

Developing Social-Emotional Reciprocity in Elementary Age Children on the Autism Spectrum
through an Art Therapy Intervention Plan

Kathryn Lee Schmidt

A Research Paper
In
The Department
Of
Creative Arts Therapies

Presented in Partial Fulfillment of the Requirements
For the Degree of Master of Arts
Concordia University
Montreal, Quebec, Canada

September 2016

© Kathryn Lee Schmidt, 2016

CONCORDIA UNIVERSITY

School of Graduate Studies

This research paper prepared

By: Kathryn Lee Schmidt

Entitled: Developing Social-Emotional Reciprocity in Elementary Age Children on the
Autism Spectrum through an Art Therapy Intervention Plan

and submitted in partial fulfillment of the requirements for the degree of

Master of Arts (Creative Arts Therapies; Art Therapy Option)

complies with the regulations of the University and meets the accepted standards with respect to
originality and quality as approved by the research advisor.

Research Advisor:

Stephen Snow, Ph.D., RDT-BCT

Department Chair:

Yehudit Silverman, MA, R-DMT, RDT

September 2016

Abstract

Developing Social-Emotional Reciprocity in Elementary Age Children on the Autism Spectrum through an Art Therapy Intervention Plan

Kathryn Lee Schmidt

With increased sophistication in diagnostic tools, children with Autism Spectrum Disorder (ASD) are getting diagnosed at earlier ages, causing a greater demand for intervention (Steever, 2011). Social-emotional reciprocity is a defining feature of ASD which can prevent the child from making deep connections and responding empathetically to others (American Psychiatric Association, 2013). Children on the Spectrum are naturally drawn to the creative arts because of their visual strengths and desire for sensory stimulation (Martin, 2009). However, current art therapy literature is lacking in specific step-by-step intervention plans to address the needs of this population. Using the steps laid out by Fraser, Richman, Galinsky and Day (2009), this paper examines current literature on ASD, child development, empathy, and art therapy in order to develop an art therapy intervention plan to increase social-emotional reciprocity in elementary aged children on the Spectrum.

Keywords: art therapy, attachment, autism spectrum disorder, children, empathy, joint attention, mirroring, special needs, social-emotional reciprocity.

Acknowledgements

I would like to express my deep gratitude to all of my teachers and supervisors who have helped guide me throughout the program. I would also like to thank all of the ladies in my cohort who provided me with endless caring and support. I would especially like to thank my big-hearted co-therapists Katya and Marissa who were always there for me day or night. Thank you to my family and to James who always made time to help me.

Table of Contents

	Page
Chapter 1: Introduction.....	1
Theoretical orientation.....	2
Definition of terms.....	2
Methodology.....	3
Chapter 2: Literature review	
Autism Spectrum Disorder.....	5
Mirror neurons	6
Attachment.....	6
Gaze and joint attention.....	6
Empathy.....	7
Social-emotional reciprocity.....	8
Theory of mind and social cognition.....	9
The Creative Arts Therapies	
Art Therapy and Autism.....	9
Art Therapy and joint attention.....	10
Art Therapy and attunement/ mirroring.....	10
Chapter 3: Considerations	
Levels of functioning	12
Stereotypies.....	12
Sensory issues and materials.....	13
Additional considerations	14
Chapter 4: Other Intervention Models	
Empathy Module.....	15
SCERTS.....	16
Responsive teaching.....	17
CBT for socioemotional understanding.....	18
Dance-movement therapy.....	19
Drama therapy social skills group.....	20

Art therapy social skills group.....	21
Interactive art therapy template.....	21
Chapter 5: Sample Art Therapy Intervention	
Therapist's role.....	22
Treatment goals.....	23
Intervention plan	23
Intervention considerations.....	30
Further recommendations.....	31
Conclusion.....	31
References.....	33

Introduction

This research paper proposes the development of an art therapy intervention to increase social-emotional reciprocity in elementary aged children (ages 5 to 12) on the Autism Spectrum. This question will be addressed through a literature review and proposing an art therapy program focusing on the aforementioned needs, using the intervention research steps as outlined by Fraser, Richman, Galinsky, and Day (2009). Autism Spectrum Disorder (ASD) currently affects 1 % of the population (American Psychiatric Association, 2013), with social-emotional deficits as a primary feature. This deficit affects the child's ability to engage in back-and-forth conversation and appropriately share their interests and emotions with others (American Psychiatric Association, 2013). This lack of joint attention and shared affect greatly diminishes the child with Autism's ability to form close and meaningful relationships. Without the ability to demonstrate empathy and social-emotional reciprocity, the child may experience loneliness and isolation and miss out on age-appropriate play and conversation with peers that would allow them to build relationships as they grow (Bauminger, 2002; Bauminger & Kasari, 2000).

People on the Autism Spectrum are generally visual learners (Volkmar & Wiesner, 2009), and are therefore frequently drawn to art therapy (Martin, 2009). It is important, then, that art therapists better equip themselves to deal with the specific needs of this population, such as deficits in socialization and restricted patterns of behaviour. Research has shown that the earlier children with Autism are referred to therapy, the better chance they have of decreasing distressing symptoms (Martin, 2009; Volkmar & Wiesner, 2009). By addressing joint attention and social-emotional deficiencies early on, art therapists have the opportunity to help children build on these skills and better socialize and interact with the world around them.

In the field of art therapy, practitioners such as Lachman-Chapin (2001), Bragge and Fenner (2009), Vick (2011), and Evans and Rutten-Saris (1998) have addressed the needs of their clients with ASD through mirroring and parallel and joint art-making between client and therapist. These art therapists have noted in their experience that making art alongside their clients furthered the therapeutic alliance (Evans & Rutten-Saris, 1998; Lachman-Chapin, 2001) and broadened the client's engagement (Bragge & Fenner, 2009). Therefore, art therapy interventions involving concurrent and reflexive art-making between art therapist and client has the potential to develop a visual back-and-forth therapeutic relationship which could promote social-emotional reciprocity.

Theoretical Orientation

The theoretical approach of this paper is generally of a psychodynamic nature, drawing upon attachment theory and its principles of attunement, mirroring, and individuation. It also integrates developmental psychology by drawing on the functional developmental levels laid out by Greenspan (2004). These tasks are achieved between infant and caregiver in the following sequence: shared attention and regulation, engagement and relating, two-way intentional communication, complex problem solving, creative representations and elaboration, and representational differentiation and emotional thinking (Greenspan, 2004). Combined together, these perspectives will guide the paper and the proposed intervention plan.

Definition of Terms

Art Therapy: The British Association of Art Therapy (2003) defines art therapy as the use of art materials for self-expression and reflection in the presence of a trained art therapist. Clients who are referred to an art therapist need not have previous experience or skill in art; the art therapist is not primarily concerned with making an aesthetic or diagnostic assessment of the client's image. The overall aim of its practitioners is to enable a client to effect change and growth on a personal level through the use of art materials in a safe and facilitating environment. (As cited in Edwards, 2014, p. 2-3).

Autism Spectrum Disorder: The American Psychiatric Association (2013) divides the symptoms of ASD into two categories: persistent deficits in social communication and interaction and "restricted, repetitive patterns of behaviour, interests, or activities" (para. 6). These symptoms must present themselves early on in the child's development and are present across multiple contexts. Under the category of social communication and social interaction, deficits can manifest as difficulties with social-emotional reciprocity, nonverbal communication, and understanding, developing, and maintaining social relationships (American Psychiatric Association, 2013). Restricted behaviours, interests, or activities can involve repetitive motor movements, insistence on sameness, fixated interests, and hyper- or hyporeactivity to sensory input. Because ASD is a spectrum disorder, the presentation of symptoms can vary vastly from person to person.

Social-emotional reciprocity: Within the context of ASD, social-emotional reciprocity is “the ability to engage with others and share thoughts and feelings” (American Psychiatric Association, 2013, para. 31).

Methodology

According to Steever (2011), “the number of children diagnosed with Autism is increasing, evidence for and acceptance of early behavioral intervention continues to grow, and yet the number of treatment providers is not sufficient to meet the need” (p. 203). There is an abundance of literature and case studies on art therapy and Autism Spectrum Disorder (Evans, 1998; Evans & Rutten-Saris, 1998; Evans & Dubowski, 2001; Gilroy, 2006; Henley, 2001; Kornreich & Schimmel, 1991; Martin, 2008; Martin & Lawrence, 2009; Martin, 2009; McGregor, 1990; Tipple, 2003), but little literature proposing specific art therapy interventions. If art therapists are to provide services on par with behavioural intervention plans and be in the number of professionals responding to the growing needs as Steever (2011) outlines above, art therapists need to develop more intervention-based approaches.

There are six phases in intervention research, according to Fraser et al. (2009). Phase one is “problem analysis and project planning” (p. 24), in which the researcher develops an understanding of their problem, then, establishes a timeline for the intervention’s development. Phase two is “information gathering and synthesis” (p. 24), where the researcher conducts a literature review and studies similar programs that were both successful and unsuccessful. This phase helps the researcher identify what has already been done so as not to replicate someone else’s work, and is also informed by the successes and failures of other programs, so the researcher can learn from them. Phase three is the design portion wherein the researcher develops their intervention method and how they will observe its effects. Phase four is “early development and pilot testing” (p. 24), and phase five is “evaluation and advanced development of the program” (p. 24). Due to the limited scope of this paper, the focus will be on analyzing the problem, conducting a literature review, examining other programs, and designing the intervention program. There will be no opportunity to test the program’s effectiveness and fine-tune it.

Data collected in this method will be literature pertaining to the topic (ASD, social-emotional reciprocity, joint attention, mirroring, and art therapy) in accordance with phase one of intervention research – problem analysis (Fraser et al., 2009). Once the literature has been

collected it will be synthesized into phase three – designing an intervention. Generally in intervention research, data is analysed in phase four, where the researcher performs a pilot study of their intervention. Qualitative data is then “aggregated from single-case or small-group studies to produce useful information that indicates in program processes are operating as intended” (Fraser et al., 2009, p. 32). Once this data is gathered, the researcher uses the findings to refine the intervention program and fix any implementation issues in order to move on to advanced development and testing. However, as mentioned above, the scope of this paper will only encompass phases one through three and data will be collected primarily through a thorough review of pertinent literature.

Fraser et al. (2009) state that intervention research “often results in two products: a detailed description of a new program or service and an evaluation of the effectiveness of that program or service” (p. 4). Because the scope of this paper does not include the evaluation of the program’s effectiveness, reliability and validity cannot be examined. In terms of ethics, this program could not be presented to any person or institution with claims of developing social-emotional reciprocity in children on the Autism Spectrum. As the authors point out: “the development of an intervention is nuanced by constant critical appraisal based on data, new theory, expert review, and practice experience” (p. 28). Since this is not possible for this paper, there is a key element missing. However, this can be remedied by encouraging other researchers to test the intervention program laid out here on a pilot group, to examine its effectiveness at a later date. Other ethical concerns relate to the bias of the researcher. Fraser et al. (2009) note that, “the researcher is deeply involved in the intervention research process, especially in specifying a program theory and developing program materials” (p. 178). This heavy involvement and investment in their own design means that the researcher must be careful not to see only positives when examining their results. The authors further outline that a successful intervention program may lead to the potential of financial benefits from selling manuals, providing training, and/ or speaking at conferences. Therefore, the researcher must take special care to collect and analyze the data “using scientific methods and to approach the process of evaluation with integrity” (p. 178).

Another ethical consideration to bear in mind when conducting research is the concept of *exitting ethics*. According to Tracy (2010) the researcher must take care to best present their findings “so as to avoid unjust or unintended consequences” (p. 847). As researchers, we do not

have complete control as to how our research will be read or used, but we still need to take care not to mislead anyone with our findings (Tracy, 2010). One way to overcome this potential short-coming is to “publish a *Legend of Cautions* that warns readers about the ways that the research analyses may be misread, misappropriated, or misused” (p. 848).

Literature Review

Autism Spectrum Disorder

Autism is a neurodevelopment disorder that has both genetic and environmental causes (Morrison, 2014). The fifth edition of the Diagnostic and Statistical Manual divides the symptoms of Autism into two categories: persistent deficits in social communication and social interaction, and restricted, repetitive patterns of behaviour, interests, or activities (American Psychiatric Association, 2013). Because Autism is a Spectrum disorder, there is a wide variety of severity within these categories. Social communication can range anywhere between mild, in which the person has difficulties starting conversations (Morrison, 2014), or severe, in which the person has no verbal skills and no apparent response to others. As Martin (2009) describes, these difficulties with social communication, including “disengagement, abruptness, lack of expressed empathy, or poor eye contact” (p. 18), can become noticeable in children as young 12 months old and persist into adulthood (American Psychiatric Association, 2013). Social-emotional reciprocity is a major roadblock for children on the Spectrum. Their lack of ability to engage with others and share their thoughts and feelings (American Psychiatric Association, 2013) make it challenging to form close, empathetic bonds with others, which has been shown to lead to loneliness and depression in higher functioning people with Autism (Bauminger, 2002).

Mirror neurons and Autism. Mirror neurons are the neurons in our brain that fire when we perform an action as well as when we observe someone else performing that same action (Keysers, 2011). Many researchers, such as Keysers (2011), postulate that this mirror neuron action is what keeps humans empathetically connected to one another. A study by Dapretto et al. (2006) demonstrated through functional Magnetic Resonance Imaging (fMRI), which measures the changes in the brain activity through recording the blood flow, that those on the Autism Spectrum lack this mirror neuron activity when imitating and observing emotional expressions of

others. Another study by Oberman, Ramachandran and Pineda (2008) confirmed that children on the Spectrum had a suppressed mirror neuron response to certain stimuli. A study by Klin, Jones, Schultz, Volkmar and Cohen (2002), in which people with Autism were shown a movie, eye-tracking software, recorded that the participants with the most social deficits spent the majority of their time looking at people's mouths and objects instead of at their eyes. Because of this lack of interest in face and eyes, Keysers (2011) postulates, the child with ASD is missing out on the "developmental associations between the child's own emotions and attentional states and the facial expressions and gaze directions of other people" (p. 164). Keysers also notes that congruent facial-muscle response (i.e. smiling when someone smiles, frowning when they frown, etc.) occurs 70% of the time for typical children, but only 35% of the time for children with Autism. These findings have important implications both on the lives of children on the Spectrum and for those who treat them.

Attachment. As established by Bowlby (1988), attaching to a caregiver is an important part of early childhood development that lays the foundation for how the child experiences future relationships. Back-and-forth attunement between infant and caregiver helps determine what form of attachment is established. Six types of attachment can occur depending on the level of attunement and responsiveness of the caregiver: fearful (of rejection), fearful (of engulfment), withdrawn, dismissive, preoccupied/ enmeshed, and standard/ secure (Harris, 2004). A secure attachment occurs when the caregiver is "consistently responsive enough" (Harris, 2004, p. 151) and helps the infant navigate future relationships in a healthy, reciprocal way. A study by Seskin et al. (2010) revealed that the majority of the children with ASD who they tested were insecurely attached. Durrani (2014) postulates that this is due to sensory dysfunction and issues self-regulating. Because people with ASD often suffer from hypo or hypersensitivity to environmental stimuli, it may hinder their "capacity to attach to caregivers and [...] from optimal communication and exchange with the environment" (Durrani, 2014, p. 100). It is important to note though, despite the fact that children with ASD do not appear to be attached to others, they still desire and need human affection and attention (Martin, 2009, p. 18).

Gaze and joint attention. In normally developing toddlers, an important milestone in communication skills is the engagement in gestures and eye contact with their primary caregiver(s) (Volkmar & Weisner, 2009). Between 6 to 12 months of age toddlers begin to engage in joint attention; that is, engaging in watching activities with their caregivers (Bakeman

& Adamson, 1984; Leekam & Moore, 2001). When presented with a novel stimulus, the toddler or child will turn to look at their caregiver to judge his/ her reaction, then turn back to re-view the stimulus (Volkmar & Weisner, 2009). In this way, the child is learning how to react emotionally to different situations (Wolff, 1987), to exchange and convey *affective signals* (Mundy, 1995), and to experience sharing (Rheingold, Hay, & West, 1976). In infants, this behaviour can be seen in joint smiling between the infant and their caregiver. However, with infants, toddlers and children on the Autism Spectrum, this joint affect sharing is largely absent (Mundy, 1995). In a study on affective exchanges between young autistic children and their mothers, Dawson, Hill, Spencer, Galpert and Watson (1990) discovered that children with Autism were much less likely to smile in response to their mother's smiles when compared to normal children. And in response to this behaviour, mothers became less likely to continue smiling at their infants (Dawson et al., 1990). Volkmar and Weiser (2009) note that toddlers with Autism may point to something they want, but usually no eye contact with the caregiver is present. The child with Autism is also unlikely to follow if their caregiver points to something.

Empathy. To return again to normally developing toddlers, Hoffman (2007) theorizes that empathy develops when the toddler gains a sense of others being separate from him/ herself. He says that there are three preverbal modes of empathic arousal: mimicry, conditioning, and association, which are involuntary and quick responses that “enable infants and preverbal children to empathize with others in distress” (p. 134). As toddlers are able to pair their own feelings of distress with the viewing of another in distress, they begin to have a “reciprocal feeling of concern for the victim” (p. 142) driven by how they presume the other is feeling, which motivates them toward trying to comfort themselves by trying to help the other.

Hobson (2007) states that this capacity for “insight into self, other, and symbol” (p. 423) is largely lacking in those with early childhood Autism. Furthermore, these children lack the interest in other people's expressive bodily actions that help normative developing toddlers and children develop an “understanding of self and other, which affects how they relate to others” (p. 426). At 24 months, toddlers are very interested in the feeling states of others, asking questions and reacting to affection, happiness, distress, and tiredness in their caregivers. This simultaneously helps them develop emotional understanding, emotional role taking, self-regulation, and self-reflective awareness (Hobson, 2007).

As mentioned in the previous section, toddlers with ASD show a lack of interest in looking at others as well as a lack of response to others' affective states (Hobson, 2007). A study by Sigman, Kasari, Kwon, and Yirmiya (1992) tested responses to negative emotions in normally developing toddlers and those with ASD. In this study the researchers mimed hurting themselves, being afraid of a toy, and huddling on a couch for comfort. Fewer than half of the 30 children with Autism even looked at the researcher. Those who did look over made a brief glance then went back to playing with toys. Hobson (2007) concludes that this is evidence that "children with Autism are relatively unengaged not only in one-to-one interpersonal-affective transactions, but also with another person's emotional attitudes toward objects and events in the world" (p. 432). Without being sensitive and responsive to the emotional states of those around oneself, it is difficult to make an appropriate emotional response and interaction. In order to develop empathy, one must connect with another person and become aware and engaged with what they are expressing with their body (Hobson, 2007). This lack of *primary intersubjectivity*, says Hobson, affects children with Autism's ability to take on another's perspective and develop important concepts of mind such as understanding belief, desire, and intention in another person.

Social-emotional reciprocity. The Diagnostic and Statistical Manual of Mental Disorders, 5th Edition (American Psychiatric Association, 2013) states that people with Autism are lacking in their "ability to engage with others and share thoughts and feelings"(para. 31), (i.e. social-emotional reciprocity). In children this is observable through the child's lack of interest in imitating others, sharing emotions and experiences, and initiating social interactions (American Psychiatric Association, 2013).

According to the model of emotional socialization put forth by Denham (1998), families affect their child's emotional development in three ways: through modelling, through their own reactions, and through coaching. These three factors combine together to help the child understand emotions and express them, which in turn leads to social competence and emotional regulation (Denham, 1998). In children with Autism, who have deficits in their "ability to engage with others and share their thoughts and feelings" (American Psychiatric Association, 2013, para. 31), this ability to learn social-emotional reciprocity from caregivers is greatly hindered. Since many infants with Autism lack social smiling and joint attention, this could in turn affect the social-emotional reciprocity deficits we see emerging in these children (Charman, 2003). Joint attention has also been associated with both language development (Mundy,

Sigman & Kasari, 1990) as well as social and peer group behaviour (Sigman & Ruskin, 1999; Stone & Yoder, 2001). This theory has made joint attention behaviours key targets for early intervention programs using a psycho-educational approach (Charman, 2003). If therapists can address these deficits in joint attention, it may lead to an improvement in social-emotional reciprocity.

Theory of mind/ social cognition. According to Baron-Cohen (2011), people with ASD are “delayed in developing a *theory of mind*: the ability to put oneself into someone else’s shoes and to imagine their thoughts and feelings” (p. 40). This lack of theory of mind, according to Baron-Cohen, leaves people in a state of *mindblindness* wherein they are unable to imagine why a person made a particular social choice and subsequently cannot predict what they will do next. This ability to mind read is an important aspect of empathy. But, Baron-Cohen says, true empathy also requires that the person react to another’s emotions (i.e. affective empathy), with which people on the Spectrum also have difficulty. Bauminger (2002) refers to this as social cognition, i.e. “the child’s ability to spontaneously read and correctly interpret verbal and nonverbal social and emotional cues [...] and the ability to make an adequate attribution about another person’s mental state” (p. 284). He further states that if children on the Spectrum are to develop social-emotional skills, they need to learn how to “distinguish the various affective expressions in facial, gestural, and verbal displays, in oneself and others, and to understand their social-contextual meanings” (p. 284). Psychoeducation in affective expressions, therefore, is an important part of treating those on the Spectrum.

The Creative Arts Therapies

Art therapy and Autism. According to the author of *Art Therapy, Research and Evidence-based Practice*, there is much literature documenting the effectiveness of art therapy with children and adolescents on the Autism Spectrum (Gilroy, 2006). Martin (2008) says that children on the Spectrum are “very visually oriented and have a strong need for sensory input” (p. 16). Gabriels (2003) concurs saying that the different art media and tools engages this population and uses their visual-spatial strengths. After engaging the child, the art therapist can then begin to address therapeutic goals such as social skill development (Gabriels, 2003). Gabriels and Gaffey (2012) add that through the use of art materials and “attunement of the art therapist and the child’s own sensory experience, autistic children can also improve their

imitation skills, motor skills, and coordination. These skills can further bolster emotional awareness and understanding, emotional regulation, and social skills” (p. 207).

Art therapy and joint attention. According to Tiegerman and Primavera (1984), “the therapeutic environment provides essential learning experiences that have not been identified in the natural environment” (p. 29). They contend that gaze interaction between client and clinician is necessary if any learning is to take place. Therefore, in order to address this deficit in communicative gaze behaviour, Tiegerman and Primavera designed a study for children ages 4 to 6 with severe Autism that involved mirroring object manipulation. They discovered that by sitting across from the child and manipulating the same toy in the same fashion as the child, the child’s gaze behaviour increased.

Art therapy, through the use of the image and art-making, has the potential to address the need for joint attention repair. According to Isserow (2008), “the act of looking together at the object is of vital importance for art therapy as it joins up the vertices of the triangle between patient, image, and therapist, enabling the structure of the art therapeutic relationship” (p. 34). Mutual gazing, says Holmes (1993), establishes attachment and provides an avenue to share affect. Hobson (2002) notes that avoidant eye contact is a high indicator of childhood Autism and that their central difficulty is their “capacity for reciprocal, affective relatedness with others” (p. 258). Without joint attention, the child is missing out on how other people relate to the world (Hobson, 2002) and therefore has difficulties putting themselves in another’s shoes (Isserow, 2008). Citing two case studies, Isserow (2008) highlights the importance of art therapists establishing joint attention if they wish to develop the client’s ability to share affect with the therapist.

Art therapy and attunement/ mirroring. In order to address deficits in shared attention and affect, many art therapists have turned to a more interactive approach to art therapy in which the therapist attunes to the client through physical mirroring or through making their own art (Bragge & Fenner, 2009; Evans & Rutten-Saris, 1998; Gabriels & Gaffey, 2012; Gilroy, 2006; Vick, 2009). Using the research on *vitality affects* put forth by Stern (1985), Evans and Rutten-Saris (1998) developed a type of mirroring and joint art-making in order to engage non-verbal children on the Spectrum. Stern (1985) postulates that each child has a way of processing and acting on sensory information that begins in infancy. Evans and Rutten-Saris (1998), Evans and Dubowski (2001) and Gilroy (2006) elaborate on Stern’s theory by contending that this vitality

affect can be attuned to by the therapist non-verbally, such as through movement and breath which mimics the care received in early infancy. Through micro-analysis, the therapist can pick up on small movements of the child, then once they feel comfortable they can reflect back these attuned movements in a more exaggerated manner. Once this attunement is in place, the atmosphere will become more relaxed over time “leading to possibilities for interaction such as *turn taking* – ‘You draw something, I draw something’ – with can lead to *exchange*” (Evans & Dubowski, 2001, p. 76). After the experience of having been *moved-with* the client, the therapist can then start adding new elements to the relationship such as art-making; eventually giving directives and themes the child can explore (Evans & Rutten-Saris, 1998).

A case study by Durrani (2014) with a 12-year-old boy with Autism and sensory issues revealed a similar process. Durrani noted that in order to build rapport and engage her client in art-making, she had to first make art in front of him. In this way, the art therapist modelled how to use art materials and create an atmosphere of predictability and safety. After several sessions of observation, the child finally felt comfortable enough to come closer to the art therapist and eventually engage with the materials. At this point the therapist moved toward mirroring, following the child’s body rhythm, movement, and use of art materials. Sometimes client and therapist made art side-by-side and sometimes on the same paper; always following the child’s lead. Like Evans and Rutten-Saris (1998), Durrani (2014) also refers to this process as similar to one between mother and infant - “an attempt to attune to [the child’s] body language and emotional state” (p. 105).

In their research, Bragge and Fenner (2009) specifically lay out an approach for art-making between client and therapist, which they term the *interactive square*. The interactive square builds upon Schavieren’s concept of the triangular relationship that occurs in art therapy between the client, the client’s artwork, and the art therapist (2000). Within the triangle, different emphasis is placed on different aspects of the triangle as the session unfolds (Schaverien, 2000). Using this concept, Bragge and Fenner (2009) add in a fourth element of the art therapist’s art, making the triangle turn into a square. In the interactive square approach, the therapist and the therapist’s art both become an integral piece in interacting with the child with Autism and their art. Using this approach with two clients with Autism “encouraged interaction and alternative forms of communication against autistic withdrawal” (Bragge & Fenner, 2009, p. 26). They argue that through this method they were able to broaden the client’s engagement and provide a

safer, non-verbal means of communicating through the artworks. Like the researchers mentioned above, Bragge and Fenner also began their sessions through mirroring the client's movements and art materials and slowly guided them past fixated activities. In order to help each child, the therapist must first meet her/ him where s/he is at and mimic early infancy attunement. Before children can learn to symbolize, the therapist must go back to an earlier developmental milestone to fill in what might have been missed.

Autism and Therapy: Additional Considerations

Levels of Functioning

Because Autism is a Spectrum Disorder, each client a therapist meets with has a different level of functioning. Different adaptations will have to be made depending on whether the client is high-functioning or low-functioning. The DSM-V has divided these levels of functioning into three levels: requiring support, requiring substantial support, and requiring very substantial support (American Psychiatric Association, 2013). In level one, the person is able to speak in full sentences, but has difficulties with back and forth conversations, and needs support. In level two, there is a "limited initiation of social interactions and reduced or abnormal responses to overtures from others" (American Psychiatric Association, 2013, table 2, para. 1) and even with supports, these social impairments will still be visible. These individuals speak in simple sentences and have limited interests. In level three the person has severe verbal and nonverbal deficits, resulting in limited social initiation and response. These individuals often only know a few words and speak unintelligibly (American Psychiatric Association, 2013). The art therapist, therefore, must adjust his/ her style depending upon the level of functioning each individual client presents with. For children who are completely nonverbal, for example, the therapist will have to adjust his/ her way of speaking and add visual aides if necessary (see *Additional Considerations*).

Stereotypies

In addition to "persistent deficits in social communication and social interaction" (American Psychology Association, 2013, para. 1), the other defining marker of ASD is the "restricted, repetitive patterns of behaviour, interests, or activities" (para. 6), also known as stereotypies. These can include an intense focus on one topic of interest such as trains or a particular video game; an insistence on sameness and routine; repetitive motor movements or

speech such as watching objects spin or repeating a phrase over and over; hyper- or hypo-reactivity to sensory inputs, such as the desire to smell hair or the inability to touch clay (American Psychology Association, 2013). Although these behaviours are not the focus of this paper or of the intervention, they are nonetheless important to consider when working with a client on the Spectrum. An intense interest in a particular subject can be quite useful for the art therapist. Temple Grandin (1996) wrote in her autobiography that educators should watch what the child enjoys then “take that involvement and divert them into other channels” (p. 149). *The Child Psychotherapy Treatment Planner* (Jongsma, Peterson, & McInnis, 2003) also advises as a treatment intervention for children with autism to “channel strengths or areas of interest into a positive, constructive activity” (p. 89). Specifically they recommend “redirect[ing] the client’s preoccupation with a single object or restricted area of interest to turn it into a productive activity” (p. 89).

Sensory Issues and Materials

Another important consideration when working with those on the Spectrum is the issue of hyper- and hypo- sensitivity. Many people with Autism have difficulty filtering sensory input, which can result in either over or under stimulation of the senses (Martin, 2009). Some children may be drawn to fuzzy textures and enjoy spending the art therapy session finding and touching anything fuzzy in the room. Other children may be completely overwhelmed by the smell of paint that they scream and run out of the room. Martin (2009) recommends overcoming this hurdle by using Lusebrink’s (1990) continuum for rigid and fluid materials. Lusebrink (1990) recommends laying out a variety of materials ranging from rigid (i.e. pencil crayons) to fluid (i.e. finger paint) and see what the person is drawn to. Martin (2009) cautions, however, that “often a child will be drawn to materials that match, rather than soothe, their current sensory state, and allowing too much of this can be like putting fuel on the fire and increase their dysregulation” (p. 71). Therefore, it is the art therapist’s job to watch what the child chooses and to monitor how they interact with it. If an agitated child comes into the room and chooses finger paint and begins smearing it against the wall and running around, then the material is causing further dysregulation and the materials and/ or activity need to be modified. If an agitated child chooses paint and gets engrossed by the sensory and kinaesthetic experience and begins calming down, then that was an appropriate choice for sensory regulation. It is also advisable to work with an occupational therapist if the child continues to have sensory regulation difficulties. The same

principle can be applied when deciding how much art material to put out for a client. According to Martinovich (2006), the least intimidating way to foster creativity and expression in clients is to put out a wide variety of materials to choose from. Rubin (2005) also advocates making the most commonly used materials visible at all times to “enhance the likelihood that patients will use them spontaneously” (p. 39). Wadeson (1995) points out that the open studio method does not work for every individual and the type of material and size of paper should all be taken into account depending on the person. This is especially important for children who have issues with their sensory input and self-regulation (Martin, 2009). Again, Martin (2009) advocates for close observation of the child and to “experiment and compromise” (p. 73). If they appear to be overwhelmed by the presence of a stack of paper, change your approach next session (2009); it is all part of the experimentation process.

Additional Considerations when Working with this Population

A common occurrence in those with developmental disabilities is learned helplessness, which can occur when a caregiver continues to provide the person with assistance even when s/he no longer needs it (Koegel, Koegel, Ashbaugh, & Bradshaw, 2014). This can cause the person with disabilities to be dependent on the help of others and decide that they do not have the ability to try new things, take risks or learn new skills (Goody, 2012). This pattern of interaction is often repeated within the art therapy room where the therapist may rush in and take over the art-making process for the client. But as Aach-Feldman and Kunkle-Miller (2001) note, “even severely and profoundly impaired individuals desire some level of independent functioning, so promotion of autonomy is important” (p. 234). It will take some prompting and encouragement by the therapist to help the client overcome feelings of helplessness, inadequacy, and low self-esteem. The art room can be a place that facilitates opportunities for choice and “provides a sense of mastery and control over media and outcome” (Wilson, 2012, p. 265) which sets the stage for autonomy outside of the art room.

Another common occurrence when working with those on the Spectrum can be acts of aggression toward self or others in the room (Martin, 2009; Volkmar & Weisner, 2009). When faced with aggressive acts, is important to remain “as calm and collected as possible rather than inadvertently contributing to further escalation” (Volkmar & Weisner, 2009, p. 379). It is important for the therapist to protect themselves, their clients and their property, and clients should be informed that violence and threats are never allowed in the art therapy room (Hanna,

Hanna & Keys, 1999; Nissimov-Nahum, 2008). By presenting firm boundaries, the therapist acts as an auxiliary super ego and strengthens the client's ability for self-control (Hagood, 2000). In therapy and in life children need clear definitions of which behaviours are acceptable and which are not (Ginott, 1979). When faced with aggression, it may be necessary to restrain the child or remove them from the room, or remove yourself from the room in instances of extreme threats to one's safety (Martin, 2009). Eventually the client can be taught to direct their emotions into symbolic channels of art-making (Ginott, 1976). Therapists may want to consider a more behavioural approach when working with difficult clients by offering rewards for desirable behaviours.

A final consideration is visual adaptations. Less verbal and/ or more disorganized children may need visual prompts to keep them on track. Having a visual schedule around the room and visual symbols on the outside of materials can increase communication and expectations to the child. This can also decrease feelings of anxiety the child may have and encourage more independent work (Martin, 2009). The Picture Exchange Communication System (PECS) can also be implemented in those with no or limited verbal abilities (Bondy & Frost, 1994). It is important to note that these adaptations are not necessary for higher functioning children and may in fact hinder their learning and encourage learned helplessness.

Other Intervention Models

Empathy Module

In his book, *Emotional Regulation in Children and Adolescents*, Southam-Gerow (2013) lays out a module for increasing empathy skills in normative developing children. He recommends using this module in therapy with any child who has difficulties with empathy such as understanding another's perspective. The objectives of the module are "1. Recognizing others feelings by using emotional cues 2. Understanding others' feelings (walking in their shoes) 3. Feeling others feelings (sharing the emotion), and 4. Separating from others' feelings in order to help" (Southam-Gerow, 2013, p. 141).

In step one, recognizing emotions in others, children are taught to identify external and situational cues through the use of games (e.g. *Feelings Jeopardy*, and *Triple Deck Feelings Detective Game*). The therapist takes on the role of game show host and introduces the child to various scenarios and guides them through appropriate decision making. Step two, appreciating

and sharing others' feelings, builds upon what was learnt in the previous step by helping the child to really feel and understand what another person may be feeling. Games such as *Emotional Idol* and *Take One, Take Two* are played with the child, again presenting scenarios and helping expand the child's emotional knowledge. These games are more interactive, and the therapist (still acting as game show host) has the child act out the role of contestant to really embody what the people in the scenarios are experiencing. Step three, separating from others' emotions in order to help, is the "last step in the development of empathy" (Southam-Gerow, 2013, p. 151). In this step, clients are taught why separation is important and the pros and cons of empathy through a Call-in Radio Show game. As host and caller, the therapist and client continue to go through scenarios, but this time with an emphasis on what the bystander can do to help.

SCERTS Model

The SCERTS model was developed in 2003 by Prizant, Wetherby, Rubin, and Laurent, and it is a "transactional, family-centred approach to enhancing communication and socioemotional abilities of children with Autism Spectrum Disorder" (p. 296). One of its primary goals is to facilitate social communication by both enhancing the child's capacities for joint attention and symbol use. Joint attention is broken down into the sub-goals of "1. Expression of communicative intent, 2. Expand range of communicative functions, 3. Enhance social reciprocity (rate of communication, repair, persistence), and 4. Enhance communicative gaze, sharing of emotional states" (Prizant et al., 2003, p. 299). The sub-goals of symbol use are to "1. Move the child to conventional means of communication, 2. Move to symbolic communication and play, 3. Move from echolalia to creative language, and 4. Enhance language and symbolic comprehension" (p. 299). Prizant et al. (2003) write:

An essential component of the SCERTS Model is to profile a child's strengths and weaknesses in abilities related to the capacity for joint attention, by documenting abilities to express a range of intentions, to engage in reciprocal interactions and shared activities with adults and peers, and to use social-affective signals such as gaze shifting for social referencing and affect sharing. (p. 302).

In order to achieve these goals, Prizant et al. (2003) lay out some sample social communication goals in table two (p. 303) that address goals for joint attention and symbol use at the prelinguistic, emerging language, and advanced language levels. Some goals of note in the

joint attention category are: establishing shared affect through smiling and looking, and expanding the “range of communicative functions to include more social purposes,” (Prizant et al., 2003, p. 303), increase reciprocity through turn-taking, and “facilitate awareness of another’s intentions, preferences, and experiences” (p. 303).

The Transaction Support aspect of the SCERTS model involves identifying and providing support in the domains of interpersonal, education/ learning, and in the family. This can involve finding a partner for the child with ASD to practice their skills with, designing and implementing visual aides in the child’s school, and providing the family with psychoeducational information. The idea behind this is to help the child gain confidence and ease with communicating in different settings, so that they do not lose their motivation to continue engaging in social-emotional activities, and so that they can gain feelings of efficacy and continue to practice.

Responsive Teaching

Mahoney and Perales (2003) developed an intervention called *Responsive Teaching* in order to promote social-emotional functioning in children with ASD. This intervention is termed *Relationship Focused* because the emphasis is on “maternal responsiveness” (p. 78) to the child. The underlying assumption for this intervention is that parents’ responsiveness to their child “underlies developmental and social-emotional functioning” (p. 78). Therefore *Responsive Teaching* teaches parents how to use responsive interaction strategies in everyday situations with their child with ASD. Based on extensive literature, Mahoney and Perales developed 19 *pivotal intervention objectives* which are developmental domains shown to be influenced by maternal responsiveness and organized them under the categories of Cognition, Communication, Social-Emotional Functioning and Motivation. Under Cognition are the sub-goals of: social play, initiation, exploration/ manipulation, problem solving, and practice. Under Communication are: joint activity, joint attention, vocalization, intentional communication, and conversation. For social-emotional development there is a focus on trust/ attachment, empathy/ intersubjectivity, cooperation, and self-regulation. And in the final category of motivation there is interest, persistence, enjoyment, feelings of competence, and feelings of control.

According to Mahoney and Perales (2003), Responsive Teaching is a “holistic intervention” (p. 79) that begins by identifying each child’s individual developmental needs. If one area of concern has been identified for a child (such as communication), the other categories are still addressed (cognition, social-emotional functioning, and motivation) in the intervention

plan. Based on the intervention topics, the parents are taught *Responsive Teaching Strategies* of reciprocity, contingency, control, affect, and match which was then developed into a Family Action Plan to increase responsive parental interactions (p. 80). The results of the study with 20 families over a yearlong intervention indicated a substantial increase in parental responsiveness and the child's socio-emotional functioning. At the end of the study the children had higher social competence scores and fewer issues with self-regulation.

Although this was a one-time study with a small sample size and relies upon substantial family involvement, it is nonetheless important. It helps provide a foundation for other practitioners to build upon by providing developmental goals.

Cognitive Behavioural Therapy for Social-Emotional Understanding

A study by Bauminger (2002) examined a 7-month long Cognitive Behavioural Therapy (CBT) intervention for children aged 8 to 17 with high-functioning ASD to increase social-emotional understanding. Unlike the previous intervention, which focused on the relationship as the primary agent of change, this CBT intervention focused on observable measures of social interaction such as eye contact. It is important to note again that these children were diagnosed as being high-functioning and therefore, already, have a certain level of cognitive development and understanding in order to engage in this intervention. The motivation behind creating this intervention is that children, adolescents, and adults with high-functioning Autism are prone to feelings of loneliness and depression due to a lack of friendships, but lack the social and emotional understanding to properly interact with their peers (Bauminger, 2002; Bauminger & Kasari, 2000; Hobson, 1993; Wing, 1992). The assumptions of the researcher were that social problem solving and emotional recognition are teachable behaviours which can influence the individual's behaviour, which can further lead to better social adjustment. Therefore, the goals of this intervention were to "promote both children's social cognition (including emotional understanding) and social interaction with peers" (Bauminger, 2002, p. 286).

Training in both social-interpersonal problem solving and affective education were taught throughout the seven-month intervention. The children were taught how to read body posture, facial expressions, feelings, sensations, and how this could help them anticipate how others were feelings. Emotional recognition in themselves and others was also taught as was how this affects the social situation. Like the Responsive Teaching method above (Bauminger, 2002), this intervention was a collaborative effort that involved parents and teachers being made aware of

the goals and methodology so they could continue the work in multiple settings. The participant was required to work on their curriculum three hours a week with their teacher, then practice further with a peer. The results of the study demonstrated an improvement in emotional understanding, social cognition, and social interaction. More specifically, the children were able to increase their level of eye contact and share topics/ experiences with a peer.

The author of the *Practitioner Review: Psychological and Education Treatments for Autism*, Patricia Howlin (1998) has doubts about methods that seek to outwardly teach social skills. The author writes:

It is dealing with more complex and subtle social deficits that presents much more of a challenge. Knowing how to make friends, recognizing what other people are feeling or thinking, and reacting appropriately, are fundamental human aptitudes; they are not rule-based skills that are acquired through teaching. Thus, interventions designed to overcome such basic deficits are almost certain to be limited in their effectiveness. (p. 315).

Dance Movement Therapy

An intervention designed by Behrends, Muller, and Dziobek (2012) outlined a 10-week dance movement therapy group that focused on increasing empathy in adults with ASD. The assumption the authors made is that (kinaesthetic) empathy can be fostered through reciprocal body/movement interactions. They “hypothesize that the practice of coordinative movement tasks for people with empathy deficits in a group setting has the potential to improve individual expressive variation of movement, empathic abilities and general psychological wellbeing” (p. 114). The authors identified three empathy-fostering dimensions: Perception, Expression, and Interaction, which were the focus of their intervention. To address perception in oneself and others, the participants were introduced to observation and interaction tasks with other participants. To promote expression and creativity, variations in walking and contrasting movements, and creating small choreographies, were introduced to the group. Interaction was divided up into three subcategories of imitation, synchronous movement, and motoric cooperation. These were addressed through imitation and mirroring of partners’ and group’s movements, leading and following tasks, and creating a joint choreography.

A similar dance movement template for children with ASD was designed by Martin (2014). Phase one of the intervention involves establishing safety and regulation, and assessing

and addressing each child's level of functioning. After this has been established, Martin suggests moving on to Phase two: building connection and encouraging engagement. Like in Behrends et al.'s (2012) intervention, this is achieved through mirroring. By "literally embodying the exact shape, form, movement qualities, and feeling tone" (Martin, 2014, p. 549) the dance movement therapist can potentially activate the child's mirror neuron system and increase social interaction, attunement, and empathy. In Phase three the children learn body awareness and motor coordination. The theory behind this being that a sense of self can help the child relate better to others and their environment (i.e. a theory of body). Phase four: rhythm and timing, seeks to bring the child into sync with "typical daily rhythms" (p. 550) of others in order to potentially address emotional regulation, and relatedness. Martin suggests any "games that provide a back-and-forth motion or turn-taking, such as rolling a ball between therapist and client, might also be used to encourage the rhythmic, back-and-forth nature of communication" (p. 551).

Drama Therapy Social Skills Group

A 21-week study was conducted at the Centre for Arts in Human Development in Montreal in order to test the effectiveness of drama therapy in teaching social skills to children with ASD (D'Amico, LaLonde, & Snow, 2015). The researchers define social skills as behaviours such as "getting acquainted, making friends, engaging in conversation, developing empathy and self-regulation skills, as well as conflict management" (D'Amico et al., 2015, p. 23; Cappadocia & Weiss, 2011). D'Amico et al. (2015) propose that through the use of role-play and projection, the children receive an opportunity to "better understand social narratives that arise from interactions with others" (p. 25). The study consisted of six children, aged 10-12 with high-functioning ASDs, who were noted to have social skill difficulties. The group met once a week for 21 weeks and focused on "communication, cooperation, assertion, responsibility, empathy, [and] engagement" (p. 30). Although the exact steps of the intervention are not laid out, the researchers give some examples of activities such as improvisation and projection techniques to increase their social skills. Children were also guided through activities to increase cooperation and cohesion among the group by developing and embodying different persona. The characters were developed further and engaged in "improvised scenes of conflicts" in order to increase problem-solving, empathy, and communication skills (p. 31). Post-tests administered after the intervention did not show any statistically significant improvements within the realm of empathy, but the participants did show marked decreases in hyperactivity and inattention.

Art Therapy Social Skills Group

In her research paper, Lasry (2010) designed an intervention to help children with Autism better integrate into the school system. Based on the writings of Riley (2001), Lasry created and implemented a group art therapy intervention “in the form of social skills training [to] help children with Autism learn the appropriate skills such as self-awareness and empathy, thus facilitating successful, everyday interactions” (p. 1). Lasry further notes that the ability to empathize is an important part of social interactions, but is often lacking in those with Autism. Therefore, the goals for her art therapy group were to increase the child’s self-awareness and awareness of others.

Lasry’s (2010) intervention consisted of a 20-week art therapy program for children ages 7 to 12 with high-functioning Autism. The first ten weeks were individual art therapy sessions in order to help the child become acquainted with the art therapist and the art therapy process, and for the remaining ten weeks the children were integrated into a group. In individual sessions, the activities appear to be related to emotional and self-awareness and involve making a collage of one’s favourite things, draw one’s individual strengths, selecting a collage face and telling a story surrounding the emotion depicted, body tracing, self-portrait, and portrait of the art therapist. The group portion of the intervention continues its focus on emotions, but moves more in the direction of awareness of others. Activities include portrait drawing of another group member, mask-making, puppet-making, story/comic strip response to a problem and possible solutions. The final session was a party for the group. Each session involved a beginning ritual, a brief discussion period, and an ending ritual. There were no scales administered to test the effectiveness of the intervention.

Developing an Interactive Art Therapy Template

Within the realm of Art Therapy literature, there has yet to be written an intervention that specifically addresses empathy or social-emotional reciprocity. However, in chapter eight of their book, *Art Therapy with Children on the Autistic Spectrum*, Evans and Dubowski (2001) outline how to develop a template to apply to one’s art therapy sessions. According to the authors, the first session should be where the art therapist observes and later analyzes social interaction and behaviour sequences. This close observation, perhaps aided with a video camera, can provide a “reliable guide to the ensuing therapy from which it is then possible to assess and monitor progress” (p. 97). During this assessment period, Evans and Dubowski suggest the art

therapist take note of the interactions between therapist, child, and drawing activities, attunement, interaction, return-exchange behaviours, play-dialogue, verbal and non-verbal communication, and any testing behaviours. This data can be used in order to determine if the child needs to work directly (in which the art therapist provides structure and directives so the child can learn to use as many different materials as possible) or indirectly (in which the mirroring and attunement and interaction become the main goal). In any of the approaches, Evans and Dubowski state that the main role of the therapist is to give shape to the child's experience through interaction and reciprocal action. This template will be used in the upcoming section.

Art Therapy and ASD: an Intervention Model

Therapist's Role

In conventional art psychotherapy, there is a triangular relationship between the client, the client's artwork, and the art therapist (Edwards, 2014; Schaverien, 2000). The creative process and the relationship between client and therapist synthesize and interact to create the basis for exploration and healing (Case, 2000; Edwards, 2014; Schaverien, 2000). "Within this triangular relationship greater or lesser emphasis may be placed on each axis (between, for example, the client and their art work or between the client and the art therapist) during a single session or over time" (Edwards, 2014, p. 2). In this theoretical perspective, the art therapist functions as witness to whatever the client creates (Bragge & Fenner, 2009).

However, other art therapists such as Kramer (1986), Franklin (2010), Case (2000), Bragge and Fenner (2009) have pointed to the benefit of the therapist as active participant. Kramer termed these active interventions as *third-hand*, in which the therapist physically intervenes as an auxiliary ego in order to "carry on a visual dialogue with the client as well as offer assistance when the art process derails" (Franklin, 2010, p. 163). Kramer also stated that this process involves attuning to the client's *visual handwriting*, developmental level, and symbolism in order to truly convey visual empathy. Furthermore, it is vital that the therapist intervenes in the least intrusive way possible and does not impose content or distort meaning. In Franklin's (2010) experience, making an art response to a client's artwork can "enhance the therapeutic alliance by reflecting internalized, embodied, resonant material back to the client" (p. 163). In a group with depressed adolescents, Franklin, as the art therapist, would create his own

art in response to the art and the themes occurring in the group. This leads to participants asking questions about the therapist's art, and resonating with it. They made connections with themselves and the response art and felt heard by the therapist (Franklin, 2010).

As mentioned earlier in the paper, Bragge and Fenner (2009) specifically recommend the use of therapist art-making when working with children on the Spectrum. Citing case studies with different children they note that moving from the traditional triangle of art, client, therapist to the square of client art, therapist art, therapist, client helps engage children with ASD more. This re-creates common social interaction and creates an interactive space. Stott and Males (1984) and Edwards (2009) also note that they take on a more hands-on approach when working with children or adults with intellectual disabilities. For these art therapists, this did not mean doing any actual art-making, but taking a more active role by encouraging participation (Stott & Males, 1984), or loading up a brush with paint and handing it to the client to see what would happen (Edwards, 2009). Dubowski and James (1998), and Edwards (2009) both note how they use the tracking process advocated in play therapy by Landreth (1991) to narrate what the child is doing. In both cases, this helped the client know that they were being paid attention to and that their actions were valued. Eventually, this helped Dubowski and James' (1998) client start to pay attention to what he himself was doing. But even when working with children with severe disabilities, the authors' caution still not to lead more than necessary. If handing a child a brush with paint, they still have the right to turn down your offer (either verbally or non-verbally).

Treatment Goals

Based on the above literature review, the author proposes a sample intervention model in order to facilitate social-emotional reciprocity between client and therapist. Because ASD is a spectrum disorder and each person with Autism is vastly unique, the model is broken down into phases. It is impossible to give a week-by-week account of what to do because each client will progress at his/her own pace. Also, because some children benefit from directive and some from non-directive art therapy, both options are laid out within the following treatment plan. The goals of each phase of therapy are to establish attunement, joint attention, sharing, collaboration, develop theory of mind, develop empathy, and to facilitate separation.

Intervention

Phase 1: Introduction.

Main therapeutic goals. Observation and analysis. Assess child's preferences. Use video to micro-analyze if desired.

Rationale. Assessment for preferences helps the art therapist develop and refine their approach to treating the child as a unique individual (Brooke 2009; Evans & Dubowski, 2007; Kearny & McKnight, 1997).

Materials. A small selection of art materials ranging from resistive to fluid for the child to choose from. For example, lay out a variety of different sized papers, pencil crayons or crayons, markers, plasticine, and paint. Only put a small portion of each to foster self-control and containment.

Directions. Introduce the child to the art therapy room and the art therapist. Show the child the selection of materials and tell them they can make whatever they wish using one or all of the materials.

Alternate. If the child is too anxious or dysregulated to choose a material and does not know what to create, the therapist can begin to make her own art. The therapist can choose a resistive media such as crayons and begin making shapes for example. As the child feels more comfortable, they may try the materials that the therapist is using. If the child remains disengaged, the therapist can begin trying out a broader range of materials available such as plasticine and paint.

Use this opportunity to assess the child's preferences and approach to art-making and to meeting someone new. Does the child choose fluid materials and become more and more disorganized? Do they choose pencil and draw meticulously for the full session, ignoring the other person in the room? Do they have a favourite cartoon character that they draw over and over again? Decide if the child would benefit more from directive or non-directive art therapy.

Note. Some children (who are more on the higher functioning level of the spectrum) may have many questions, whereas children who are lower functioning may not speak at all.

Phase 2: Attunement/ attachment/ establishing rapport.

Main therapeutic goals. Enter your client's world by attuning to them. Establish the therapeutic alliance.

Rationale. Before making therapeutic change, the therapist must first connect to the client. If this can't be done verbally, then it can be done through the body and/or through the art.

Attunement can lead to secure attachment (Durrani, 2014; Evans & Rutten-Saris, 1998; Gabriels & Gaffey, 2012).

Materials. A small sample of materials ranging from resistive (e.g. pencils) to fluid (e.g. watercolours).

Directions. Continue to familiarize the client with art materials and the process of art-making (Durrani, p. 105). Begin the mirroring process by following the client's lead. Choose the same material as your client and begin making your own version of what the client is creating. This phase is not about creating an exact replica of what the child is creating, but rather opening up a visual dialogue and helping the child feel seen. With less verbal clients, it can be helpful at this point to speak out loud about your creation as you work (i.e. "I see you're making a dog, I would like to make a dog too! Mine's going to be brown"). This narration can further support the mirroring that is occurring within the art.

Alternate. If the child requires a more directive approach, draw first what you would like her/ him to make and ask them to follow your lead.

This phase should continue until the child begins to acknowledge the therapist or their art. This can be observed through slight glances toward the art, or a change in the child's art that resembles the therapists.

Phase 3: Joint attention – looking together

Main therapeutic goal. Facilitate joint attention between client and therapist.

Rationale. Joint attention is an important developmental milestone that must be reached before further therapeutic work can be made (Hobson, 2002; Holmes, 1993; Isserow, 2008; Tiegerman & Primavera, 1984)

Materials. A small sample of materials ranging from resistive to fluid.

Directions. Continue to mirror the client's art-making process, but introduce the concept of sharing at the end of each drawing or session (depending on how the child works). Model how the process works by holding up your artwork and explaining what you made (for example, "I made a blue robot out of plasticine today.") Encourage the child to look at your creation. After your turn, tell the child it is their turn to share and guide them through holding their art up so you can see (using hand-over-hand techniques if necessary). If the child is verbal, you can ask them what they drew, what it is about, if it reminds them of anything, etc. If the child is less verbal or non-verbal, this process involves looking together at the creation and the therapist

saying what she sees. (e.g. “I see that you used only red today and you made lots of scribbles over and over on that big sheet of paper”).

Note. Because of difficulties with imagination, some children with ASD, even verbal ones, cannot expand on what they have created. If questions such as “what does the monster in your drawing eat?” are met with silence, anxiety, or the response “nothing, it’s a drawing,” then focus on the formal elements of the drawing such as colour, shape, and size.

Alternate. For a more directive approach, the therapist can bring in (or ask the child to bring in) a figurine/toy that would catch the child’s interest and focus. The therapist then places the figurine at the centre of the table and says that they will both be drawing what they see. After the process, the therapist and child can hold up their drawings and compare. This format of sharing should be followed throughout the remainder of the sessions.

Phase 4: Sharing experiences.

Main therapeutic goals. Expand on joint attention and sharing and move toward collaboration and turn-taking. Encourage playfulness.

Rationale. Sharing and turn-taking is an important step toward developing normative social-emotional reciprocity (Evans & Dubowski, 2001). The ability to play and share that experience with someone is often lacking in those with ASD (Martin, 2009).

Materials. Paper and markers of various sizes

Directions. The following activities can be done all in one session, or in different sessions. If the child has been working non-directive thus far, introduce the session by saying you will be trying something different today. After the activity, you can return to non-directive art-making, mirroring, and sharing at the end.

Scribble chase. Explain that together you will be playing a drawing game called a Scribble Chase by following each other around on the paper using markers. Model the game by putting your marker down first and asking the child to follow you. If the child gets off track, remind them to use their looking skills and note where the other marker is on the page. Once the child gains some level of comfort, switch roles and allow them to lead. Narrate the process by noting things such as direction, shape, and speed (e.g. “you’re going so fast, I can’t keep up!”)

Squiggle game. In this game, the client and therapist take turns making scribbles and looking for things inside them. The therapist can begin by drawing a scribble, then asking if they can see anything. This can be a very difficult activity for children who cannot think

symbolically, and may not be feasible for every child. The therapist can help through modelling of finding simple images such as a 'figure 8,' or a fish.

Pass the drawing. After the child has developed some form of mastery of following and leading in the scribble chase, the therapist can introduce a 'pass the drawing' game. The therapist starts by making a simple drawing (such as an animal) then passes it to the child to add to. The therapist can help with imaginative and play skills by asking what the animal needs (does it need a place to sleep? What does it eat? Could it wear a funny hat?). The child is then asked to pass the drawing back, and the therapist can add to it. This can also be achieved through non-representational drawings if that is the current level the child is at. When it is the child's turn to start the drawing, it is important to remind them that it will be modified, and the drawing will not stay the same. For more reluctant/rigid children, ask for their input of what they think the therapist should draw on their image. Do not attempt this if the child is very protective of their image.

Joint story making. Make a joint storybook together by each drawing an alternate page for the book. If the child does not have an idea for a book, the therapist can begin by using a show or book or video game that the child is already very interested in. For example, if the child is obsessed by the character of Olaf from the Disney movie *Frozen*, explain that together you will be making a book about the snowman Olaf. The therapist can draw the first page, and ask the child what happens next. Note: this can be difficult for children higher on the spectrum who have perfectionistic traits. They may have seen the movie so many times that they become frustrated when they cannot replicate exactly what they see in their mind. In this instance, it might be beneficial for the therapist to invent a simple creature that can be replicated easily by the child in subsequent pages. Again, this process involves encouraging play and imagination by the therapist.

Spontaneous collaboration. If working in a non-directive manner, choose a creative way to turn the child's explorations into collaboration.

Phase 5: Developing theory of mind.

Main therapeutic goal. Begin helping the client move toward developing theory of mind through self-exploration and emotional awareness.

Rationale. A pre-requisite for emotional awareness is a sense of self (Target & Fonagy, 1996; Southam-Gerow, 2013).

Materials. A small sample of materials ranging from resistive to fluid. A large sheet of paper for body tracing, a mirror for self-portraits, emotion cards, collage of faces with a range of emotions, and/ or the book *Sad monster Glad monster* by Emberley and Miranda (1997) which is well-suited for younger children.

Directions. At this point in therapy, the child should be engaged in the art-making process and improved upon joint attention skills. Therefore, if a child gets to this point in therapy, it is no longer necessary to mirror, but rather continue to encourage the child to become more independent and share their art with the therapist. Some children will not make it to this stage, in which case the therapy can continue to focus on mirroring and joint attention. If the child is ready for self-exploration, the following directives can be implemented:

Body scan. Help the child to gain more awareness of themselves and their environment by guiding them through a body scan. Ask the child to sit in their seat and feel their head, all the way down to their toes. For younger children who cannot sit still for long, engage them in a quick game of *head, shoulders, knees, and toes*.

Self-portrait. If the child is developmentally capable, get them to look in a mirror and draw themselves. This can be expanded by asking the child to make different emotions in the mirror and drawing those. Ask them to note what their eyes, eyebrows, and mouth are doing in each face (“I see that your eyes are big right now while you smile”).

Body tracing. Ask the child to lay on a big piece of paper and trace around them (be careful of children who are hypersensitive to touch or temperature/texture of the floor). For children who do not want to be traced, the therapist can offer an outline of a person on a smaller piece of paper. The body map can act as an extension of the self-portrait by asking the child to take note of what they are wearing

Likes/dislikes collage. Make a column for the child on a piece of paper where they can write, draw, or use collage to sort out things they like and dislike. For kids who are more verbal, this can open up a conversation about their life experiences.

Emotional education. Read an emotions book such as *Sad Monster/Glad Monster* to the child in order to open up a conversation around basic emotions. Ask the child to create a similar book by thinking of and drawing the things that make them happy, sad, angry, etc.

Body map. Trace around the child or provide a sheet with a traced body, and ask the child to think of different emotions. Start by asking the child to think of something on their *likes* list

that makes them happy, then scan their body and note if they feel anything. Ask them where the feeling is and what colour it would be. Get them to colour on the body map where they feel. This may be a difficult exercise for many children that will require more body awareness and psychoeducation surrounding emotions.

Fluid media exploration. If working non-directly, the therapist can begin to introduce more fluid media. Giving the client watercolour paints, for example, could help them access more emotions than with resistive media.

Phase 6: Getting to know others - fostering empathy.

Main therapeutic goal. Help the child move from awareness of themselves and their feelings to the feelings of others.

Rationale. Once the child has shown the ability to identify emotions in themselves, they can move on to identifying emotions in others (Southam-Gerow, 2013).

Materials. A small sample of materials ranging from resistive to fluid. Collage of faces showing different emotions.

Directions. Identifying emotions can be accomplished throughout therapy as the therapist vocalizes feelings, or directly through the following activities:

Feelings collage. Divide up a paper into different basic emotions (happy, sad, angry) and present the child with a variety of faces. Ask them to divide up the faces into the categories. For higher functioning children, ask what they think happened to make each person feel the way they are. The therapist can also ask if the child has ever felt that way and what would they do if they encountered someone feeling that emotion.

Portraits. The therapist and child each do a portrait of each other. Ask client to carefully examine the eyes and mouth of the therapist. This can be further expanded by trying out different emotional faces and drawing those.

Return to the scribble chase. The therapist and client can take this opportunity in therapy to return to the scribble chase (See Phase 4:1). This time the focus can be more on narrating emotions that each person has while having to go slow or fast, or wait to go first. This can be compared to the scribble chase done initially to see if there is any change in engagement with the art materials and the child's ability to relate to the art therapist.

Empathetic response drawing. If working non-directly, the therapist can make their own empathetic response drawing to any of the artworks the client produces.

Phase 7: Ending therapy

Main therapeutic goal. Establish therapist and client as separate individuals and say goodbye.

Rationale. Termination of therapy is an opportunity to reflect on the client's accomplishments and help the client prepare for life without the therapist (Baird, 2005; Balsam & Balsam, 1984; O'Connor, 2000).

Materials. The client's and therapist's artwork.

Directions. Go through the art made throughout the therapy and reflect upon all of the art made. The therapist and client can go through the art they each made individually as well as separately. This is a good time to acknowledge all of the collaborative work client and therapist created together, but point out their individual differences as well. (e.g. "I remember we made this story together, and I really wanted it to be about a cat, and you wanted it to be about a dog"). This is a time of reflection, acknowledgement of the time spent together, individuation, and separation. "Separating from parents is one of the key tasks in growing up for any individual as it gives the opportunity to begin to individuate. Many clients [with disabilities] have had very painful and, often, abrupt separations from parents leaving them with many unresolved issues around dependence and independence and many have complicated attachments. By helping clients face the reality of an ending will make a small but significant contribution towards helping clients grow up emotionally" (O'Connor, 2000, p. 11-12).

Intervention Considerations

There are several considerations that should be taken into account when marking art alongside a client. Moon (2002) notes that making art alongside the client has the potential to intimidate and can cause a more vulnerable client to feel less confident. Bragge and Fenner (2009) also point out that making one's own art can take the therapist's attention away from the client. While engaged in her own art-making process the therapist may miss out on subtle non-verbal cues coming from the client as well as what the client is creating. This requires the therapist to be able to oscillate in and out of their own art-making to ensure that the client's needs are being met. Furthermore, Bragge and Fenner (2009) came across a client who was upset that he could not draw as well as the therapist. In this instance, the therapist was able to bring this into a meaningful conversation with the client regarding his self-esteem and perceived skill level. But this may not always be possible with each client, and should be taken into consideration.

The therapist should also be mindful to follow the client's lead in terms of imagery, and not impose her own ideas onto the child.

Another important consideration when working with children on the Spectrum is the promotion of generalization. As Meadows (2013) says, "teaching children with Autism should never happen within a vacuum. The skills learned should be intentionally applied across settings and individuals, to help the child interact meaningfully with their environment" (n.p.). This can be remedied by getting the child to participate in dyad or group work in order to put into practice what they have learned in individual therapy. Martinovich (2006) notes that:

the most effective support for AS [Autism Spectrum] usually comes from long-term interaction and learning in groups. The "little professor" demeanour of many AS individuals means that they relate very well in a one-to-one relationship with an adult counsellor. It is in a group context with their peers that more problems are likely to become salient and more learning is likely to occur. (p. 79).

Additionally, Howlin (1998) notes that "no single mode of treatment is ever likely to be effective for all children and all families" (p. 307), so it is important for the client to venture outside of the realm of art therapy to acquire new skills and practice previously learned ones.

Further Recommendations

The next steps to be taken with this paper would be to complete intervention research steps four and five: pilot testing, refinement, review, and advanced testing (Fraser et al., 2009). In order to test out the program's effectiveness, a pilot study must be conducted to measure its ability to increase social-emotional reciprocity. In order to complete this effectively, the researchers would need to target what to observe and collect data on to measure social-emotional reciprocity. Qualitative and/ or quantitative data must be collected and aggregated in order to test the program's effectiveness. Researchers carrying out the pilot study could for example, measure any increases in eye contact such as in the study by Bauminger (2002). Once data has been collected, the intervention can be fine-tuned so that it can be reliable and valid in achieving all of the therapeutic goals laid out in the above intervention plan. After that, the information can be dispersed to other therapists and caregivers to provide social-emotional interventions that are backed up by research.

Conclusion

Through a review of literature and the proposal of an intervention program, this research paper has attempted to combine art therapy with developmental psychology, with the aim of increasing social-emotional reciprocity in elementary aged children on the Autism Spectrum. The literature examined above has demonstrated the developmental milestones (such as joint attention, communicating gaze behaviour, and spontaneous imitation) that come easily for normatively developing infants, are delayed or non-existent in those on the Spectrum. Perhaps due to a suppressed mirror neuron response, children with ASD do not always develop the social-emotional reciprocity skills that their peers do.

Art therapy has the ability to help children address these developmental milestones by offering appealing, sensory-rich experiences that use the visual strengths of children with ASD. By engaging in concurrent and reflexive art-making alongside the client with ASD, the art therapist has the opportunity to go back and address the developmental milestone of joint attention and hopefully increase the child's ability to engage in social-emotional reciprocity. The aforementioned intervention plan laid out in this research paper has followed steps one, two, and three of the intervention research laid out by Fraser et al. (2009). In order to establish validity and reliability to this intervention, steps four and five must be carried out. Future researchers need to establish tools of measurement for social-emotional reciprocity followed by a pilot study with participants. Once completed, the intervention plan could be fine-tuned, further developed and tested. This process is a necessary step for lending credibility to the field of art therapy and put it on par with other well-known and tested ASD interventions.

References

- Aach-Feldman, S., & Kunkle-Miller, C. (2001). Developmental art therapy. In J. A. Rubin (Ed.), *Approaches to art therapy* (pp. 226-240). New York: Routledge.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental Disorders: Autism Spectrum Disorder* (5th ed.). Arlington, VA: American Psychiatric.
- Baird, B. N. (2005). *The internship, practicum, and field placement handbook. A guide for helping professions* (4th ed.). Upper Saddle River, NJ: Prentice Hall.
- Bakeman, R., & Adamson, L. B. (1984). Coordinating attention to people and objects in mother-infant and peer-infant interaction. *Child Development*, 55, 1278-1289.
- Balsam, R. M., & Balsam, A. (1984). *Becoming a psychotherapist: A clinical primer*. Chicago, IL: University of Chicago Press.
- Baron-Cohen, S. (2011). The empathizing-systemizing theory. In E. Hollander, A. Kolevzon, & J. T. Coyle's (Eds.), *Textbook of Autism Spectrum Disorders* (pp. 39-49). Washington and London: American Psychiatric.
- Bauminger, N. (2002). The facilitation of social-emotional understanding and social interaction in high-functioning children with Autism: Intervention outcomes. *Journal of Autism and Developmental Disorders*, 32(4), 283-298.
- Bauminger, N., & Kasari, C. (2000). Loneliness and friendship in high-functioning children with autism. *Child Development*, 71, 447-456.
- Behrends, A., Muller, S., & Dziobek, I. (2012). Moving in and out of synchrony: A concept for a new intervention fostering empathy through interactional movement and dance. *The Arts in Psychotherapy*, 39, 107-116.
- Bondy, A. S., & Frost, L. (1994). The Picture Exchange Communication System. *Focus on Autistic Behavior*, 9(3), 1-19.
- Bowlby, J. (1988). *A secure base: parent-child attachment and healthy human development*. New York, NY: Basic Books.
- Bragge, A., & Fenner, P. (2009). The emergence of the 'Interactive Square' as an approach to art therapy with children on the autistic spectrum. *International Journal of Art Therapy*, 14(1), 17-28. doi: 10.1080/17454830903006323
- Brooke, S. L. (2009). *The use of creative therapies with Autism Spectrum Disorders*. Springfield, IL: Charles C Thomas.

- Cappadocia, M. C., & Weiss, J. A. (2011). A review of social skills training groups for youth with Asperger syndrome and high functioning Autism. *Research in Autism Spectrum Disorders*, 5(1), 70-78.
- Case, C. (2000). 'Our lady of the Queen': Journeys around the maternal object. In A. Gilroy & G. McNeilly (Eds.), *The changing shape of art therapy: New developments in theory and practice* (pp. 15-55). London, UK: Jessica Kingsley.
- Charman, T. (2003). Why is joint attention a pivotal skill in autism? *The Royal Society*, 358, 315-324. doi:10.1098.rstb.2002.1199
- D'Amico, M., Lalonde, C., & Snow, S. (2015). Evaluating the efficacy of drama therapy in teaching social skills to children with Autism Spectrum Disorders. *Drama Therapy Review*, 1(1), 21-39.
- Dapretto, M., Davies, M. S., Pfeifer, J. H., Scott, A. A., Sigman, M., Bookheimer, S. Y., & Iacoboni, M. (2006). Understanding emotions in others: mirror neuron dysfunction in children with Autism Spectrum Disorders. *Nature Neuroscience*, 9(1), 28-30. doi:10.1038/nn1611
- Dawson, G., Hill, D., Spencer, A., Garpert, L., & Watson, L. (1990). Affective exchanges between young autistic children and their mothers. *Journal of Abnormal Child Psychology*, 18(3), 335-345.
- Denham, S. (1998). *Emotional development in young children*. New York, NY: Guilford.
- Dubowski, J., & James, J. (1998). Arts therapies with children with learning disabilities. In Sandle, D. (Ed.), *Development and diversity: New applications in art therapy* (pp. 41-56). London, UK: Free Association.
- Durrani, H. (2014). Facilitating attachment in children with autism through art therapy: A case study. *Journal of Psychotherapy Integration*, 24(2), 99-108. doi:10.1037/a003674
- Edwards, C. (2009). 'Scribbling with Thomas': Art therapy with a nonverbal adolescent male. Living with Down Syndrome and Autistic behavioural features. In S. L. Brooke (Ed.), *The use of creative therapies with Autism Spectrum Disorders* (pp. 67-86). Springfield, IL: Charles C Thomas.
- Edwards, D. (2014). *Art Therapy*, (2nd ed). Washington, DC: Sage.
- Emberly, E., & Miranda, A. (1997). *Sad Monster, Glad Monster: A book about feelings*. New

- York, NY: Hachette Book Group.
- Evans, K. (1998). Shaping experience and sharing meaning: art therapy for children with Autism. *Inscape*, 3(1), 17-25.
- Evans, K., & Dubowski, J. (2001). *Art therapy with children on the autistic spectrum: Beyond words*. London, UK: Jessica Kingsley.
- Evans, K., & Rutten-Saris, M. (1998). Shaping vitality affects, enriching communication: Art therapy for children with Autism. In D. Dandle (Ed.), *Development and diversity: New applications in art therapy*. London, UK: Free Association.
- Franklin, M. (2010). Affect regulation, mirror neurons, and the third hand: Formulating mindful empathic art interventions. *Art Therapy: Journal of the American Art Therapy Association*, 27(4), 160-167.
- Fraser, M. W., Richman, J. M., Galinsky, M. J., & Day, S. H. (2009). *Intervention research: Developing social programs*. New York, NY: Oxford University Press.
- Gabriels, L. R. (2003). Art therapy with children who have Autism and their families. In C. Malchiodi (Ed.), *Handbook of art therapy* (pp. 193-206). New York, NY: Guilford Press.
- Gabriels, L. R., & Gaffey, J. L. (2012). Art therapy with children on the Autism Spectrum. In C. Malchiodi (Ed.), *Handbook of art therapy* (pp. 205-221). New York, NY: Guilford Press.
- Gilroy, A. (2006). *Art therapy, research and evidence-based practice*. London, UK: Sage.
- Ginott, H. G. (1976). Therapeutic intervention in child treatment. In C. Shaefer (Ed.), *The therapeutic use of child's play* (pp. 279-290). New York, NY: Jason Aronson.
- Goody, S. (2012). Stuck in childhood? In S. Bull & K. O'Farrell (Eds.), *Art therapy and learning disabilities: Don't guess my happiness* (pp. 107-116). New York, NY: Routledge.
- Grandin, T. (1996). *Emergence: Labeled Autistic*. New York, NY: Grand Central.
- Hagood, M. M. (2000). *The use of art in counselling child and adult survivors of sexual abuse*. London, UK: Jessica Kingsley.
- Hanna, F. J., Hanna, C. A., & Keys, S. G. (1999). Fifty strategies for counselling defiant, aggressive adolescents: Reaching, accepting, and relating. *Journal of Counselling and Development*, 77, 395-403.
- Harris, T. (2004). Implications of attachment theory for working in psychoanalytic psychotherapy. *In Forum Psychoanalysis*, 13, 147-156.

- Henley, D. (2001). Annihilation anxiety and fantasy in the art of children with Asperger's Syndrome and others on the autistic spectrum. *American Journal of Art Therapy*, 39, 113-121.
- Hobson, R. P. (1993). The emotional origins of social understanding. *Philosophical Psychology*, 6, 227-245.
- Hobson, P. (2002). *The cradle of thought*. London, UK: Macmillan.
- Hobson, P. (2007). Social relations, self-awareness, and symbolizing: A perspective from Autism. In C. Brownell & C. B. Kopp (Eds.), *Socioemotional development in the toddler years* (pp. 423-451). New York and London: The Guildford Press.
- Hoffman, M. L. (2007). The origins of empathic morality in toddlerhood. In C. Brownell & C. B. Kopp (Eds.), *Socioemotional development in the toddler years* (pp. 132-149). New York and London: The Guildford Press.
- Holmes, J. (1993). *John Bowlby and attachment theory*. London and New York: Routledge.
- Howlin, P. (1998). Psychological and educational treatments for Autism. *Journal of Child Psychology and Psychiatry*, 39, 307-322.
- Isserow, J. (2008). Looking together: Joint attention in art therapy. *International Journal of Art Therapy*, 13(1), 34-42.
- Jongsma, A. E., Peterson, L. M., William, P. M. (2003). *The child psychotherapy treatment planner*. Hoboken, NJ: John Wiley & Sons.
- Kearny, C. A., & McKnight, T. J. (1997). Preference, choice, and persons with disabilities: asynopsis of assessments, interventions, and future directions. *Clinical Psychology Review*, 17(2), 217-238.
- Keysers, C. (2011). *The empathic brain: How the discovery of mirror neurons changes our understanding of human nature* [Kindle version]. Retrieved from Amazon.com.
- Klin, A., Jones, W., Schultz, R., Volkmar, F., & Cohen, D. (2002). Visual fixation patterns during viewing of naturalistic social situations as predictors of social competence in individuals with Autism. *Archives General Psychiatry*, 59, 809-816.
- Koegel, L. K., Koegel, R. L., Ashbaugh, K., & Bradshaw, J. (2014). The importance of early identification and intervention for children with or at risk for autism spectrum disorders. *International Journal of Speech-Language Pathology*, 16(1), 50-56.

- Kornreich, T., & Schimmel, B. (1991). The world is attached by great big snowflakes: Art therapy with an autistic boy. *American Journal of Art Therapy*, 29, 77-84.
- Kramer, E. (1986). The art therapist's third hand: reflections on art, art therapy, and society at large. *American Journal of Art therapy*, 24, 71-86.
- Lachman-Chapin, M. (2001). Self-psychology and art therapy. In J. A. Rubin (Ed.), *Approaches to art therapy: Theory and technique* (pp. 66-80). New York, NY: Routledge.
- Landreth, G. L. (1991). *Play therapy: The art of the relationship*. Muncie, IN: Accelerated Development.
- Lasry, N. (2010). *Incorporating group art therapy for children with Autism into the school system* (Unpublished research paper). Concordia University, Montreal, QC.
- Leekam, S., & Moore, C. (2001). The development of attention and joint attention in children with Autism. In J.A. Burack, T. Charman, N. Yirmiya, & P. R. Zelazo (Eds.) *The development of Autism: Perspectives from theory and research* (pp. 105-129). Hillsdale, NJ: Lawrence Erlbaum.
- Lusebrink, V. B. (1990). *Imagery and visual expressing in therapy*. New York, NY: Plenum Press.
- Mahoney, G., & Perales, F. (2003). Using relationship-focused intervention to enhance the social emotional functioning of young children with Autism Spectrum Disorders. *Topics in Early Childhood Special Education*, 23(2), 77-89. doi:10.1177/ 0211214030230020301
- Martin, M. (2014). Moving on the spectrum: dance/ movement therapy as a potential early intervention tool for children with Autism Spectrum Disorders. *The Arts in Psychotherapy*, 41, 545-553.
- Martin, N. (2008). Assessing portrait drawings created by children and adolescents with Autism Spectrum Disorder. *Art Therapy: Journal of the American Art Therapy Association*, 25(1), 15-23.
- Martin, N. (2009). *Art as an early intervention tool for children with Autism*. London and Philadelphia: Jessica Kingsley.
- Martin, M., & Lawrence, K. S. (2009). Art therapy and Autism: Overview and recommendations. *Art Therapy: Journal of the American Art Therapy Association*, 26(4), 187-190. doi: 10.1080/07421656.2009.10129616

- Martinovich, J. (2006). *Creative expressive activities and Asperger's Syndrome*. Philadelphia, PA: Jessica Kingsley.
- McGregor, I. (1990). Unusual drawing development in children: What does it reveal about children's art? In C. Case & T. Dalley (Eds.), *Working with Children in Art Therapy* (pp. 39-54). London, UK: Routledge.
- Meadows, T. (2013). *Generalization: Teaching loosely*. Retrieved from <http://www.iloveaba.com/2013/03/generalization-teaching-loosely.html>
- Moon, C. (2002). *Studio art therapy: Cultivating the artist identity in the art therapies*. London UK: Jessica Kingsley.
- Morrison, J. (2014). *DSM-5 made easy: The clinician's guide to diagnosis* (2nd ed). New York, NY: The Guilford Press.
- Mundy, P. (1995). Joint attention, social-emotion approach in children with Autism. *Development and Psychopathology*, 7, 63-82.
- Mundy, P., Sigman, M., & Kasari, C. (1990). A longitudinal study of joint attention and language development in autistic children. *Journal of Autism and Developmental Disorders*, 20, 115-128.
- Nissimov-Nahum, E. (2008). A model for art therapy in educational settings with children who behave aggressively. *The Arts in Psychotherapy*, 35, 341-348.
- Oberman, L. M., Ramachandran, V. S., & Pineda, J. A. (2008). Modulation of MU suppression in children with Autism Spectrum disorders in response to familiar or unfamiliar stimuli: The mirror neuron hypothesis. *Neuropsychologia*, 46(5), 1558-1565.
doi:10.1016/j.neuropsychologia.2008.01.010
- O'Connor, H. (2000). The importance of endings within learning disabilities: A personal view. *Psychology Research*, 10(2), p. 3-14.
- Prizant, B. M., Wetherby, A. M., Rubin, E., & Laurent, A. C. (2003). The SCERTS model: Transactional, family-centered approach to enhancing communication and socioemotional abilities of children with autism spectrum disorder. *Infants and Young Children*, 16(4), 296-316.
- Rheingold, H., Hay, D., & West, M. (1976). Sharing in the second year of life. *Child Development*, 83, 898-913.
- Rubin, J. A. (2005). Inviting Art-Making. In J. A. Rubin (Ed.), *Artful therapy* (pp. 51-66).

- Hoboken, NJ: Wiley.
- Schaverien, J. (2000). The triangular relationship and the aesthetic countertransference in analytical art psychotherapy. In A. Gilroy & G. McNeille (Eds.), *The changing shape of art therapy* (pp. 55-83). London, UK: Jessica Kingsley.
- Seskin, L., Feliciano, E., Tippy, G., Yedoutschnig, R., Sossin, M. K., & Yasik, A. (2010). Attachment and Autism: Parental attachment representations and relational behaviours in the parent-child dyad. *Journal of Abnormal Child Psychology*, 38, 949-960.
doi:10.1007/s10802-010-9417-y
- Sigman, M. D., Kasari, C., Kwon, J-H., & Yirmiya, N. (1992). Responses to the negative emotions of others by autistic, mentally retarded, and normal children. *Child Development*, 63(4), 796-807.
- Sigman, M., & Ruskin, E. (1999). Continuity and change in the social competence of children with Autism, Down syndrome and developmental delays. *Monographs of the Society for Research in Child Development*, 64(1), 1-114.
- Southam-Gerow, M. A. (2013). *Emotion regulation in children and adolescents: A practitioners guide*. New York and London: The Guilford Press.
- Steever, M. P. (2011). Autism. In W. T. O'Donohue & C. Draper (Eds.), *Stepped care and e-health: Practical applications to behavioral disorders* (pp. 203-221). London & New York: Springer
- Stern, D. (1985). The interpersonal world of the infant: A view from psychoanalysis and developmental psychology. London and New York: Karnac.
- Stone, W. L., & Yoder, P. J. (2001). Predicting spoken language in children with Autistic Spectrum Disorders. *Autism*, 5, 341-361.
- Stott, J., & Males, B. (1984). Art therapy for people who are mentally handicapped. In T. Dalley (Ed.), *Art as therapy* (pp. 111-126). London, UK: Routledge.
- Target, M., & Fonagy, P. (1996). Playing with reality II: The development of psychic reality from a theoretical perspective. *International Journal of Psychoanalysis*, 77, 459-479.
- Tiegerman, E., & Primavera, L. H. (1984). Imitating the autistic child: Facilitating communicative gaze behaviour. *Journal of Autism and Developmental Disorders*, 14(1), 27-38.

- Tipple, R. (2003). The interpretation of children's artwork in a paediatric disability setting. *Inscape*, 8(2), 48-59.
- Tracy, S. J. (2010). Qualitative quality: Eight "Big-Tent" criteria for excellent qualitative research. *Qualitative Inquiry*, 16(10), 837-851. doi:10.1177/1077800410383121
- Vick, R. M. (2011). Creative dialog: A shared will to create. *Journal of the American Art Therapy Association*, 17(3), 216-219. doi:10.1080/07421656.2000.10129707.
- Volkmar, F. R., & Wiesner, L. A. (2009). A practical guide to Autism: What every parent, family member and teacher needs to know. Hoboken, NJ: John Wiley & Sons.
- Wadeson, H. (1995). *The dynamics of art psychotherapy* (2nd ed.). New York, NY: John Wiley & Sons.
- Wiley, M. S., Turner, L. (nd). The attuned therapist: Does attachment theory really matter? Retrieved from <http://www.drdansiegel.com/uploads/The-attuned-therapist.pdf>
- Wing, L. (1992). Manifestation of social problems in high-functioning autistic people. In E. Schopler & G. Mesibov (Eds.), *High-functioning individuals with Autism* (pp. 129-142). New York, NY: Plenum Press.
- Wolff, P. H. (1987). *The development of behavioural states and the expression of emotions in early infancy: New proposals for investigation*. Chicago and London: The Chicago Press.
- Wilson, M. (2012). Art Therapy in addictions treatment: creativity and shame reduction. In C. Malchiodi (Ed.), *Handbook of art therapy* (pp. 302-320). New York, NY: The Guilford Press.