Final Project Letter of Intent

Aspergers Syndrome in Middle School Children:
An Art Therapy Intervention Manual

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Problem Statement

Prevalence rates of Aspergers syndrome (AS) have increased significantly over the past few decades, with current findings suggesting an incidence as high as 1 in 250 children. Parents, caregivers, teachers, and mental health professionals are faced with numerous challenges when dealing with children with AS, particularly between grades six and nine, and would benefit from having a broader range of effective interventions and increased knowledge about AS. Beyond traditional behavioural approaches to dealing with AS, there has been a lack of interest in exploring more creative approaches to dealing with the symptoms associated with this syndrome. It is the author’s belief that the singularity of AS intervention approaches corresponds to the deficiency of AS treatment outcomes. This letter of intent proposes the development of a therapeutic model that demonstrates the potential effectiveness of art therapy in the treatment of AS in middle-school children. The therapeutic model will be derived from two sources: first, the literature emerging from studies on Aspergers Syndrome (AS), and second, research on the therapeutic attributes associated with art therapy.

Goals

By reviewing the literature on AS in children and research on art therapy, the author will show a relationship between the therapeutic benefits associated with the art therapy process and the therapeutic challenges presented by AS in children. In particular, the author will demonstrate how the confirmed neurological benefits of art therapy may
respond to needs of the AS child that are not commonly met by current therapeutic practices. The author will focus on the challenges that are specific to middle-school children with AS because this is the age where peer interaction and social pressures normally emerge, further challenging the AS child’s already compromised abilities in these areas. In the long term, bringing together the fields of art therapy and AS research may benefit those working in the field by expanding the range of therapeutic tools considered beneficial in treating AS and by offering an alternative conceptual model on which to base intervention. The culminating product is an intervention manual comprised of a series of sample art therapy sessions that target the therapeutic domains common in AS. These goals will require a clear understanding of the mental health profession’s conception of AS as well as an understanding of established and potentially therapeutic effects of art therapy, which will be conveyed in the literature review.

Rationale and Background

Aspergers Syndrome. Aspergers Syndrome is a neurobehavioural disorder that was first described by Hans Asperger in 1944 in his publication Autistic Psychopathy in Childhood (Attwood, 1998). Following this initial work, interest and research into AS remained relatively uncommon until Wing (1981) undertook a comprehensive review of the syndrome, thereby prompting its inclusion as a distinct diagnosis in the American Psychiatric Association’s Diagnostic and Statistical Manual of Mental Disorders (1994) (fourth edition).

While debate continues about the diagnostic criteria for AS, it is generally believed to be a spectrum disorder within the category of pervasive developmental
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disorders (PDD)(Smith Myles & Simpson, 1998; Stewart, 2002). In terms of diagnostics, it seems important to distinguish AS from other neurobehavioural disorders with which it shares common traits, such as nonverbal learning disorder, schizoid personality, and high-functioning autism. According to Klin, Volkmar, and Sparrow (2000), the main diagnostic features of this disorder include:

- qualitative impairments in social function
- clinically significant impairment in social functioning
- repetitive and restricted patterns of behaviour and interests
- normal language and cognitive development other than that associated with socialization and curiosity about the environment

AS is distinct from other PDD disorders in that there is cognitive competency and normal language development in early childhood, which often mask the presence of AS. A relatively normal pattern of development in young children often leads to missed or delayed diagnosis and subsequent mismanagement of children suffering from AS (Stewart, 2002). Of great significance to parents and clinicians is the consensus in the mental health profession that early diagnosis and intervention have the greatest impact when dealing with this population. This suggests that more attention should be directed towards establishing effective assessment and intervention techniques (David, David, & Riley, 2003; Gabriels as cited in Malchiodi, 2003). This realization becomes more important when considered alongside evidence that children with AS are at greater risk than the normal population for developing serious psychological problems. These include schizophrenia, psychosis, Tourette syndrome, obsessive compulsive disorder, psychotic depression, and bipolar disorder (Klin et al., 2000). In addition, individuals with Asperger
traits often develop anxiety and affect disorders because they are unable to execute normal social functions. Contributing significantly to mental health dysfunction in this population are victimization and the subsequent anxiety experienced when interacting with peers, who often perceive the behaviours of children with AS as bizarre (Klin & Volkmar, 2000; Smith Myles & Simpson, 1998).

From a neurological perspective, this disorder is characterized by two main features: a deficiency in executive function and a social-emotional processing disorder (Schultz, Romanski, & Tsatsanis, 2000). It follows that any intervention that can effectively improve neurological functioning and emotional regulation would be beneficial in the treatment of AS. In the last two decades there has been a significant amount of research into neurological processes as they relate to mental health function, brain plasticity, and neurogenesis (Doidge, 2007; Rossi, 2002). The findings from this research suggest that interventions that help reroute thought processes, or mind-body connections, may have wide-ranging implications for ameliorating some of the nonadaptive behavioural traits associated with AS.

*Art therapy.* Art therapy is considered a creative therapeutic approach that embraces both the products and process of art making (Malchiodi, 2003). According to Kandel (as cited in Rossi, 2002), art therapy and the creative process can have positive effects on brain function and behaviour. There has been little interest to date in exploring more creative approaches when treating AS. This may be due to the perception that AS is associated with fairly intractable thought patterns and behaviours. These characteristics become evident around the age of three and continue throughout an individual’s lifetime (Attwood, 1998). Fitzgerald (2006) believed that traits of rigid and hyperlogical thinking
can be channelled in creative ways. In addition, for therapists and researchers alike it can provide insight into the thought patterns of an individual as well as memory, perception, and aspects of executive function.

Art therapy can facilitate cognitive, motor, and sensory experiences in an integrative way at both conscious and unconscious levels (Stone as cited in Tibbetts & Stone, 1990). In addition, as an interactive approach, art therapy provides opportunity for socialization and the development of social skills (Evans & Dubowski, 2001). Art therapy is an established therapeutic approach for treating anxiety, frustration, and anger issues, all of which are significant challenges faced by children with AS (Grossman, 1981; Stewart, 2002).

It is also important to explore AS and art therapy from a neuropsychological perspective as there is a need to scientifically validate the significance of incorporating art therapy techniques into current treatment modalities. Rubin (as cited in Vick, 2003) discussed a general perception of art therapists as being anti-theoretical and anti-authoritarian in their approach to research. Indeed, until recently there has been a lack of empirical research in this field. However, new developments in neuroimaging techniques such as functional Positron Emission Tomography (fPET) and Magnetic Resonance Imaging (fMRI) have expanded our understanding of brain functioning (Lusebrink, 2004) and created new frontiers for the evaluation of art therapy techniques.

Recent findings concerning the effects of imagery and art making on the brain have important implications for the application of art therapy as a treatment modality for children with AS. Malchiodi (2003) discussed the many ways that image making and other creative activities directly influence brain function. These influences are seen in the
right and left hemispheres, in the limbic system, and in memory retrieval and they also play a role in physiological processes through mind-body connections. The current view held by researchers studying brain function has shifted away from the concept of localized neurological processes. It is now believed that many areas of the brain are involved in specific neurological activities and that brain plasticity is possible at every developmental level (Doidge, 2007). This theory holds enormous potential for healing and the possibility of fostering more adaptive responses in individuals with AS. Rossi’s (2002) hypothesis about the mind-body connections and neurological effects of creativity provide further rationale for this project. Rossi (2002) also suggested that there is the potential for neurogenesis to occur through the creative process; this hypothesis supports the validity of future research in AS and art therapy.

Project Procedures

The project will involve three sections. The first section will consist of a literature review of AS and of art therapy. The review will proceed according to the steps advocated by Mertens (1988) and Leedy and Ormrod (2005). The search strategy will involve identifying keywords for the electronic databases available. Keywords and phrases will include: Aspergers Syndrome, neurological and Aspergers Syndrome, neurobiological and Aspergers Syndrome, art therapy and Aspergers Syndrome, art therapy and neurobiology, and art therapy and the brain. Library databases that will be accessed in this research will include PsycINFO, Academic Search Premier, EBSCOhost, and Ovid. To ensure a contemporary view of AS and art therapy, the literature search will focus on the last 20 years of work.
In addition to an extensive review of secondary sources, several primary sources will be investigated. These resources will include Asperger’s (1944/1991) original account of AS, Wing’s (1981) clinical review of this disorder, and several investigations into psychobiology and brain plasticity (Rossi, 2002; and Doidge, 2007). Leading contributors to therapeutic approaches that incorporate art therapy will also be reviewed, with particular attention given to approaches that address the domains of social interaction, emotional processing, repetitive and restricted patterns of interest and behaviour, and executive functioning. These authors will include Malchiodi, Dalley, Klein, and Winnicott. In addition, current intervention protocols used with AS will be investigated, such as behavioural approaches based on learning theory.

The second section will involve a synthesis of the research literature focusing on points of intersection between the therapeutic needs of children with Aspergers syndrome and the therapeutic attributes of art therapy. This analysis will provide the framework for a conceptual model of intervention.

The third and final section will be the proposed art therapy intervention manual. The manual will comprise sample sessions, each of which will target a specific therapeutic domain that is characteristic to children with AS. These domains will include emotional regulation, communication skills, social skills, and motor skills. Special considerations for the idiosyncratic behaviours of children with AS will be noted in the manual; for example, there will be a brief discussion of how to incorporate areas of individual restricted interest into the intervention protocol.
**Potential Implications**

AS is a disability that is often characterized by deficits in communication and imagination (Evans & Dubowski, 2005). The use of art in therapeutic practice with children has the potential to facilitate communication with a nonthreatening and often playful approach. The making of art itself is considered by some to be a creative act requiring the process of imagination (Evans & Dubowski, 2005). Overall, the expressive possibilities of young clients may be expanded when their therapy protocol incorporates art making, and they may also be more compliant with attending and participating in the therapeutic encounter if they perceive that playing and fun are involved.

Art therapy as a psychotherapeutic process shows great promise as an effective way to alleviate the psychological problems and distress commonly associated with AS. The psychobiological implications of creative experiences in therapy, as discussed by Rossi (2002), may have significant implications in facilitating gene expression and increased adaptive behaviours in children with AS. At the same time, the creation of an art product allows the therapist to explore the unique worldview of a child with AS and to use this to identify the difficulties and challenges that the child is facing, thereby promote a meaningful therapeutic encounter.

Exploring AS and art therapy from a neurological standpoint will establish the credibility of claims associated with the therapeutic possibilities of art-therapy processes. Also affected are such practical consideration as developing effective intervention programs for use with individuals and groups in school settings. Effective interventions may help alleviate the difficulties teachers face when dealing with the intractable behaviours and thought patterns associated with AS. Funding in public education is
always inadequate and often restricted to empirically proven methods, which are not always effective in the long term. The validation of art therapy will help promote an alternative view of creative therapies with further implications for funding and support to incorporate this approach into intervention programs and methodology.

Many therapists dealing with children are already aware of the therapeutic possibilities of art-making processes. It is important to note, however, that a limited understanding of art as a therapeutic tool can be risky when used by untrained professionals due to a tendency to place an emphasis on using the creative process as a diagnostic technique (Malchiodi, 1993). Increased understanding of the therapeutic mechanisms involved in the art therapy process will direct the efforts of practitioners in more effective ways.

The development of a therapeutic model with a theoretical foundation may generate future qualitative and quantitative research into the areas where AS and art therapy intersect. There is enormous potential for effectively incorporating art therapy into existing treatment programs in schools and support organizations, as this therapeutic approach can be adapted for various clinical approaches, both as a communication tool and as a vehicle for emotional processing. A resource that presents practical examples of how the creative process can be used in therapy with the AS child may help fill some of the therapeutic void in this area. With a wider range of tools at their disposal, and an increased awareness of the neurological aspects of the creative process, those working with children diagnosed with AS will have the potential to improve the effectiveness of their work and, subsequently, the lives of these children and their families.
References


