had access to the stories at all times and would be prompted to read the stories before the specific situation took place. With the use of social stories, Jon showed a decrease in precursors to tantrum behavior. The stories effectively helped Jon react appropriately in specific situations.

Scattone, Tingstrom, and Wilczynski (2006) described a study in which the use of social stories increased appropriate social interactions with peers for three boys with

ASD; two of the boys were 8 years-olds and one was 13 years-old. The boys reviewed the social stories each day for approximately five minutes before an unstructured free-time activity (recess or lunch). The social stories encouraged appropriate peer interactions. One of the 8 year-olds showed no meaningful increase in social interaction. The other 8 year-old showed moderate improvements. The 13 year-old demonstrated the most significant increase in appropriate social interactions. Overall, this study demonstrated that social stories increased appropriate social interactions for some children with ASD (Scattone et al., 2006).

Bernad-Ripoll's (2007) work with a 9 year-old boy diagnosed with Asperger's syndrome provided an example of using social stories and video to improve understanding of emotions. The boy used video recordings to document himself in different situations, so he could watch and practice his behaviors. Some of the situations evoked negative reactions and some evoked positive reactions. The boy reviewed social stories of emotions prior to watching the recordings. After viewing the social stories and the video, the researcher asked the boy to label the emotion he represented in the video, explain why he felt that way, and describe what he should do in that situation. The boy's ability to distinguish between emotions, understand why they occurred, and identify alternative reactions to negative situations improved. Overall, this study demonstrated the usefulness of social stories and video recordings could in increasing emotion recognition, understanding causes of emotions, and finding alternatives for inappropriate responses (Bernad-Ripoll, 2007).

In Martin's (2008) study of children with limited verbal communication, art provided expressive relief and an alternative system of communication. Martin's study, in which she assessed portrait drawings created by children with and without ASD,

provided an additional example of using the art process to increase communication. Each participant had 30 minutes to complete the Portrait Drawing Assessment (PDA). The facilitator documented and scored participants' drawing characteristics and behaviors while the children drew the facilitator's face. During this procedure, the facilitator simultaneously drew the participants' portrait. Looking at the facilitator's face proved more difficult for participants with ASD than for those without ASD. The facilitator scored participants on 13 items related to characteristics of the drawing (i.e., resemblance to facilitator, line quality, size, detail, shading) and 17 items related to behaviors (i.e., mode of communication, self-stimulating behaviors, attention to facilitator's face while drawing, social behaviors). Participants with ASD rated mostly as interested or focused and used conversational verbal skills more, while those without ASD rated as indifferent or casual and used less conversational verbal skills. Participants with ASD attempted to build a relationship and communicate personal information with the facilitator through this assessment, demonstrating the positive effect art can have when treating children with ASD.

Summary

While the review of the literature on art therapy and children and adolescents with ASD revealed a number of benefits in using art with this population, it also revealed the limited research available. A majority of the research represents case studies on the use of social stories with individuals with ASD. Research that clearly examines the art making process could add valuable information to the existing case studies. The purpose of this study was to test an intervention design on one participant's ability to make connections between environmental factors and emotions. In other words, this study aimed to help enable children with ASD to better understand why they feel the way they do and how

that emotion relates to what is going on around them. This research addressed the following question: Can an art therapy protocol, designed for use with children with ASD, increase understanding of emotions and how those emotions relate to one's environment?

CHAPTER 2

METHOD

Introduction

Research about the efficacy of art therapy as treatment for children and adolescents with ASD is limited. Many of the researchers mentioned in the literature review used visual stimuli (such as social stories) in their studies, but did not actively engage clients in the art making process. Unlike the studies in the literature review, this study focused on active art making with an adolescent diagnosed with ASD. The purpose of this study was to assess an intervention protocol designed to assist the participant in understanding his emotions, and to make connections with his emotions and environmental surroundings.

Case study using mixed methods

I collected and assessed data from a number of sources. I collected qualitative and quantitative data through surveys completed by the guardian, the other professional and the participant at the beginning and end of the study. I provided in-person surveys to the participant, guardian, and the other professional. I measured quantitative data with weekly rating scales, and qualitative data with open-ended and multiple-choice questions. I documented qualitative data, such as images created by the participant during sessions, and behaviors and communication abilities observed throughout the sessions. The drawing directives and discussion questions were designed to gather information on the participant's abilities to express emotions and relate to his environment. I provided the participant with an art journal to utilize throughout the study, and encouraged him to draw in it as much as possible. I intended the art journal as a source of additional qualitative data. At the end of the study, I planned to collect the art journal and discuss its

contents with the participant and his guardian; however, he never completed any drawings in his journal. Data would be presented as a case study, as the participant's abilities, needs, and responses varied and cannot be generalized to apply to all male adolescents with ASD. I conducted the art-making process with the participant five times within a five week period, with one session per week.

Participant

I selected a participant from a therapeutic psychosocial group which focused on the acquisition and utilization of appropriate social skills. The participant was a client of the local mental health center. I selected a male, based on the higher prevalence of ASD diagnosis in males. I obtained informed consent from the child and his legal guardian (see Appendix A), and from one other professional (i.e., teacher, therapist, clinician, etc.) in frequent contact with the child (see Appendix B). The child participated voluntarily. To obtain information from the other professional, I utilized a release of information document, signed by the participant, his guardian, and the other professional (see Appendix C). I made initial contact with the participant and his guardian by phone and arranged an introductory meeting.

Instruments

Each of the instruments used were created specifically for this study. The instruments included introduction, weekly, and conclusion surveys, in addition to art directives and discussion questions.

Introduction, weekly, and conclusion surveys. At the beginning of the study, I administered introductory surveys (see Appendices D and E) to the guardian and participant. The guardian and other professional completed weekly surveys (see Appendices F and G). Upon the conclusion of the last session, I administered a

conclusion survey to the child, the guardian, and the other professional (see Appendices H, I, and J). Participants completed the surveys in written form. I provided additional explanations to the child when he requested, to help him complete the surveys. I gave the introductory surveys before the first art session with the child and the conclusion surveys after the last art session with the child. I collected quantitative data through rating scales on the surveys and qualitative data through open-ended and multiple-choice questions on the surveys. The surveys provided comparison measurements of the child's ability to understand and relate emotions to his environment.

Art directives and discussion questions. In each session, I used the same protocol and gave the same five directives for five different drawings. I designed each directive to gather qualitative data about a specific focus. I also designed discussion questions for each art directive to seek out additional qualitative data. I documented all observations and discussions as qualitative data. The first directive instructed the child to “make a drawing of whatever you would like.” Discussion questions included “How are you feeling today? What did you do at school and home? Are you excited about, okay with, or not excited about drawing today?” The first directive aimed to get the child comfortable drawing and to develop a relationship with me. Next, I instructed the child to complete a second directive, “draw how you feel today or right now.” Discussion questions included “What are you feeling right now? How are those emotions affecting you?” The second directive aimed to examine how the child expressed his emotions. I instructed the child to “draw something that you did today or something that happened to you today” for the third directive. Discussion questions included “What was happening during this situation? How did that relate to how you were feeling?” The third directive intended to determine situations or events involving the child that day. The fourth

directive instructed “draw a self-portrait.” Discussion questions included “How did the situation or environment you were in affect your emotions? How do you deal with your emotions?” The goal of the fourth directive aimed to examine how the child related environmental situations with his emotions, and how he expressed those emotions. The fifth directive instructed the child to “draw something that you like or something that you like doing.” Discussion questions included “What is your drawing of? Why do you enjoy that so much?” The goal of the fifth drawing intended to bring down the intensity level of the session and end it on a positive note. I administered these directives and discussion questions in each of the five sessions with the participant.

Procedure

After requesting and obtaining permission from the Emporia State University Institutional Review Board (IRB) (see Appendix K and Appendix L), I set up a meeting with the participant and his guardian. The first meeting, an introductory meeting, took place in the participant’s home. It provided an opportunity for the guardian and the participant to ask questions or voice concerns about the study. This meeting also provided an opportunity to obtain informed consent and to administer the introductory surveys with the guardian and participant. I provided an art journal to the participant and discussed its purpose with the guardian and participant. I encouraged the participant to use his journal as often as possible, to write or discuss with the guardian or other professional his thoughts at the time of entry, and to date his work. The participant and I discussed the art journal briefly at the beginning of each art session. I planned to collect the journal at the end of the study, make copies of the journal pages, and then return the journal to the participant; however, he never drew in his journal. The participant and I agreed to meet once a week, if possible, at the location of his psychosocial group for our

five sessions. The participant's guardian completed weekly surveys, which I would send home with the participant in his backpack to give to her. I provided the other professional the weekly surveys and consent form face-to-face, as she worked at the agreed upon location for the sessions. Additionally, I provided the other professional a copy of the guardian consent form and the release of information form signed by the participant and his guardian.

The procedures of the study include flexibility to make adaptations considering the needs of the child possible. I asked the participant to create five drawings, each on separate 12.7-by-17.8 centimeter pieces of paper. I encouraged verbal discussion throughout the drawing process. I paid close attention to the individual's drawing process, behaviors, and verbal and non-verbal communication throughout the length of the session, and thoroughly documented these observations for future reference using an assessment form (see Appendix M).

After inquiring about the participant's art journal, I began each session by giving him 12.7-by-17.8 centimeter pieces of paper, crayons, colored pencils, markers, and charcoal. I sat next to the participant to observe the process of art making and guide discussion. I handed the participant the first sheet of paper and asked him to make a drawing of whatever he would like. I intended this first drawing as a warm up to get the participant comfortable with drawing and develop a relationship with me. I gave a five minute limit for this drawing. While the participant worked on his drawing, I encouraged him to communicate verbally. I asked questions such as "How are you feeling today? What did you do at school and home? Are you excited about, okay with, or not excited about drawing today?" I documented all responses. I gave a warning when 1 minute of

drawing time remained to prevent behavioral outbursts and give the participant a chance to conclude his drawing.

Once the time limit was up, or if he stated he was done with his drawing and we had discussed it, I handed the participant a second sheet of paper and asked him to draw how he felt “today or right now.” I gave him a five to 10 minute time limit. During this drawing, I asked the participant to discuss his current emotions with questions such as, “What are you feeling right now? How are those emotions affecting you?” I asked the participant to explain what he was drawing.

The third drawing directive instructed the participant to draw something that he did that day or something that happened to him that day. I gave a five to 10 minute time limit for this drawing. I encouraged him to discuss environmental situations. I asked questions such as, “What was happening during this situation? How did that relate to how you were feeling?”

I instructed the participant to draw a self-portrait for the fourth drawing, and I gave a five to 10 minute time limit. As he drew, I discussed with the participant the emotions that he identified, the environmental situation he drew, and how both related to him. I also talked with the participant about how he dealt with his emotions.

The fifth drawing directive required the participant to draw something that he likes or something that he likes doing. I gave a five minute limit for this drawing. This directive intended to decrease the level of intensity of the session and end it on a positive note. I asked the participant about the drawing with questions such as, “What is your drawing of? Why do you enjoy it so much?” Once close to completion, I asked the participant how he currently felt. This question aimed to get a sense of any progress made or changes that occurred throughout the session. I collected and organized all of the

images and notes from the session. I facilitated this process in five sessions, one per week, over five weeks. I kept the art pieces to photocopy the images, and offered to return the original work back to the participant once I had done so.

At the end of the study I held a termination meeting with the participant and his guardian. I administered the conclusion survey with the guardian and the participant. I provided the Other Professional Conclusion Survey to the other professional following the last art session. I planned to collect and discuss the art journals with the participant at the termination meeting, but he never completed any drawings in it. I discussed any final questions or concerns with the participant and his guardian at that time.

Confidentiality

I maintained confidentiality throughout the course of this research and in presenting my findings. I kept identifying information confidential and used pseudonyms when presenting the results of this study. I kept records of observations, surveys, and the artwork in a secure cabinet in my home office. I kept these records until the completion of my research and then shredded all original documents. I documented photocopies of art work and results from observation and surveys maintaining the confidentiality of the participant, his guardian, and the other professional.

Materials

Materials offered for the participant to utilize in this study included colored pencils, ink, crayons, markers, and charcoal. Other materials included paper, pencil sharpeners, and erasers. I used heavyweight paper for the 12.7-by-17.8 centimeter pieces of paper. Additionally, I provided the 50-page art journal.

Data analysis

I scored the surveys' quantitative data using a single subject pre-post design. I analyzed qualitative data based on common themes. I analyzed the data collected from the art process and art journal based on observation and discussion of common themes. Specifically, I examined the participant's emotional expression via facial expression, body language, and verbal cues, such as if he appeared happy, relaxed, upset, stressed, ex cetera, and how this changed during the session and across all sessions. I also observed the participant's ability to communicate, his understanding of his emotions, and why he felt the way he was feeling. I noted improvements or decline in ability to understand emotions, communication, and enjoyment of the art. All qualitative analysis was based on observation or discussion with the child or his guardian. I organized and categorized all qualitative and quantitative data into concepts of emotional expression and the participant's ability to relate emotions to environmental factors.

Budget

This study had a minimal budget. Art materials were the main expense, estimated at \$10-\$15. The art journal cost approximately \$10. Printing of surveys and consent forms had an estimated cost of \$3.

CHAPTER 3

RESULTS

The Participant

This study involved an 8 year-old, Caucasian male participant named “Kyle.” Upon providing the information about my study to his mother, “Caitlyn,” agreed to allow Kyle to participate. Kyle received his first diagnosis and entered into treatment at the age of 4 years-old. Kyle’s DSM Axis I diagnoses, or clinical disorders, included: Attention-Deficit/Hyperactive Disorder Combined Type, Autistic Disorder, and Mood Disorder Not Otherwise Specified. His DSM Axis II diagnosis was Mild Mental Retardation. Kyle’s general medical condition identified him as healthy on his DSM Axis III diagnosis. His DSM Axis IV diagnosis of psychosocial and environmental problems included: past family violence/neglect, problems with his primary support group, poor interpersonal boundaries, and academic conflict with teachers/peers. Kyle’s global assessment of functioning (GAF) rated as 28 at the time of in-take when he entered services at 4 years-old, and rated at 45 at the beginning of the study. Caitlyn reported the basic features of Kyle’s Autism diagnosis as “mild” including impairment in social interactions, impairment in communication, and repetitive or abnormal behaviors.

Kyle qualified as a severely emotionally disturbed (SED) client at the mental health center, and therefore received a number services that included but were not limited to the psychosocial rehabilitation group through which he was contacted, community psychiatric supportive treatment (or case management), and individual and family therapy. In addition to therapy, Kyle took medications that included Seroquel, Abilify, Clonidine, and Focalin. At school Kyle participated in educational programs, mainstream classrooms, and special education settings.

Introductory Meeting

Once established that Kyle would willingly participate in my study, I set up an introductory meeting with Caitlyn and him. At the introductory meeting, Caitlyn, Kyle, and I went over the details of my study and I answered any questions that they had. I explained the Informed Consent and Authorization to Release Information forms and Caitlyn, Kyle, and I signed them. Caitlyn completed the Introductory Guardian Survey, while I assisted Kyle in completing the Introductory Participant Survey by providing additional explanations to the questions he did not understand. I presented an art journal to Kyle and explained its purpose to both Kyle and Caitlyn. Kyle stated that he wanted me to hold on to the art journal, and I stated I would. Caitlyn, Kyle and I agreed that Kyle and I could meet weekly, at the same site as the psychosocial rehabilitation group, before the group activities started. We planned to conduct our sessions in a room adjoining the group psychosocial room to provide a level of comfort and familiarity for Kyle, as well as to assure the research was conducted in a one-on-one, semi-confidential setting. A wall and a doorway with a curtain separated the research room and the group room.

It was agreed upon in the introductory meeting that the other professional who would provide weekly responses to the Other Professional Survey would be Kyle's individual therapist, "Jessica." Jessica, a Licensed Masters Level Psychologist (LMLP), conducted her therapy sessions at the same site. This allowed me to provide her with and retrieve the weekly surveys directly.

Session I

In Kyle's first session, he appeared in a good mood and willing to participate. He reported feeling "happy" at the start of the session. I addressed the journal with him, which I still had in my possession via his request. He stated he wanted me to keep the

journal and let him draw in it when he wanted to during the psychosocial rehabilitation group. I stated I would hold on to it, and for him to let me know when he wanted to draw in it. I handed Kyle the first piece of paper and asked him to “make a drawing of whatever you would like.” Kyle responded to questions while he drew. He stated that he felt “happy” today, that he played games at school, and that he felt “okay with” drawing today. Once he stated he was done I asked him to tell me about his drawing. Kyle reported that he drew a dog and that he drew it because he “likes dogs” (see Appendix N, drawing 1). During the drawing process Kyle focused and applied effort; he displayed a quiet manner while drawing but responded to questions. The image resembled his description, and included moderate detail, color, and text.

For the second drawing, I asked Kyle to “draw how you felt today or how you feel right now.” Kyle responded to questions while he drew. He stated that he felt “happy.” With prompting, Kyle identified that feeling happy made “today easy” and he could tell his picture represented feeling happy because of the smile on the person’s face (See Appendix N, drawing 2). During the drawing process, Kyle applied minimal effort; he appeared focused but needed prompting to complete the task. The image resembled his description, and included minimal detail, color, and text.

For the third drawing, I asked Kyle to “draw a picture of something that you did today or of something that happened to you today.” He responded to questions while he drew. He reported that he had played BINGO at school that day, and with prompts stated he felt happy because he liked to play games (see Appendix N, drawing 3). During the drawing process Kyle appeared interested but applied minimal effort and needed prompting to complete the task. The image resembled his description, and included minimal detail, color, and text.

I asked Kyle to complete a “self-portrait, or picture of yourself” for the fourth drawing. He responded to questions while he drew. With prompting he reported that it was sometimes difficult to determine how the situation or environment affected his mood. He reported being “good” at dealing with his emotions. He stated that he drew himself (see Appendix N, drawing 4). With prompting, he identified that others could tell he felt happy in the image because of the smile. During the drawing process, Kyle appeared interested and focused but applied minimal effort. The image resembled his description, and included minimal detail and color.

For the fifth drawing I asked Kyle to “draw something that you like, or something that you like doing.” He responded to questions while he drew. He stated that he drew his favorite kind of car, a “Super Car,” which could “drive by itself” (see Appendix N, drawing 5). He reported feeling “good” about our first session because he “likes to draw.” During the drawing process he appeared interested, focused, and applied effort. The image resembled his description, and included moderate detail, color, and text. Kyle reported his concluding mood as “happy.”

Overall, Kyle spent little time on each of his drawings; the session lasted a total of 20 minutes. Kyle appeared generally focused while drawing, but needed some prompting to include images and to verbally communicate. Verbal with prompts made up Kyle’s primary mode of communication. Kyle engaged in no self-stimulating behaviors and minimal eye contact throughout the session. Kyle’s overall attitude towards tasks appeared to be interested and focused while drawing. The graphic indicators in Kyle’s drawing placed him at the Preschematic Stage in development. The Preschematic Stage represents 4-7 year-olds, and represented a slight delay from Kyle’s chronological developmental age.

Table 1 shows Kyle's responses in the first session, as observed by the researcher.

Session II

In Kyle's second session, he appeared to be in a good mood and willing to participate. He reported feeling "good" at the start of the session. I addressed the journal with him, which I still had possession of via his request. He had no journal entries. Kyle stated that he wanted me to keep the journal and that he didn't want to draw in it. I told him okay and that he would not have to draw in it if he did not want to, as the drawing process was meant to be enjoyable for him. I handed Kyle the first piece of paper and asked to "make a drawing of whatever you would like." Kyle responded to questions while he drew. He stated that he felt "good", that he played a boxing game at school with the other kids, and that he felt "okay with" drawing today. I asked him to tell me about his drawing upon completion of it. Kyle reported that he drew his little brother "trying to pull his loose tooth out" (see Appendix O, drawing 1). During the drawing process Kyle applied effort, and appeared interested and focused. The image resembled his description, was highly detailed, and included color.

For the second drawing, I asked Kyle to "draw how you felt today or how you feel right now." Kyle responded to questions while he drew. He stated that he currently felt "happy." Kyle could not identify why he felt happy or how his emotions affected him. While drawing, Kyle made the statement "I use every color because I am happy" (see Appendix O, drawing 2). When I asked him to tell me about his drawing, Kyle reported drawing his family as the happy faces and that "they made me so proud of my family because I did good work." I asked Kyle if that meant that his family felt proud of him, and he said yes. During the drawing process Kyle applied effort, and appeared

Table 1

Researcher observations: Session I

How many times in this session did the client:	Never	Once	2 or 3 Times	Several Times	Constantly
Use words to express how he feels			X		
Use nonverbal cues to express how he feels		X			
Express happiness			X		
Express anger/frustration		X			
Express sadness	X				
Relate emotions to an environmental factor		X			
React with physical tantrum behaviors when asked to follow directions	X				
React with verbal tantrum behaviors when asked to follow directions	X				
React by withdrawing when asked to follow directions	X				
React by staying calm and following directions when asked to follow directions					X

focused and interested. The image resembled his description, and included moderate detail and color.

Next, I asked Kyle to “draw a picture of something that you did today or of something that happened to you today” for the third drawing. He responded to questions while he drew. He reported that he had played BINGO today with his brother at school (see Appendix O, drawing 3); when I asked him about playing with his brother he corrected himself and stated that he had played with the other kids in his class. Kyle reported that playing BINGO made him happy because he likes to play games. During the drawing process Kyle appeared interested and applied effort. The image resembled his description, and included minimal detail and text.

The fourth drawing directed Kyle to complete was a “self-portrait, or picture of yourself.” He responded to questions while he drew. Kyle reported being unable to determine how situations or his environment affected his mood and stated that he didn’t know how he dealt with his emotions. When telling me about his drawing, he identified “me” as his brother, “she” as his sister, “he” as his other brother, and the person in the middle as his dad (see Appendix O, drawing 4). I asked Kyle where he was in his self-portrait; he then identified himself as the person who he had previously identified as dad. During the drawing process Kyle appeared interested, focused, and applied effort. Kyle described the images in an unclear and confusing manner, and included moderate detail and text.

I asked Kyle to “draw something that you like, or something that you like doing” for the fifth drawing. He responded to questions while he drew. When I asked him to tell me about his drawing, he stated that he felt “happy to be me” (see Appendix O, drawing 5). I asked why he felt happy to be himself and he stated his grandma was coming to visit

and he felt close with her. He reported feeling “happy” about our session because he enjoys drawing. During the drawing process he appeared somewhat uninterested, distracted, and applied minimal effort. Kyle included text but did not include an image; when encouraged to include an image, Kyle stated that he liked it “that way.” Kyle reported his concluding mood as “happy.”

Overall, Kyle spent little time on each of his drawings; the session lasted a total of 25 minutes. At times Kyle appeared focused while drawing; at others, he appeared distracted and needed prompting to include images and communicate verbally. His primarily communicated verbal with prompts. Kyle engaged in no self-stimulating behaviors and made minimal eye contact throughout the session. Kyle’s overall attitude towards tasks appeared indifferent, though he focused and completed most tasks with prompts. His graphic indicators of development were at the Preschematic Stage.

Table 2 shows Kyle’s responses in the second session, as observed by the researcher.

Session III

In the third session, Kyle arrived in a good mood and willing to participate. He reported feeling “good” at the start of the session. Kyle had no journal entries, as I still had possession of the journal via his request. He talked about his older brother’s recent birthday, and how his family and he celebrated by going out to eat. I handed Kyle the first piece of paper and asked to “make a drawing of whatever you would like.” Kyle responded to questions while he drew. He stated that he felt “good,” that he had played group games at school with the other kids, and that he felt “okay with” drawing that day. When he reported being done with his drawing I asked him to tell me about it. Kyle stated that he drew a dog, because he liked dogs (see Appendix P, drawing 1). Kyle

Table 2

Researcher observations: Session II

How many times in this session did the client:	Never	Once	2 or 3 Times	Several Times	Constantly
Use words to express how he feels			X		
Use nonverbal cues to express how he feels	X				
Express happiness				X	
Express anger/frustration	X				
Express sadness	X				
Relate emotions to an environmental factor	X				
React with physical tantrum behaviors when asked to follow directions	X				
React with verbal tantrum behaviors when asked to follow directions	X				
React by withdrawing when asked to follow directions	X				
React by staying calm and following directions when asked to follow directions					X

reported that he had two dogs and that he wanted to get a cat for his sister because he felt he was a good big brother. During the drawing process Kyle applied effort, and appeared interested and focused. The image resembled his description, and included moderate detail and text.

For the second drawing, I asked Kyle to “draw how you felt today or how you feel right now.” Kyle responded to questions while he drew. He stated he felt “happy.” Kyle could not identify why he felt happy or how his emotions affected him. When I asked him to tell me about his drawing, Kyle stated “it’s of a happy guy,” who he identified as his brother (see Appendix P, drawing 2). During the drawing process, Kyle applied minimal effort, appeared unfocused, and needed prompting to complete the task. The image resembled his description, and included minimal detail, color and text.

I asked Kyle to “draw a picture of something that you did today or of something that happened to you today” for the third drawing. He responded to questions while he drew. He reported he had played BINGO in math at school as they did every day in his special classroom (see Appendix P, drawing 3). Kyle stated he really liked games and that he felt happy when he got to play them. I prompted Kyle with other possible emotions he may experience when playing games; he agreed to also feeling excited, but could not identify other emotions he experienced without prompting. During the drawing process, Kyle appeared uninterested and applied minimal effort. I encouraged Kyle to include an image but he did not. The image resembled his description, and included minimal detail and text.

The fourth drawing I asked Kyle to complete was a “self-portrait, or picture of yourself.” He responded to questions while he drew. Kyle stated he liked to play games and that it made him feel happy when he got to play them, but needed prompting. When

asked how other people could tell when Kyle felt mad, he could not identify how he shows when he is upset; he did identify things that triggered him to feel upset, but not how he expressed feeling upset. Kyle reported drawing his sister, his brother, and himself (see Appendix P, drawing 4). He stated that they all felt happy, but he could not identify how the viewer could tell they felt happy or why they felt happy. During the drawing process Kyle appeared somewhat uninterested, and he applied minimal effort. The image resembled his description, and included minimal detail and color.

I asked Kyle to “draw something that you like, or something that you like doing” for the fifth drawing. He responded to questions while he drew. Kyle reported he drew a bike, and he liked riding bikes (see Appendix P, drawing 5). When asked why he enjoyed riding his bike, Kyle stated “it makes me proud of me;” he could not further explain this statement. During the drawing process Kyle appeared somewhat focused and applied moderate effort. The image resembled his description, and included moderate detail and color. Kyle reported his concluding mood as “happy.”

Overall, Kyle spent little time on each of his drawings; the session lasted a total of 20 minutes. Kyle appeared generally focused while drawing, but needed some prompting to include images and to verbally communicate. He primarily communicated verbally with prompts. Kyle engaged in no self-stimulating behaviors and established minimal eye contact throughout the session. Kyle’s overall attitude towards tasks appeared indifferent, though he did focus and complete most tasks. His graphic indicators of development ranked at a Preschematic Stage.

Table 3 shows Kyle’s responses in the third session, as observed by the researcher.

Table 3

Researcher observations: Session III

How many times in this session did the client:	Never	Once	2 or 3 Times	Several Times	Constantly
Use words to express how he feels			X		
Use nonverbal cues to express how he feels	X				
Express happiness				X	
Express anger/frustration	X				
Express sadness	X				
Relate emotions to an environmental factor		X			
React with physical tantrum behaviors when asked to follow directions	X				
React with verbal tantrum behaviors when asked to follow directions	X				
React by withdrawing when asked to follow directions	X				
React by staying calm and following directions when asked to follow directions					X

Session IV

In the fourth session, Kyle appeared in a good mood and willing to participate. He reported feeling “good” at the start of the session. Kyle had no journal entries, as I still had possession of the journal via his request. I handed Kyle the first piece of paper and asked him to “make a drawing of whatever you would like.” Kyle responded to questions while he drew. He stated he felt “good” today; he said he liked being at the psychosocial group, and he felt “excited” about drawing that day. When he stated he had completed his drawing I asked him to tell me about it. Kyle reported that he drew a cat, because he liked cats and because they “play” with him (see Appendix Q, drawing 1). During the drawing process Kyle applied effort, appeared interested and focused. The image resembled his description, and included moderate detail and text.

For the second drawing, I asked Kyle to “draw how you felt today or how you feel right now.” Kyle responded to questions while he drew. While drawing Kyle said his sister told him he could not draw well, but he thought he could draw well; I agreed and told him I thought he could draw very well. Kyle stated he felt “happy.” I inquired about how I could tell he felt happy in the picture, to which he responded “by the face” (see Appendix Q, drawing 2). I asked “What about the face?” Kyle stated “that face;” he could not verbally identify the smile on the person’s face. Kyle stated that his emotions affected him in a “good” way, but could not describe what he meant. I asked him to tell me about his drawing; Kyle said the person had green arms, and “a purple hat and shoes because it’s a girl.” He drew part of the face blue because he “was making his face blue.” He explained that sometimes when he felt mad or sad he would “make his face blue.” During the drawing process Kyle applied effort, and appeared focused and interested. The image resembled his description, and included moderate detail, color and text.

I asked Kyle to “draw a picture of something that you did today or of something that happened to you today” for the third drawing. He responded to questions while he drew. Kyle reported that he drew two BINGO cards (see Appendix Q, drawing 3). He stated he did not get to play a full game of BINGO because they ran out of time in his class. I asked Kyle if he felt upset when they ran out of time. He said he felt upset, but since they go to lunch after that class and he likes lunch it was okay. During the drawing process Kyle appeared interested and applied effort. However, at times he appeared somewhat distracted and asked if this was his fourth drawing; Kyle appeared interested in joining the kids in the other room. The image resembled his description, and included minimal detail, color, and text.

The fourth drawing directive instructed Kyle to draw a “self-portrait, or picture of yourself.” He responded to questions while he drew. Kyle stated he felt happy in the picture because of “his face” (see Appendix Q, drawing 4). I asked if we could tell he felt happy because of the persons’ smiling, and he said yes. I asked how he shows when he is happy; Kyle stated “by standing, talking outside, and playing.” He could not further explain that statement. During the drawing process, Kyle appeared interested and focused. The image resembled his description, and included minimal detail and color.

I asked Kyle to “draw something that you like, or something that you like doing” for the fifth drawing. He responded to questions while he drew. Kyle reported that his drawing depicted himself playing with his dog (see Appendix Q, drawing 5). He reported that he liked his dog so much because “he is a nice dog.” Kyle stated he felt “happy” because he liked being at the psychosocial group and enjoyed drawing. During the drawing process Kyle appeared interested, focused and applied moderate effort. The

image resembled his description, and included moderate detail, color, and text. Kyle reported his concluding mood as “happy.”

Overall, Kyle spent little time on each of his drawings; the session lasted a total of 20 minutes. Kyle primarily communicated verbally with prompts. He engaged in no self-stimulating behaviors and minimal eye contact throughout the session. Kyle’s overall attitude towards tasks appeared interested and focused. His graphic indicators of development placed him in the Preschematic Stage.

Table 4 shows Kyle’s responses in the fourth session, as observed by the researcher.

Session V

In the fifth session, Kyle appeared to be in a good mood and willing to participate. He reported feeling “good” at the start of the session but could not identify why. Kyle had no journal entries. I handed Kyle the first piece of paper and asked him to “make a drawing of whatever you would like.” Kyle responded to questions while he drew. He stated he felt “good.” that he had participated in math at school, and that he felt “okay” with drawing that day. When he stated he had completed his drawing I asked him to tell me about it. Kyle reported he drew a cat, because his sister liked cats (see Appendix R, drawing 1). During the drawing process, Kyle applied effort, and appeared interested and focused. The image resembled his description, and included moderate detail, color, and text.

For the second drawing, I asked Kyle to “draw how you felt today or how you feel right now.” Kyle responded to questions while he drew. He reported he felt “happy.” When asked why he felt happy, he stated “because I like it.” I asked “What do you like?” He could not respond. I asked again, “What do you like that is making you happy right

Table 4

Researcher observations: Session IV

How many times in this session did the client:	Never	Once	2 or 3 Times	Several Times	Constantly
Use words to express how he feels				X	
Use nonverbal cues to express how he feels	X				
Express happiness					X
Express anger/frustration	X				
Express sadness	X				
Relate emotions to an environmental factor			X		
React with physical tantrum behaviors when asked to follow directions	X				
React with verbal tantrum behaviors when asked to follow directions	X				
React by withdrawing when asked to follow directions	X				
React by staying calm and following directions when asked to follow directions					X

now?” Kyle said, “My mom.” Kyle could not identify how his emotions affected him. I asked him to tell me about his drawing once he stated he had completed it. Kyle pointed out the four words that said “happy,” and identified the face in the image as his brother (see Appendix R, drawing 2). Kyle reported the face in the image felt “happy” but could not identify what cue revealed that it appeared happy (i.e., the smile). During the drawing process, Kyle appeared interested in his drawing, but also somewhat distracted and kept looking toward the connecting room. The image resembled his description, and included minimal detail and text.

I asked Kyle to “draw a picture of something that you did today or of something that happened to you today” for the third drawing. He appeared distracted and somewhat unresponsive to questions while drawing, as people walked through the room. I asked him to tell me about his image when he stated he had completed it. He struggled to discuss the image or what he had done at school. With some encouragement Kyle stated “I just did math” (see Appendix R, drawing 3). During the drawing process, Kyle appeared uninterested, distracted, and needed prompts. The image included minimal detail, color, and text.

The fourth drawing required Kyle to draw a “self-portrait, or picture of yourself.” Kyle continued to be distracted and appeared to want to return to the other room. When he stated he had completed his drawing, I asked him to tell me about his image. Kyle reported the image included himself “just standing, walking in the snow” (see Appendix R, drawing 4). Kyle stated he felt happy in the image, but could not identify how he expressed feeling happy. During the drawing process, Kyle appeared uninterested, distracted, and needed prompts. The image included minimal detail.

I asked Kyle to “draw something that you like, or something that you like doing” for the fifth drawing. When he stated he had completed his drawing, I asked him to tell me about it. Kyle described the image as “BINGO;” he reported he liked playing BINGO because “it is fun” (see Appendix R, drawing 5). He reported feeling “happy” about our session, but he wanted to go back to group in the other room. I told Kyle he could go back to the group, as our session had come to an end. During the drawing process Kyle appeared uninterested, distracted, and needed prompts. The image included minimal detail, color, and text. Kyle reported his concluding mood as “happy.”

Overall, Kyle spent little time on each of his drawings; the session lasted a total of 20 minutes. Kyle primarily communicated verbally with prompts. He engaged in no self-stimulating behaviors and minimal eye contact throughout the session. Kyle’s overall attitude toward tasks appeared uninterested and distracted. The graphic indicators in his drawing place him in the Preschematic Stage of development.

Table 5 shows Kyle’s responses in the fifth session, as observed by the researcher.

Guardian Survey Results

Table 6 displays the weekly responses of the Kyle’s mother, Caitlyn. She rated him on the following scale: 1- never, 2- once, 3- two or three times, 4- several times, and 5- constantly.

In Caitlyn’s concluding survey, she reported no changes throughout the sessions in Kyle’s diagnosis or treatment. As represented in the chart, she reported no significant changes in Kyle’s behaviors throughout the study. She also reported that she thinks Kyle has enjoyed making art because it is calming, but that the study overall did not affect him.

Table 5

Researcher observations: Session V

How many times in this session did the client:	Never	Once	2 or 3 Times	Several Times	Constantly
Use words to express how he feels			X		
Use nonverbal cues to express how he feels		X			
Express happiness				X	
Express anger/frustration	X				
Express sadness	X				
Relate emotions to an environmental factor	X				
React with physical tantrum behaviors when asked to follow directions	X				
React with verbal tantrum behaviors when asked to follow directions	X				
React by withdrawing when asked to follow directions		X			
React by staying calm and following directions when asked to follow directions					X

Table 6

Guardian weekly survey responses

How many times this week have you observed your child:	Week 1	Week 2	Week 3	Week 4	Week 5
Expressing his emotions, in general	4	4	4	4	3
Expressing his emotions verbally	4	4	4	4	4
Expressing his emotions non-verbally	5	5	5	5	5
Relating his emotions to environmental factors	4	4	3	4	3
Reacting to stressful environmental situations with physical tantrum behaviors	4	4	5	4	4
Reacting to stressful environmental situations with verbal tantrum behaviors	4	4	5	4	4
Reacting to stressful environmental situations by withdrawing	2	3	3	3	2
Reacting to stressful environmental situations by staying calm and doing what is asked of him	4	3	2	3	3

Other Professional Survey Results

Table 7 displays the weekly responses of Kyle's individual therapist, the Other Professional. She rated him on the following scale: 1- never, 2- once, 3- two or three times, 4- several times, and 5- constantly.

Jessica's responses, as represented in the chart, show no significant changes in Kyle's behaviors throughout the study.

Client Survey Results

Kyle completed an introductory and conclusion survey. He required my assistance, which included additional explanations and prompting, to complete the surveys.

In the introductory survey, Kyle reported he liked making art and preferred paint. He reported difficulty in expressing his emotions. Kyle identified "happy" as the easiest emotion to express by "not yelling," and "sad" as the most difficult emotion to express; he could not identify ways to express that emotion. He rated his ability to relate emotions to environmental factors as "somewhat difficult." Kyle reported that in stressful situations his reactions can include yelling or screaming, hitting or kicking, and getting quiet or leaving the room. He identified homework as a daily stressor; he reported handling this stressor by "getting upset."

In the concluding survey, Kyle reported he continued to like making art and preferred markers and paint. He reported never using his journal throughout the study. He struggled to rate his ability to express his emotions. Kyle reported "happy" as the easiest emotion to express, but could not identify how he expressed happiness. Kyle could not identify the most difficult emotion for him to express. Kyle reported relating his emotions to environmental factors as "somewhat difficult." He reported in stressful situations his

Table 7

Other professional weekly survey responses

How many times this week have you observed the client:	Week 1	Week 2	Week 3	Week 4	Week 5
Expressing his emotions, in general	3	2	3	3	1
Expressing his emotions verbally	2	1	1	3	1
Expressing his emotions non- verbally	3	2	3	3	1
Relating his emotions to environ- mental factors	1	2	1	1	1
Reacting to stressful environmental situations with physical tantrum behaviors	1	1	1	1	1
Reacting to stressful environmental situations with verbal tantrum behaviors	1	1	1	1	1
Reacting to stressful environmental situations by withdrawing	1	1	1	3	1
Reacting to stressful environmental situations by staying calm and doing what is asked of him	3	1	1	3	1

reactions can include yelling or screaming, hitting or kicking, and getting quiet or leaving the room. He identified “when I get in trouble” as a daily stressor; he could not state how he handled that situation. Kyle reported that he liked participating in this study, but could not identify if he learned anything by participating in the study.

CHAPTER 4

DISCUSSION

While this case study provided useful observations and experience, it primarily served as a pilot study for further research to incorporate a psycho-educational element. Kyle demonstrated limited understanding of how to express emotions; with no psycho-educational element incorporated in this study, that concept was not further explored or developed. By incorporating a psycho-educational element, interactions could be designed to increase emotional vocabulary and improve ability to identify emotions. Also, an opportunity to teach skills to relate environmental factors to emotions could be developed.

What I Learned from Kyle

The importance of flexibility when using art therapy with children diagnosed with ASD was highlighted in this study. It took little time for Kyle to be comfortable working with me and trusting me to see his art work; this was likely because we had met previously in his psychosocial group. However, building rapport with participants can take time and should be incorporated into the design of future studies.

Kyle demonstrated the importance of the participant's willingness to participate. When he was focused, he completed the directives with images that related to the topics discussed; when he was distracted or uninterested, his images lacked detail and he would complete them quickly and without much investment. Importantly, the use of directives and art media may have enhanced Kyle's focus and participation.

The art journal, designed to add additional documentation to the study and processing for Kyle, was not applicable in this study, as Kyle was unwilling to utilize it. Although I encouraged Kyle to use the journal to document daily activities, thoughts, and

emotions, every week he maintained that he did not want to have possession of the journal. Excluding the journal based on Kyle's disinterest reflected the flexibility necessary to work with an individual with ASD.

Generally, Kyle presented in a good mood and willing to participate in the sessions. He displayed some distractibility at times; his ability to hear the kids in the group room seemed to cause this. His distractibility increased if kids arrived to the program early, or if he arrived late and the other kids were already present in the group room. If he appeared distracted, I provided extra prompting and also asked the kids in the other room to be quieter. These actions helped Kyle focus on the directives. When working with children diagnosed with ASD, distractions need to be addressed and limited when possible; focusing can be a struggle for children diagnosed with ASD.

Kyle reported feeling "happy" at the beginning, throughout the session, and at the end of every session. "Happy" appeared to be the one emotion that Kyle felt comfortable identifying. When asked why he felt happy or what made him happy, Kyle struggled to identify the reason. He agreed to something making him happy (i.e., responding "yes" to "do you feel happy because you got to play a game today?"), but could not come up with reasons on his own. When he responded to questions, his responses were often illogical; for example, when asked "what is making you happy right now?" he responded with "because I like it."

There was a clear difference in Kyle's verbal and non-verbal ability to identify facial cues for emotions on the faces he drew. Kyle drew a number of faces throughout our sessions, many of which he identified as happy (see Appendix O, drawing 2). When asked how I could tell the faces felt happy, Kyle would respond "I don't know" or "because of that face." He could not verbally articulate that it was the smile on the face

that made it happy, unless I pointed it out to him. Interestingly, though, he did include a smile on all of the faces he drew and called them “happy;” Kyle knew to include the smile as a feature of a happy face, but he could not articulate that the smile let the viewer know that the person in the image felt happy. The inclusion of the smile could just be part of Kyle’s stereotyped schema for a person, and not represent emotion to him. He may recognize that people like him to feel “happy” so he includes smiles on all of the faces he draws, regardless of what emotion he actually feels.

Additionally, Kyle could not articulate feeling anything other than happy; however, in his drawing of the person with a blue face (see Appendix Q, drawing 2) he stated, with prompts, that sometimes when he gets mad or sad he can “make his face blue.” Kyle did not elaborate on how people show they are mad or sad. This drawing represented progress in Kyle’s development; he displayed an ability to graphically indicate other emotions besides happy.

A common theme in Kyle’s work included the use of text. He often labeled his drawings, or text made up his “image.” For example, he often labeled his images of animals (see Appendix N, drawing 1 or Appendix Q, drawing 1). Kyle’s use of text could be to identify what the image is to the viewer; he may label the images so others know what his drawing represented. His use of text may also serve as substitutions for the representation of complex images. For example, Kyle often drew a box and wrote “BINGO” inside the box to represent that he had played BINGO in math class that day (see Appendix P, drawing 3). In this instance, the concept of playing BINGO was too difficult for Kyle to represent with images, so he wrote it instead. His use of text also represented his concrete thinking rather than abstract thinking.

At times, Kyle seemed confused by the directive or seemed to forget the directive. For example, in one session, I asked him to “draw a self-portrait or a picture of yourself;” he drew three people who he identified as brother, sister, and dad (see Appendix O, drawing 4). I asked where he appeared in the drawing, and Kyle identified the image of dad as himself.

Kyle’s Graphic Indicators of Development

The graphic indicators in Kyle’s images identified his development in the Preschematic Stage. The Preschematic Stage generally represents the chronological ages of 4 to 7 years in typically developing children (Malchiodi, 1998; Anderson, 1992). It marks the early development of representational symbols, such as using simple figures to represent an object or person. In the later phases of the Preschematic Stage, children begin to recognize the relationship between themselves and the environment; they better comprehend that the environment affects their thoughts and emotions. Kyle’s images demonstrate he was in the early phases of the Preschematic Stage, as he was not able to depict a connection between his figures and the environment.

In Kyle’s drawing of the person with a blue face (see Appendix Q, drawing 2), Kyle added more details to the image (shoes, hat, etc.), used more colors, and identified different emotions than he usually did. This could represent the beginning of a developmental shift. These graphic indicators could represent his readiness to move into later phases of the Preschematic Stage.

Limitations

A number of limitations impacted this study. First, as it was a case study, only one individual participated. More participants would be desirable for a better understanding of how art therapy effects specific sub-groups of children diagnosed with ASD.

Only five brief sessions took place, each lasting around 20 minutes. More frequent sessions and an increase in the number of sessions weekly may have facilitated more discussion and art work, improved client-researcher relationship, and developed more conclusive change.

The room adjoining the group room provided distractions as people walked through. This also was problematic in terms of confidentiality and privacy. A totally private setting would be desired to eliminate distractions and possible outside factors. Video recording would also be beneficial, as so much of the data is based on the observation of the participant.

I could not distinguish between the effects of Kyle's multiple diagnoses on the study. For example, his diagnosis of Attention-Deficit/Hyperactive Disorder Combined Type could have made it difficult for him to focus on the directives; his Mild Mental Retardation diagnosis could have made the topics discussed difficult to understand. In addition, Kyle participated in a number of treatments that could have impacted the outcome of the study; his treatments included medication, individual therapy, family therapy, psychosocial group, and educational interventions. The direct effect of ASD may be better observed with participants who have a sole diagnosis of ASD.

Not planning for a psycho-educational approach also limited the study. Interventions and teaching opportunities could be designed to teach the skills I had hoped Kyle would develop. As I did not provide Kyle the opportunity to learn or develop the skills I attempted to assess, there were no changes in his abilities.

The weekly surveys indicated no conclusive results. The guardian surveys showed little changes in Kyle's expression of emotions verbally or non-verbally, relation of emotions to environmental factors, or in his reactions to stressful environmental

situations. Likewise, the “other professional” surveys showed little change in Kyle’s ability to express emotions verbally or non-verbally, relate emotions to environmental factors, or in his reactions to stressful environmental situations. In the participant surveys, Kyle reported no increase or decrease in his ability to identify emotions or relate emotions to environmental factors, and no change in his response to stressful environmental situations. The lack of significant findings from the surveys could be due to the questions not being sensitive enough to demonstrate change. The guardian and participant surveys did report Kyle’s enjoyment in the art making process. The guardian survey also indicated that the art making process is “calming” for Kyle; it could be implemented as a coping technique for him in stressful situations to decrease behavioral or verbal outbursts at home or at school.

Finally, the “other professional” who provided behavioral feedback, should have been someone who saw the participant on a regular basis. For this study, Kyle, his mom, and I selected his primary individual therapist as the other professional chosen to complete the weekly surveys of his progress. However, on a number of her surveys, she indicated that she saw Kyle only minimally that week due to poor weather conditions. A professional who is able to observe the participant multiple times a week would be preferred. The individual therapist saw Kyle at least once a week, but a teacher who would likely see him five out of the seven days a week may be able to provide responses based on more frequent observations.

Implications for Future Research

For future studies it is recommended that more individuals participate and the design include more frequent sessions and a longer experimental phase. Including a psycho-educational element is essential for teaching and developing the skills addressed

in this study. Sessions scheduled more often and for a longer period could enhance the benefits of including a psycho-educational element.

In future work with Kyle, a psycho-educational approach could include sessions that would focus specifically on explaining images of faces that express different emotions. Kyle could learn to identify the emotions expressed through facial cues. He could also learn specific triggers to emotions.

Selecting participants who have a sole diagnosis of ASD could help narrow the influencing factors of other disorders. Also, a wider array of material should be available to participants; participants could have choices of media to express themselves.

Conducting the surveys in a face-to-face manner is also recommended. Both the guardian and the other professional surveys provided sparse information and feedback. Greater details about the participants abilities and any changes in those abilities could be better understood and documented through verbal communication between the researcher and the guardian and other professional; this would provide the researcher the opportunity to ask clarifying questions or prompt responders to provide more information if necessary.

Conclusion

This study explored the effectiveness of an art making protocol in assessing the ability to identify emotions and relate emotions to environmental factors in one child diagnosed with ASD. The results of this study did not support the hypothesis that the art making process would improve Kyle's ability to identify emotions or to improve his ability to understand the relation of environmental factors on emotions. However, qualitative data demonstrated that Kyle struggled with identifying other emotions besides happiness, articulating facial features that imply specific emotions, and identifying

environmental factors that affect the emotions he experienced. However, the art process did provide him with a relaxing outlet, support, and a sense of pride in his work. It also provided important developmental information for the therapist; this information could support intervention plans and behavioral objectives. Even the very small changes observed, such as the inclusion of greater detail or more color, provided critical information which could inform opportunities to teach specific skills that Kyle was ready to absorb.

Art is an excellent alternative for communication and provides relaxation and enjoyment; these are rare experiences for a child with ASD, who struggles to communicate. The opportunity to play and create can bring a sense of satisfaction when verbal communication fails.

Throughout the study Kyle displayed the challenges and benefits of using art therapy with children diagnosed with ASD. This case study provided an example to inform example for future studies. While I observed no significant change in Kyle's ability to identify emotions or relate emotions to environmental factors, conclusions about limitations and suggested inclusions for future studies were identified and discussed, and will inform future interventions with Kyle as well as interventions with other individuals diagnosed with ASD.

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Appendix A:
Participant and Guardian Informed Consent Form

Dear Participant and Guardian,

I am a graduate student at Emporia State University in Emporia, KS, and am currently enrolled in an art therapy research course toward the fulfillment of a Master's of Science in Art Therapy. Art therapy is a profession that combines the use of art making with psychological theories and principles and views the act of creativity as healing.

I have designed a research study to review the drawn responses and verbal communication of an adolescent diagnosed with Autism Spectrum Disorder (ASD). The purpose of this study is to help connect emotions with the participants' environment and those who surround them, and to study drawing as an additional form of communication.

I need to obtain written permission for the participant in my study. The participant, guardian and one other professional (i.e., teacher, therapist, clinician, etc.) will be asked to complete introductory, weekly, and/or conclusion surveys. The participant will be asked to participate in five art sessions and keep an art journal through the length of the study. Ability and time permitting, each art session will include creating a series of five drawings in a 45-minute session. It is desired to complete five sessions over the course of two to three months. There are no known risks or discomforts expected in the participation of this study, but this could vary with each child's comfort level and their like or dislike of drawing. The child may choose not to participate in this study, or may discontinue participation at any time during the study; participation is strictly voluntary. All information will be kept confidential. Pseudonyms will be used when reporting results. I will initially need to keep the artwork to copy for inclusion in my thesis. Upon completion of my thesis, you may request the artwork be returned. If the participant would not like their artwork returned, I will keep it in a secure cabinet, in my home office, for up to one year before shredding it.

As previously stated, this study will be presented as a thesis with images of the artwork created in sessions. In any presentation of the material, identifying data (name, location, etc.) will be kept confidential.

Thank you for your assistance with this project. Please sign the form below and return it to me. If you have any questions or concerns at any time regarding this study, please feel free to call me at (515)490-4790 or e-mail me at kflaniga@emporia.edu. If you wish to contact my supervisor, Gaelynn Wolf Bordonaro, you may do so at (620)341-5809, or e-mail her at gwolf@emporia.edu. Thank you for your time and consideration.

Kayla M. Flanigan,
M.S. graduate student
Emporia State University

I have read the consent form and understood the explanation provided to me and allow
_____ to participate in the study.

Signature of participant

Signature of legal guardian

Date

Appendix B:

Other Professional Informed Consent Form

Dear Professional associated with _____,

I am a graduate student at Emporia State University in Emporia, KS, and am currently enrolled in an art therapy research course toward the fulfillment of a Master's of Science in Art Therapy. Art therapy is a profession that combines the use of art making with psychological theories and principles and views the act of creativity as healing.

I have designed a research study to review the drawn responses and verbal communication of an adolescent diagnosed with Autism Spectrum Disorder (ASD). The purpose of this study is to help connect emotions with the participants' environment and those who surround him, and to study drawing as an additional form of communication.

I have obtained written permission from _____ and his guardian (copy enclosed), and need to obtain written permission from you, as a professional, to use information you provide in my study. Also included is a release of information signed by the participant and his guardian, giving their permission for you to release specific information to me. You will be asked to complete five weekly surveys and a conclusion survey. There are no known risks or discomforts expected in the participation of this study. All information will be kept confidential. Any information you provide will only be seen by me, not by the child or his guardian. The results of this study will be presented as a thesis. In any presentation of the material, identifying data (name, location, etc.) will be kept confidential.

Please sign the form below and return it to me in the self-addressed, stamped envelope. If you have any questions or concerns at any time regarding this study, please feel free to call me at (515)490-4790 or e-mail me at kflaniga@emporia.edu. If you wish to contact my supervisor, Gaelynn Wolf Bordonaro, you may do so at (620)341-5809, or e-mail her at gwolf@emporia.edu. Thank you for your time and assistance with this project.

 Kayla M. Flanigan,
 M.S. graduate student
 Emporia State University

I have read the consent form and understand the explanation provided to me. I give permission for any information provided on the surveys I fill out to be used in this study.

 Name of Professional

 Signature of Professional

 Date

Appendix C:
Authorization to Release Information

I, (Guardian's Name), hereby authorize (Other Professional and Organization) to release information regarding services received by (Participant's Name) for the purpose of research regarding adolescents diagnosed with Autism Spectrum Disorder (ASD). The information released is limited to the responses of the weekly and conclusion surveys attached. No other information regarding the participant's diagnosis or treatment will be inquired about or shared. This release of information is designated to Kayla Flanigan, a graduate student at Emporia State University, and will be utilized only for the completion of her thesis "Drawing Connections with Autism." The shared information will be allocated via postal mail or e-mail.

This consent is valid until (four months after the start of the sessions).

As previously stated, the results of this study will be presented as a thesis. In any presentation of the material, identifying data (name, location, etc.) will be kept confidential. Original documents will be kept in a secure cabinet, in my home office for up to one year before being shredded.

Please sign the form below and return it to me. Feel free to make a copy for your personal records. If you have any questions or concerns at any time regarding this study, please feel free to call me at (515)490-4790 or e-mail me at kflaniga@emporia.edu. If you wish to contact my supervisor, Gaelynn Wolf-Bordonaro, you may do so at (620)341-5809, or e-mail her at gwolf@emporia.edu.

 Kayla M. Flanigan,
 M.S. Graduate Student
 Emporia State University

 Participant's Name

 Participant's Signature

 Date

 Guardian's Name

 Guardian's Signature

 Date

 Professional's Name

 Professional's Signature

 Date

 Professional's Position

 Professional's Relationship with Participant

Appendix D:
Introductory Guardian Survey

Demographic information

1. What is the age of your child? _____
2. Is your child: male _____ female _____
3. Where was your child born? _____
4. What ethnicity is your child? _____

Diagnostic information

5. What is your child's diagnosis? _____
6. When did they receive this diagnosis? _____
7. What are the basic features of your child diagnosis and his or her treatment?

Please check all that apply and provide an explanation of why you checked what you did.

Diagnosis	Treatment
<input type="checkbox"/> Impairment in social interaction	<input type="checkbox"/> Medication
<input type="checkbox"/> Impairment in communication	<input type="checkbox"/> Educational program
<input type="checkbox"/> Repetitive or abnormal behaviors	<input type="checkbox"/> Mainstream classroom
<input type="checkbox"/> Mild degree of ASD	<input type="checkbox"/> Special education setting
<input type="checkbox"/> Severe degree of ASD	<input type="checkbox"/> Therapy

Explanation: _____

If your child is on medication, please list them here: _____

Emotions and environment

Use the following scale to rate how many times this week your child has done the following (in an appropriate way for questions 8-11):

1	2	3	4	5
Never	Once	2 or 3 Times	Several times	Constantly

8. Expressed his/her emotions, in general: _____
9. Expressed his/her emotions verbally: _____
10. Expressed his/her emotions nonverbally (facial expression, body language, art, etc.): _____

11. Related his/her emotions to environmental factors (i.e., recognize happiness in relation to a birthday, sadness in relation to someone being mean to them, anger in relation to having to clean his or her room): _____
12. Handled stressful environmental situations (i.e., being in trouble, having to do something he or she does not want to, having something taken away from him or her) with:
1. Physical tantrum (hits, throws things, bites, etc.): _____
 2. Verbal tantrum (yells, screams, cusses, etc.): _____
 3. Withdrawing (becomes quiet or leaves room): _____
 4. Staying calm and doing what is asked of him/her: _____
13. If there is anything else about your child's ability to identify and express emotions or environmental factors you would like to mention, please do so here.
-
-

Art and anticipated outcome

14. How often does your child make art in a given week?

1	2	3	4	5
Never	Once	2 or 3 Times	Several times	All the time

15. What types of materials your child uses when making art? Check all that apply.

<input type="checkbox"/> Crayons	<input type="checkbox"/> Markers	<input type="checkbox"/> Colored pencils
<input type="checkbox"/> Charcoal	<input type="checkbox"/> Paint	<input type="checkbox"/> Pens/pencils

Others: _____

16. Is there an art medium that you think your child may dislike? If so, what is it and why do you think this?
-
-

17. How many times a week do you think your child will use his/her art journal?

1	2	3	4	5
Never	Once	2 or 3 Times	Several times	Constantly

18. How do you think your child will respond to the directives of this study (i.e., being given directions to create specific images)?

19. What is your anticipated outcome of this study, in relation to your child?

Appendix E:
Introductory Participant Survey

1. Do you like or dislike making art? Rate yourself on a scale of one to five, one being dislike and five being like.

Dislike		Don't care		Like
1	2	3	4	5

2. What art materials do you like to use? Check all that apply.

<input type="checkbox"/> Crayons	<input type="checkbox"/> Markers	<input type="checkbox"/> Colored pencils
<input type="checkbox"/> Charcoal	<input type="checkbox"/> Paint	<input type="checkbox"/> Pens/pencils

Others: _____

3. How often do you think you will use your art journal?

<input type="checkbox"/> not at all	<input type="checkbox"/> 1-3 times per week
<input type="checkbox"/> 4-5 times per week	<input type="checkbox"/> 6-7 times per week

4. On a scale of one to five, one being very difficult and five being very easy, how would you rate your ability to express your emotions? In other words, is it difficult, average, or easy for you to show others how you are feeling?

Very difficult		Average		Very easy
1	2	3	4	5

5. What emotion do you find the easiest to express? _____

What are some ways you express that emotion?

6. What emotion do you find the most difficult to express? _____

What are some ways you express that emotion?

7. On a scale of one to five, one being very difficult and five being very easy, how would you rate your ability to relate your emotions to the things going on around you?

Very difficult		Average		Very easy
1	2	3	4	5

8. How do you handle positive environmental situations (i.e., a fun event)? In other words, what do you do when you are having a good time? How do you show it?

9. How do you handle stressful environmental situations (i.e., being in trouble, having to do something that you do not want to, having something taken away from you)? In other words, what do you do when you are upset? Check all that apply.

Yelling, screaming

Hitting, kicking

Getting quiet, leaving the room

Other: _____

10. What are some daily stressors or things that make you upset (i.e., cleaning your room, doing homework)? How do you handle them?

11. Is there anything else that you think is important for me to know about you?

Appendix F:
Weekly Other Professional Survey

Date: _____

Use the following scale to rate how many times this week the child has done the following (in an appropriate way for questions 1-4):

1	2	3	4	5
Never	Once	2 or 3 Times	Several times	Constantly

1. Expressed his/her emotions, in general: _____
2. Expressed his/her emotions verbally: _____
3. Expressed his/her emotions nonverbally (facial expression, body language, art, etc.): _____
4. Been able to relate his/her emotions to environmental factors (i.e., recognize happiness in relation to a birthday, sadness in relation to someone being mean to them, anger in relation to having to clean his or her room): _____
5. Handled stressful environmental situations (i.e., being in trouble, having to do something he or she does not want to, having something taken away from him or her) with:
 1. Physical tantrum (hits, throws things, bites, etc.): _____
 2. Verbal tantrum (yells, screams, cusses, etc.): _____
 3. Withdrawing (becomes quiet or leaves room): _____
 4. Staying calm and doing what is asked of him/her: _____
6. If there is anything else about the child's ability to identify and express emotions or environmental factors you would like to mention, please do so here.

Appendix G:
Weekly Guardian Survey

Date: _____

Use the following scale to rate how many times this week your child has done the following (in an appropriate way for questions 1-4):

1	2	3	4	5
Never	Once	2 or 3 Times	Several times	Constantly

1. Expressed his/her emotions, in general: _____
2. Expressed his/her emotions verbally: _____
3. Expressed his/her emotions nonverbally (facial expression, body language, art, etc.): _____
4. Been able to relate his/her emotions to environmental factors (i.e., recognize happiness in relation to a birthday, sadness in relation to someone being mean to them, anger in relation to having to clean his or her room): _____
5. Handled stressful environmental situations (i.e., being in trouble, having to do something he or she does not want to, having something taken away from him or her) with:
 1. Physical tantrum (hits, throws things, bites, etc.): _____
 2. Verbal tantrum (yells, screams, cusses, etc.): _____
 3. Withdrawing (becomes quiet or leaves room): _____
 4. Staying calm and doing what is asked of him/her: _____
6. If there is anything else about your child's ability to identify and express emotions or environmental factors you would like to mention, please do so here.

Appendix H:
Concluding Guardian Survey

Diagnostic information

1. Has your child's diagnosis or treatment changed throughout the course of this study? If so, how?

Emotions and environment

Use the following scale to rate how many times this week your child has done the following (in an appropriate way for questions 2-5):

1	2	3	4	5
Never	Once	2 or 3 Times	Several times	Constantly

2. Expressed his/her emotions, in general: _____
3. Expressed his/her emotions verbally: _____
4. Expressed his/her emotions nonverbally (facial expression, body language, art, etc.): _____
5. Been able to relate his/her emotions to environmental factors (i.e., recognize happiness in relation to a birthday, sadness in relation to someone being mean to them, anger in relation to having to clean his or her room): _____
6. Handled stressful environmental situations (i.e., being in trouble, having to do something he or she does not want to, having something taken away from him or her) with:
 1. Physical tantrum (hits, throws things, bites, etc.): _____
 2. Verbal tantrum (yells, screams, cusses, etc.): _____
 3. Withdrawing (becomes quiet or leaves room): _____
 4. Staying calm and doing what is asked of him/her: _____
7. If there is anything else about your child's ability to identify and express emotions or environmental factors you would like to mention, please do so here.

Appendix I:
Concluding Participant Survey

1. Have you enjoyed or not enjoyed making art? Rate your enjoyment on a scale of one to five, one being disliked and five being liked.

Disliked		Didn't care		Liked
1	2	3	4	5

2. What art materials did you enjoy working with best? Check all that apply.

<input type="checkbox"/> Crayons	<input type="checkbox"/> Markers	<input type="checkbox"/> Colored pencils
<input type="checkbox"/> Charcoal	<input type="checkbox"/> Paint	<input type="checkbox"/> Pens/pencils

Other: _____

3. Did you enjoy or not enjoy drawing in your art journal? Rate your enjoyment on a scale of one to five, one being disliked and five being liked.

Disliked		Didn't care		Liked
1	2	3	4	5

4. How often did you use your art journal?

<input type="checkbox"/> not at all	<input type="checkbox"/> 1-3 times per week
<input type="checkbox"/> 4-5 times per week	<input type="checkbox"/> 6-7 times per week

5. On a scale of one to five, one being very difficult and five being very easy, how would you rate your ability to express your emotions? In other words, is it difficult, medium, or easy for you to show others how you are feeling?

Very difficult		Average		Very easy
1	2	3	4	5

6. What emotion do you find the easiest to express? _____

What are some ways you express that emotion? _____

7. What emotion do you find the most difficult to express? _____

What are some ways you express that emotion? _____

8. On a scale of one to five, one being very difficult and five being very easy, how would you rate your ability to relate your emotions to the things going on around you?

Very difficult		Average		Very easy
1	2	3	4	5

9. How do you handle positive environmental situations (i.e., a fun event)? In other words, what do you do when you are having a good time? How do you show it?

10. How do you handle stressful environmental situations (i.e., being in trouble, having to do something you do not want to, having something taken away from you)? In other words, how do you handle things that make you upset? Check all that apply.

Yelling, screaming

Hitting, kicking

Getting quiet, leaving the room

Other: _____

11. What are some daily stressors or things that make you upset (i.e., cleaning your room, doing homework)? How do you handle them?

12. Overall, did you enjoy or not enjoy being a part of this research? Rate your enjoyment on a scale of one to five, one being disliked and five being liked.

Disliked

Didn't care

Liked

1

2

3

4

5

13. Do you think this process has taught you anything new about yourself or in general? If so, what has it taught you?

Appendix J:
Concluding Other Professional Survey

Emotions and environment

Use the following scale to rate how many times this week your child has done the following (in an appropriate way for questions 1-4):

1	2	3	4	5
Never	Once	2 or 3 Times	Several times	Constantly

1. Expressed his/her emotions, in general: _____
2. Expressed his/her emotions verbally: _____
3. Expressed his/her emotions nonverbally (facial expression, body language, art, etc.): _____
4. Been able to relate his/her emotions to environmental factors (i.e., recognize happiness in relation to a birthday, sadness in relation to someone being mean to them, anger in relation to having to clean his or her room): _____
5. Handled stressful environmental situations (i.e., being in trouble, having to do something he or she does not want to, having something taken away from him or her) with:
 1. Physical tantrum (hits, throws things, bites, etc.): _____
 2. Verbal tantrum (yells, screams, cusses, etc.): _____
 3. Withdrawing (becomes quiet or leaves room): _____
 4. Staying calm and doing what is asked of him/her: _____
6. If there is anything else about your child's ability to identify and express emotions or environmental factors you would like to mention, please do so here.

Art and anticipated outcome

7. Does this child enjoy or not enjoy making art? Why do you think this?

8. Do you think this study has affected or not affected this child? How so?

Appendix K:
IRB Approval Letter



November 3, 2010

Kayla Flanigan
Art Therapy
620 State St.
Emporia, KS 66801

Dear Ms. Flanigan:

Your application for approval to use human subjects, entitled "Drawing Connections with Autism," has been reviewed. I am pleased to inform you that your application was approved and you may begin your research as outlined in your application materials.

The identification number for this research protocol is 11029 and it has been approved for the period November 2010 to May 2011.

If it is necessary to conduct research with subjects past this expiration date, it will be necessary to submit a request for a time extension. If the time period is longer than one year, you must submit an annual update. If there are any modifications to the original approved protocol, such as changes in survey instruments, changes in procedures, or changes to possible risks to subjects, you must submit a request for approval for modifications. The above requests should be submitted on the form Request for Time Extension, Annual Update, or Modification to Research Protocol. This form is available at www.emporia.edu/research/docs/irbmod.doc.

Requests for extensions should be submitted at least 30 days before the expiration date. Annual updates should be submitted within 30 days after each 12-month period. Modifications should be submitted as soon as it becomes evident that changes have occurred or will need to be made.

On behalf of the Institutional Review Board, I wish you success with your research project. If I can help you in any way, do not hesitate to contact me.

Sincerely,

A handwritten signature in black ink that reads 'Robyn Long' followed by a stylized flourish.

Robyn Long
Chair, Institutional Review Board

pf

cc: Dr. G.P. Wolf Bordonaro

Appendix L:
IRB Modification Approval Letter



January 12, 2011

Kayla Flanigan
Art Therapy
620 State St.
Emporia, KS 66801

Dear Ms. Flanigan:

The modification of research protocol #11029 has been approved and you may continue your research as outlined in your application materials.

Please remember that if it is necessary to conduct research with subjects past your approved expiration date, it will be necessary to submit a request for a time extension. If the time period is longer than one year, you must submit an annual update. If there are additional modifications to the approved protocol, such as changes in survey instruments, changes in procedures, or changes to possible risks to subjects, you must submit a request for approval for modification.

Requests for extensions should be submitted at least 30 days before the expiration date. Annual updates should be submitted within 30 days after each 12-month period. Modifications should be submitted as soon as it becomes evident that changes have occurred or will need to be made.

I wish you continued success with your research project. If I can help you in any way, do not hesitate to contact me.

Sincerely,

A handwritten signature in blue ink that reads 'Robyn Long pf'.

Robyn Long
Chair, Institutional Review Board

pf

Appendix M:
Assessment Form

Participant: _____ Session #: _____ Date: _____

Assessor: _____ Start time: _____ End time: _____

Initial notes (i.e., influential factors to session, unique circumstances, etc.):

Initial mood of child (include if stated by participant or observed): _____

Discussion of art journal entries (number of new entries, contents, descriptions by participant, identification of emotional responses): _____

Directive 1: “Make a drawing of whatever you would like.”

Questions:

How are you feeling today? _____

What did you do at school and home? _____

Are you excited about, okay with, or not excited about drawing today? _____

Tell me about your drawing. _____

Drawing process:

Interested	Uninterested	Applied effort	Minimal effort
------------	--------------	----------------	----------------

Image:

resembled description	unidentifiable	nonexistent
miniscule/small on page	runs off page	centered
minimal detail	moderate detail	highly detailed
color used	no color used	text included

Behaviors:

Focused	Distracted	Needed prompts (verbal/physical)
Expressive	Flat affect	Conversational Withdrawn

Compulsiveness: _____

Other observations/notes: _____

Directive 2: “Draw how you felt today or how you feel right now.”

Questions:

What are you feeling right now? _____

How are those emotions affecting you? _____

Tell me about your drawing. _____

Drawing process:

Interested	Uninterested	Applied effort	Minimal effort
------------	--------------	----------------	----------------

Image:

resembled description	unidentifiable	nonexistent
miniscule/small on page	runs off page	centered
minimal detail	moderate detail	highly detailed
color used	no color used	text included

Behaviors:

Focused	Distracted	Needed prompts (verbal/physical)
Expressive	Flat affect	Conversational Withdrawn

Compulsiveness: _____

Other observations/notes: _____

Directive 3: “Draw a picture of something that you did today or of something that happened to you today.”

Questions:

What was happening during this situation? _____

How did that relate to how you were feeling? _____

Tell me about your drawing. _____

Drawing process:

Interested Uninterested Applied effort Minimal effort

Image:

resembled description	unidentifiable	nonexistent
miniscule/small on page	runs off page	centered
minimal detail	moderate detail	highly detailed
color used	no color used	text included

Behaviors:

Focused	Distracted	Needed prompts (verbal/physical)
Expressive	Flat affect	Conversational Withdrawn

Compulsiveness: _____

Other observations/notes: _____

Directive 4: “Draw a self-portrait, or a picture of yourself.”

Questions:

How did the situation or environment you were in affect your emotions? _____

How do you deal with your emotions? _____

Tell me about your drawing. _____

Drawing process:

Interested Uninterested Applied effort Minimal effort

Image:

resembled description	unidentifiable	nonexistent
miniscule/small on page	runs off page	centered
minimal detail	moderate detail	highly detailed

color used	no color used	text included
Behaviors:		
Focused	Distracted	Needed prompts (verbal/physical)
Expressive	Flat affect	Conversational Withdrawn
Compulsiveness: _____		
Other observations/notes: _____		

Directive 5: “Draw something that you like, or something that you like doing.”

Questions:

What is your drawing of? _____

Why do you enjoy that so much? _____

How do you feel about our session today? Did you enjoy drawing or not so much?

Is there anything you would like to add about your drawings or anything else that we talked about today? _____

Drawing process:

Interested	Uninterested	Applied effort	Minimal effort
------------	--------------	----------------	----------------

Image:

resembled description	unidentifiable	nonexistent
miniscule/small on page	runs off page	centered
minimal detail	moderate detail	highly detailed
color used	no color used	text included

Behaviors:

Focused	Distracted	Needed prompts (verbal/physical)
Expressive	Flat affect	Conversational Withdrawn

Compulsiveness: _____

Other observations/notes: _____

Concluding notes: _____

Concluding mood of child (include if stated by participant or observed): _____

Primary mode of communication: verbal sounds gestures writing

Self-stimulating behaviors: hand flapping rocking humming/vocalization
none other: _____

Eye contact: none minimal typical intense

Overall attitude toward task: indifferent negative
complaining/frustrated interested/focused unable to determine

Drawing developmental stage:

Scribbling (2-4yrs): _____ Preschematic (4-7yrs): _____

Schematic (7-9yrs): _____ Gang age (9-12yrs): _____

Pseudo-naturalistic (12-14yrs): _____ Adolescent (14-yrs.yrs): _____

Use the scale below to rate how many times in this session the client has done the following (in an appropriate way for questions 1-6):

1	2	3	4	5
Never	Once	2 or 3 Times	Several times	Constantly

- Used words to express how he feels: _____
- Used nonverbal cues (facial expression, body language, art) to express how he feels: _____ Please describe: _____
- Expressed happiness: _____ Describe verbal/nonverbal: _____
- Expressed anger/frustration: _____ Describe verbal/nonverbal: _____
- Expressed sadness: _____ Describe verbal/nonverbal: _____
- Was able to relate their emotions to an environmental factor (i.e., recognize happiness in relation to a birthday, sadness in relation to someone being mean to

them, anger in relation to having to clean his or her room): _____ Describe the connection: _____

7. When asked to follow the directions of each task he reacted with
 - a. Physical tantrum behaviors (hits, throws things, bites, etc.): _____
 - b. Verbal tantrum behaviors (yells, screams, cusses, etc.): _____
 - c. Withdrawing (becomes quiet or leaves room): _____
 - d. Staying calm and following directions: _____

Appendix N:
Session I Art Work



Drawings 1 and 2 from Session I.

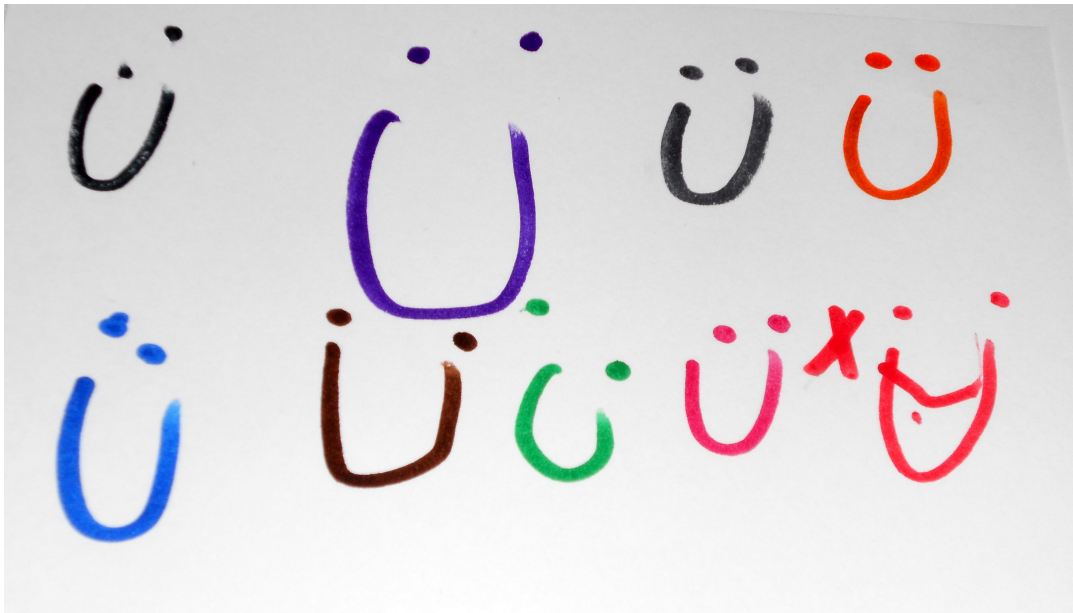


Drawings 3 and 4 from Session I.

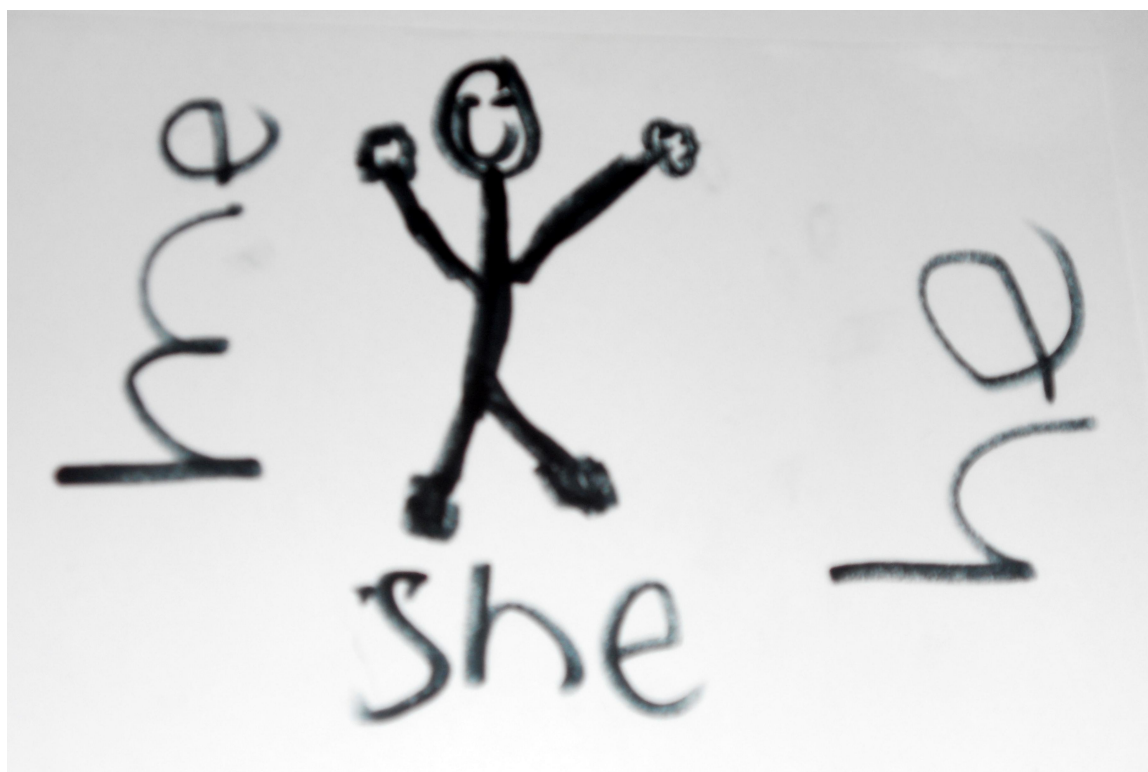


Drawing 5 from Session I.

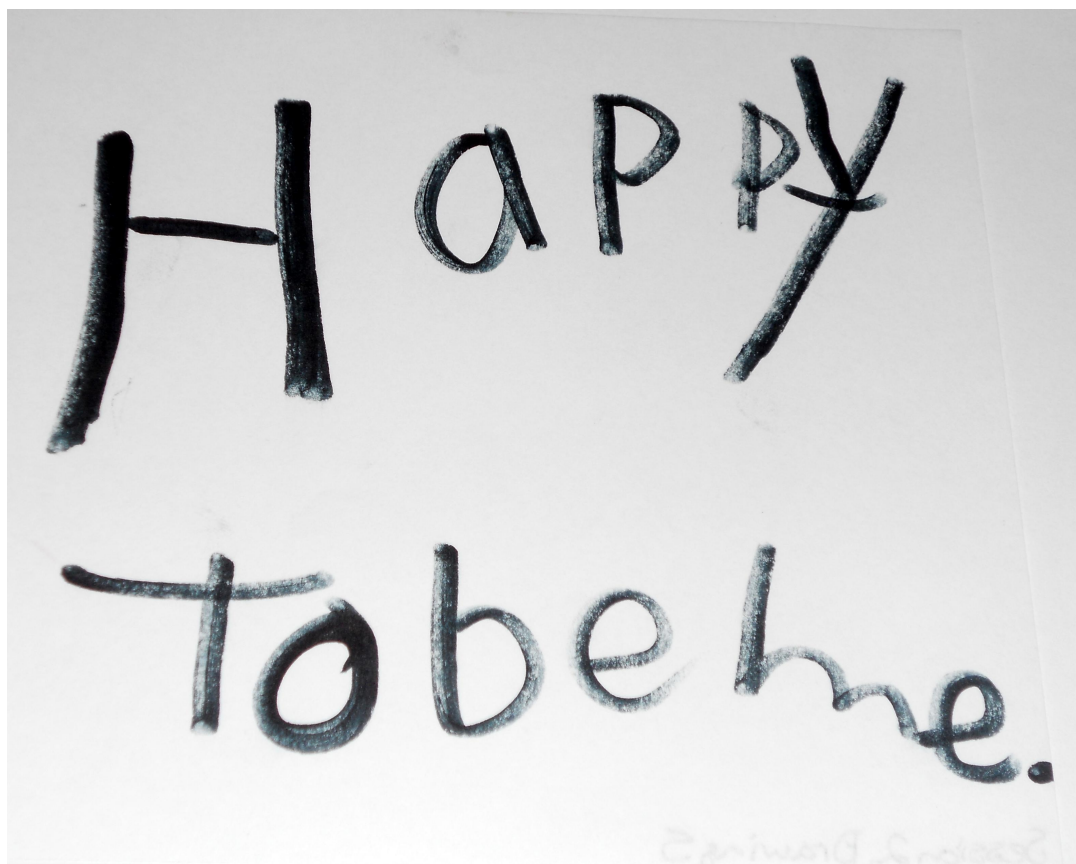
Appendix O:
Session II Art Work



Drawings 1 and 2 from Session II.



Drawings 3 and 4 from Session II.

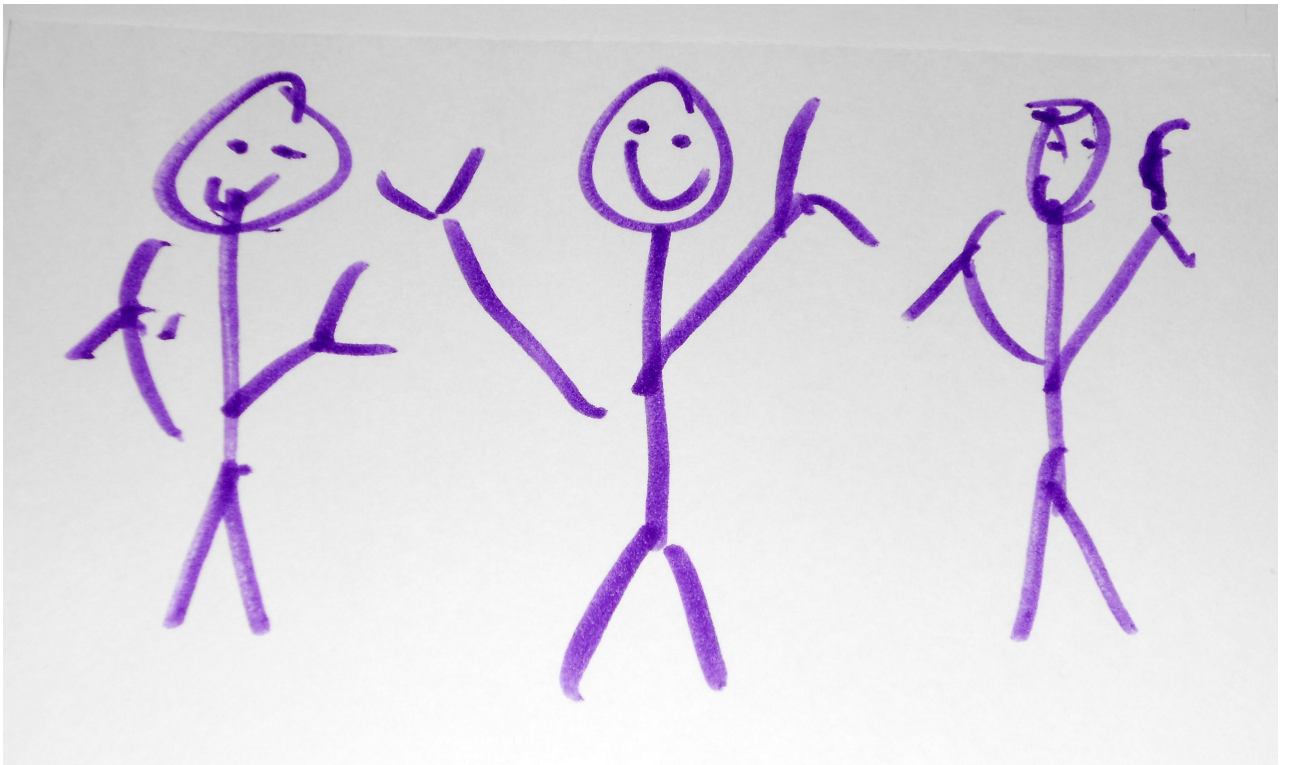


Drawing 5 from Session II.

Appendix P:
Session III Art Work



Drawings 1 and 2 from Session III.

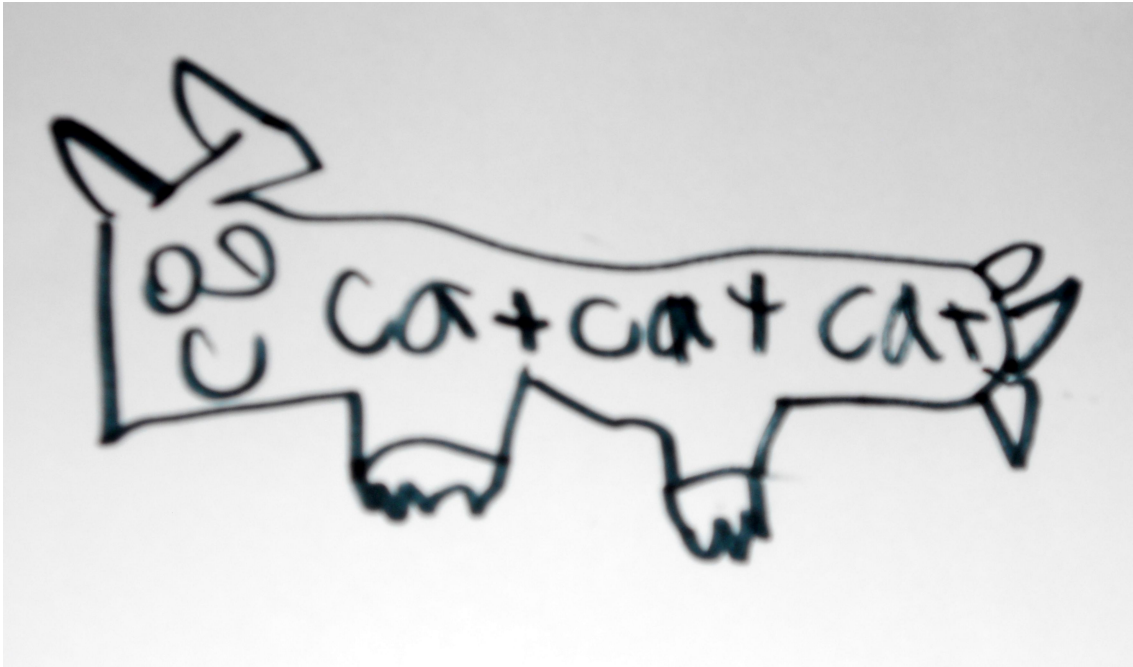


Drawings 3 and 4 from Session III.



Drawing 5 from Session III.

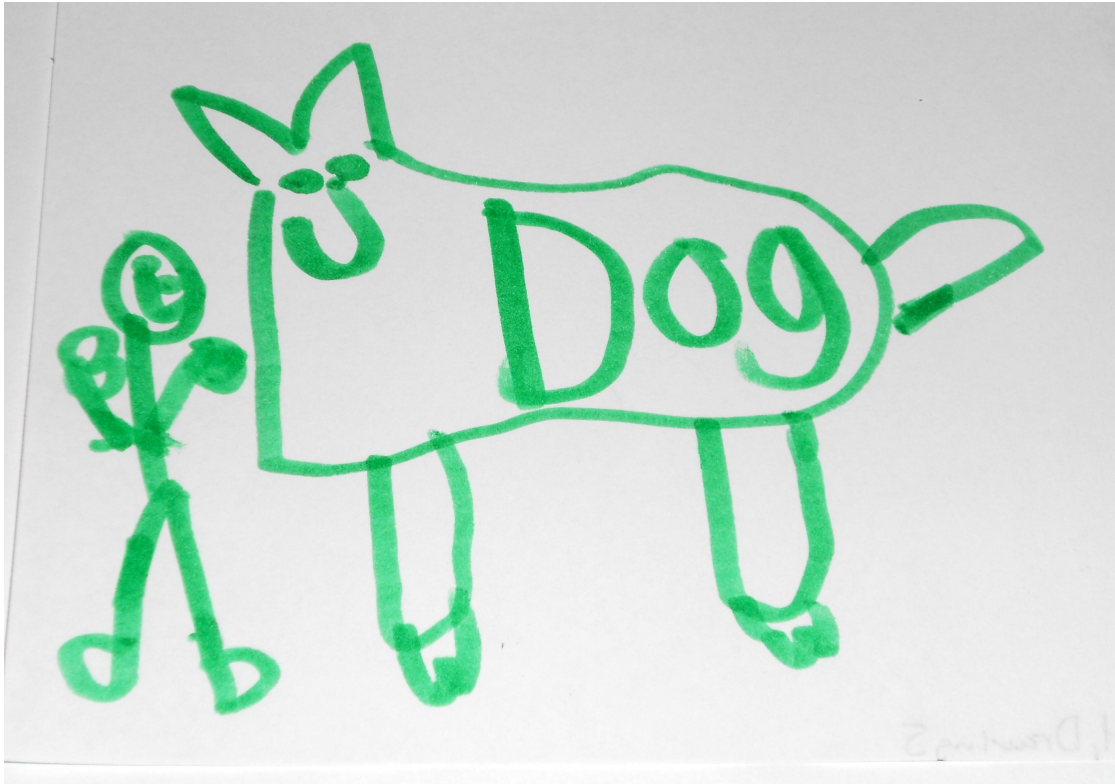
Appendix Q:
Session IV Art Work



Drawings 1 and 2 from Session IV.

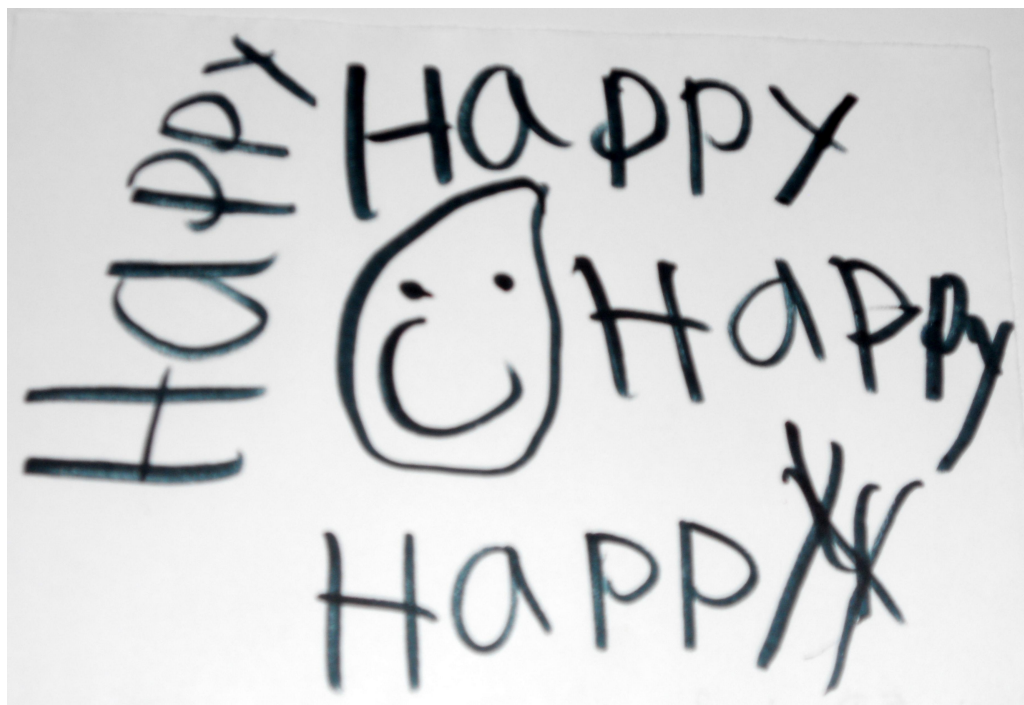
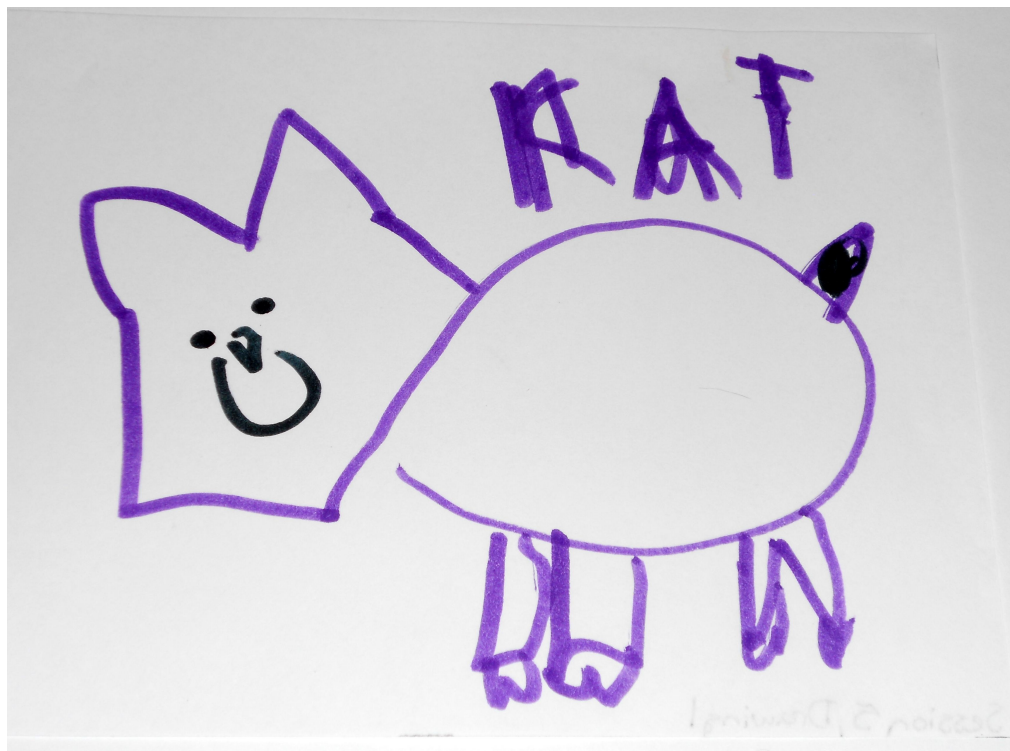


Drawings 3 and 4 from Session IV.

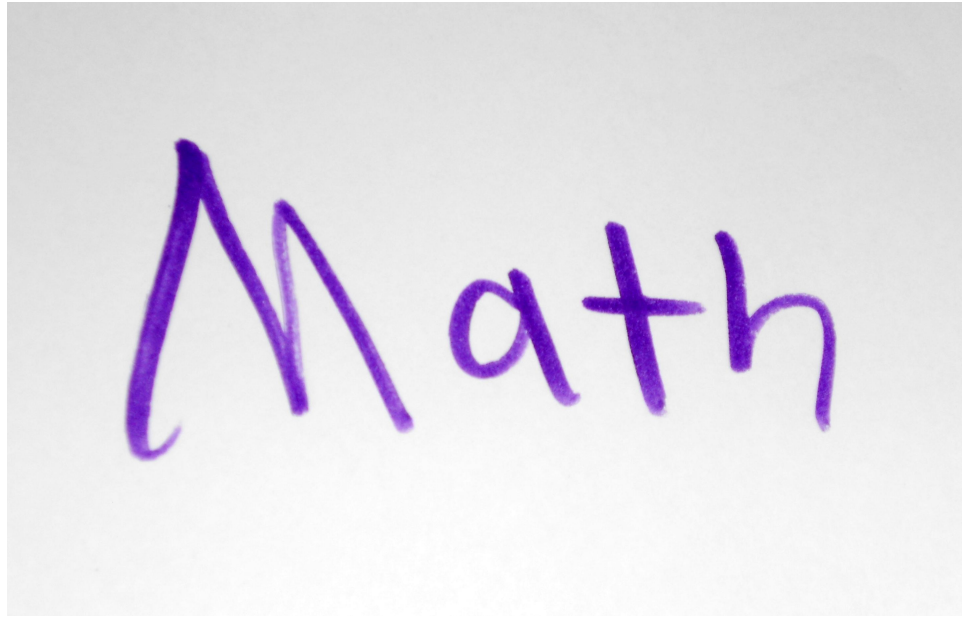


Drawing 5 from Session IV.

Appendix R:
Session V Art Work



Drawings 1 and 2 from Session V.



Math



Drawings 3 and 4 from Session V.



Drawing 5 from Session V.