

The Effectiveness of Art Therapy on Levels of Anxiety in Children

by

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Abstract

In Canada anxiety is one of the most prevalent child psychopathologies affecting more than 13% of children (Tramonte & Willms, 2010). Previous art therapy research looked at decreasing symptoms of anxiety in adults, but there has been minimal research on art therapy with children. This study examined the effectiveness of art therapy on levels of anxiety in children diagnosed with anxiety disorders or exhibiting symptoms of anxiety. Levels of anxiety were assessed in four male participants over the course of 19 one-hour individual art therapy sessions using the following statistical measures: a pre- and post-test *Multidimensional Anxiety Scale for Children* (MASC, 1997), a pre- and post-session *Feeling Barometer* (Kendall, 1992), and a pre- and post-art assessment *Person Picking an Apple From a Tree* (PPAT; Gantt & Tabone, 1998). Seventeen art directives were administered and assessed during research treatment for reductions in anxiety levels. Results indicated a statistically significant decrease in levels of anxiety for the feeling barometer ratings. Results for the MASC and the *Formal Elements Art Therapy Scale* (FEATS; Gantt & Tabone, 1998) were statistically insignificant. The positive outcomes of the art therapy sessions included an increase in the participants expression of feelings, development of skills to manage anger, stress, and anxiety, ability to change negative self talk by identifying strengths and positive characteristics, and establishment of a positive relationship with the art therapist, which were all key counselling components when working with children with anxiety (Foxman, 2004). Findings provided knowledge of art therapy directives that can be useful in the treatment of anxiety disorders, statistical measures that can be used in future studies when assessing levels of anxiety, and evidence for the use of art therapy in the treatment of anxiety.

Keywords: art therapy, anxiety, anxiety disorders, children, directives, MASC, PPAT, feeling
barometer

In memory of my great aunt

Anne Marie McBride

For all her support, love, and guidance

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CHAPTER ONE

Introduction

Anxiety in children is one of the most common childhood disorder in Canada (Austin & Boyd, 2010; Cairney & Streiner, 2010). According to Chorpita and Southam-Gerow (2006), children with anxiety tend to “experience significant and lasting psychosocial impairments” (p. 271). Anxiety disorders effect a high percentage of children and if untreated can carry on to adulthood (Dellaria, 2006; Foxman, 2004). In addition the sooner an anxiety disorder is treated the less complex and costly it becomes in the future.

A significant amount of research has shown that symptoms of anxiety disorders are common among children (Bell-Dolan, Last, & Strauss, 1990; Essau & Petermann, 2001; Foxman, 2004; Muris, 2007; Ollendick & King 1994; Silvernman & Trefferes, 2001). Bell-Dolan et al. (1990) found that symptoms of anxiety disorders effected 10% to 31% of children ages five to eighteen in the United States. According to Ollendick and King (1994), 85% of youth had a moderate level of interference with daily routines due to worrying. Researchers are expanding ways to identify anxiety disorders in at risk youth, as evidence of significant risk factors continues to increase (Chorpita & Southam-Gerow, 2006).

Moreover, there have been several studies utilizing art therapy to decrease symptoms of anxiety in adults (Albertini’s, 2001; Chambala, 2008; Nanis, Paice, Ratner, Wirth, Lai, & Shott, 2006; Nanis, 2008). However, there has been minimal research on art therapy with children.

Problem Statement

The treatment of anxiety is important for the psychological, emotional, and physical well being and development of children (Chorpita and Southam-Gerow, 2006; Foxman, 2004; Muris, 2007). In Canada, anxiety disorders are one of the most prevalent child psychopathologies effecting more than 13% of children (Tramonte & Willms, 2010). DuPont, DuPont, and Rice (2002) stated how anxiety disorders make up 31.8% of the costs of all mental health disorders.

Similarly, in the United States anxiety disorders comprise one third of total mental health costs (Foxman, 2004).

In the United States, anxiety disorders are the most common emotional disorder of children affecting 10 to 15% (Foxman, 2004). The number of children suffering from anxiety is increasing due to a trend towards greater exposure to stress and violence (Foxman, 2004). According to Foxman (2004), thirty-seven million American's suffer from anxiety disorders with anxiety being the most widespread emotional disorder effecting 25% of the population at some point in their lives. Chorpita and Southam-Gerow (2006) explained how anxiety is common among youths with a lifetime prevalence of 6% to 15%. Muris (2007) clarified the variance in rates, by breaking them down based on the length of time of the anxiety disorder. The prevalence of anxiety disorders in children for a three month period of time was estimated at 2.2% to 8.6%, six-month ranged from 5.5% to 17.7%, twelve-month rates were estimated at 8.6 to 20.9%, compared to a life time prevalence of 8.3% to 27.0% (Muris, 2007).

In general, anxiety levels have been increasing over the years, due to elevated levels of stress, and rapid changes in technology, the environment, and society (Bourne, 2010). One factor contributing to this trend is the fact that “our society and environment have changed more in the past 30 years than in the past 300 years” (Bourne, 2005, p. 1). As a result people have found it challenging to keep pace with the speed of modern society (Bourne, 2005). In addition, the rapid changes in technology have created a lot of ambiguity leaving people feeling like they cannot keep up resulting in cumulative stress and uncertainty, which are two main factors contributing to the development of anxiety disorders (Bourne, 2005).

Similarly, Ryan-Wenger, Sharrer, and Campbell (2005) explained how social and political changes over the past 30 years have created new sources of stressors for children. A total of 908 stressors were found, which included being alone, school tests, family fighting, too many things

to do, and boyfriend or girlfriend issues (Ryan-Wenger et al., 2005). Additionally, Spirito, Stark, Grace, and Stamoulis (1991), found the following stressors: parents, siblings, school, and friends.

Anxiety disorders outrank all other emotional problems including depression (Glatzer & Foxman, 2002). Anxiety disorders are often concurrent or comorbid with major depression and addictive disorders (Regier, Rae, Narrow, Kaelber, & Schatzberg, 1998). Furthermore, anxiety is among the most common reasons for medical visits, which is not surprising since anxiety is often the cause of sleeping disorders, digestive disorders, high blood pressure and other ailments (Foxman, 2004; Glatzer & Foxman, 2002; Stein, Hollander, & Rothbaum, 2009).

Dupont et al. (2002) explained how anxiety disorders account for the largest percentage of the total costs of all mental disorders because of its “high prevalence, young age of onset, and large effects on economic productivity” (as cited in ADAC, 2003, p. 2). People with anxiety disorders are “voracious consumers of healthcare services including visits to primary care physicians, specialists, diagnostic testing, ambulances and emergency room visits” (ADAC, 2003, p. 2). This excessive use of mental health services is due to the under diagnosis and under treatment of anxiety disorders. A lot of the costs associated with anxiety disorders result from absent or incorrect diagnosis, and inappropriate or inefficient treatment (Salvador-Carulla, Segui, Fernandez-Cano, & Canet 1995). Moreover, the literature is showing that effective forms of treatment for anxiety disorders are reducing overall healthcare costs (Salvador-Carulla et al., 1995).

The current problem with childhood anxiety disorders is they are often untreated and under-diagnosed, resulting in the anxiety continuing on into adulthood and often becoming more persistent and severe (Dellaria, 2006; Foxman, 2004; Salvador-Carulla et al., 1995; Wagemaker, 2003). In addition, anxiety disorders in “children and teenagers can affect their school

attendance, academic motivation, learning ability, memory, social life, concentration, attention and sleep” (Foxman, 2004, p. 3). Children with severe anxiety suffer from diminished physical health, as well as problems with intellectual, emotional and social development (Chorpita and Southam-Gerow, 2006; Foxman, 2004). Furthermore, untreated anxiety disorders often lead to the development of depression and substance abuse in early adult years (Pine, Cohen, Gurley, Brook, & Ma, 1998; Regier et al., 1998; Wagenfeld & Kaldenberg, 2005).

If anxiety can be identified and treated at the early stage of childhood development, the interference with the child’s normal development and quality of life can be minimized. According to Foxman (2004) only a quarter of children with an anxiety disorder receive the proper diagnosis and treatment.

Clearly there needs to be more accessible and innovative services provided to this population, in order to prevent more complex anxiety in adulthood. Art therapy is one psychotherapeutic treatment which may decrease levels of anxiety (Aaron, Rinehart, & Ceballos, 2011; Nanis, Paice, Ratner, Wirth, Lai, & Shott, 2006; Nanis, 2008).

Research Objectives

The first objective of the study was to examine the effectiveness of art therapy on levels of anxiety in children diagnosed with anxiety disorders or exhibiting symptoms of anxiety using the following statistical measures: *Multidimensional Anxiety Scale for Children* (MASC, 1997), a feeling scale referred to as a *Feeling Barometer* (Kendall, 1992), and the art therapy assessment *Person Picking an Apple From a Tree* (PPAT, Gantt & Tabone, 1998). In addition, the artwork was analyzed over the course of treatment to see if there were any significant themes, developments and changes.

The second objective was to determine if a wide range of colour, abstract images, heavy line pressure, size, and detail loss were prevalent in drawings created by children showing

anxiety. Chambala (2008) found the following reoccurring characteristics while conducting her study with anxious patients on a psychiatric unit: a wide range of colour and abstract images. Braimoh, Rowntree, and Stacey-Corrin (1997) found a positive correlation between line pressure and anxiety scores with outpatient adolescents. Handler and Reyher's (1965) revision of 51 studies found evidence for the following anxiety indexes: size and detail loss. Furthermore, the five anxiety indexes were matched with the following five *Formal Elements Art Therapy Scales* (FEATS; Gantt & Tabone, 1998): prominence of colour, realism, line quality, details of objects and environment, and size. In addition, the logic and problem-solving scales were examined based on Chorpita and Southam-Gerow (2006) research of anxiety disorders in children.

Research Hypothesis

The primary research question of the study was: how effective is art therapy in alleviating anxiety in children? It was hypothesized that children who received individual art therapy sessions would have a reduction in levels of anxiety.

CHAPTER TWO

Literature Review

Etiology of Anxiety and Anxiety Disorders

Anxiety. The field of anxiety has grown and evolved in many ways over the past twenty years (Bourne, 2010). According to Nutt and Ballenger (2003), the 1990's was often referred to as the decade of anxiety. The 21st century has been referred to as the century of anxiety and stress (Nutt & Ballenger, 2003). One of the major contributing causes to the increasing rate of anxiety is the increased pressure and pace of modern life (Nutt & Ballenger, 2003).

Bourne (2005) defined anxiety as a “physiological, behavioural and psychological reaction” to a stimulus (p. 6). On a physiological level, anxiety may include bodily reactions such as a rapid heartbeat, muscle tension, queasiness, dry mouth or sweating. In terms of behaviour, it can affect a person's ability to express themselves, and to deal with everyday situations. On a psychological level, it is a subjective state of apprehension and uneasiness (Bourne, 2005). Moreover, there are varying forms of anxiety and levels of intensity, ranging from a slight feeling of uneasiness to a panic attack, which involves increased heart rate, disorientation, terror, feeling detached, and becoming fearful of dying or going crazy (Bourne, 2005).

Rachman (2004) defined anxiety as “a tense, unsettling anticipation of a threatening but vague event” (p. 3). It has a similar negative affect to fear, which involves a combination of tension and unpleasant anticipation. When a person is feeling anxious they tend to have difficulty identifying the cause of their tension and uneasiness as anxiety often feels “diffuse, objectless, unpleasant and persistent” (p. 3). Rachman (2004) described the root cause of anxiety as fear. This fear may be caused by the perception of an external danger or an internal threat.

Also, fear and worry are terms often associated with anxiety. When fear goes beyond a survival reaction and becomes chronic, it can lead to “impairment, fatigue, physical complaints,

anxiety and phobias, and difficulty relaxing” (Foxman, 2004, p. 10). Not only are fear and anxiety linked, but they share common symptoms.

One of the most common symptoms of anxiety is excessive worry, which is also a component of a number of anxiety disorders (Essau & Petermann, 2001). Research has shown there is a high prevalence of childhood worries with children age seven to twelve (Essau & Petermann, 2001). According to Silverman, La Greca, and Wasserstein (1995) children have an average of 7.64 different worries related to school, health and personal harm. Muris, Merckelbach, Meesters, and Van Lier (1997) found that the top ten fears for boys age seven to twelve were:

Not being able to breathe, being hit by a car or truck, bombing attacks or being invaded, getting a serious illness, getting burned by fire, falling from a high place, getting lost in a strange place, burglar breaking into the house, electric shock, and death or dead people. (p. 265)

Fear and worry are not only linked to anxiety, but are important components in understanding the roots of an anxiety disorder.

It is important to make the distinction between anxiety and anxiety disorders as anxiety is considered a normal part of life. For children, normal levels of anxiety can be caused by having an exam, giving a presentation, or attending their first day of school. Anxiety can also be a motivating factor for children to cope with these events. However, when levels of anxiety affect regular functioning and are persistent or intense, the child most likely is suffering from an anxiety disorder (Foxman, 2004). Anxiety disorders involve levels of anxiety that are more intense, last for longer periods of time, or lead to phobias which interfere with daily life (Bourne, 2005).

Anxiety Disorders. An anxiety disorder is a strong reaction to an irrational danger with disproportionate intensity resulting in some form of impairment (Essau & Petermann, 2001). Bourne (2010) defined anxiety disorders as an outcome of cumulative stress overtime. According to Emilien, Durlach, Lepola, and Dinan (2002), the five main anxiety disorders are phobias, posttraumatic stress disorder, panic disorder, generalized anxiety disorder, and social phobia.

The most common types of anxiety disorders in children are specific phobia, social phobia, and generalized anxiety disorder (Turgeon, Kirouac, & Denis, 2005). For the purpose of this study the focus was generalized anxiety disorder (GAD). GAD is defined as “persistent levels of abnormal anxiety and worry with no apparent associated focus” (Emilien et al., 2002, p. xvi). According to the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed. (American Psychiatric Association, 2000), there are six diagnostic criteria for GAD (p. 472-473):

- At least 6 months of persistent and excessive anxiety and worry.
- Difficulty controlling worry.
- At least three other symptoms which include: restlessness, being easily fatigued, difficulty concentrating, irritability, muscle tension, and disturbed sleep. A child only needs one of these symptoms.
- The anxiety cannot be related to another Axis I disorder, such as panic attacks or being embarrassed in public.
- The individual reports constant worry, difficulty managing their worry, or problems in other areas of functioning.
- The disturbance of GAD cannot be related to the effects of a substance or a general medical condition.

Children with GAD tend to worry excessively about punctuality or their performance in school or sports, for which they constantly seek approval and reassurance (APA, 2000).

Children may also be overly conforming, perfectionistic, and unsure of themselves.

Additionally, GAD can be aggravated by stressful situations that elicit any of the following fears: “fear of losing control, fear of not being able to cope, fear of failure, fear of rejection or abandonment, or fear of death and disease” (Bourne, 2010, p. 18). For children these stressful situations may include “increased performance demands, intensified marital conflict, physical illness, or any situation that heightens the person’s perception of danger or threat” (Bourne, 2010, p. 19).

Although anxiety disorders have existed for many centuries, they have not been labelled as such (Nutt & Ballenger, 2003). Anxiety disorders were only added in 1994 to the *DSM IV* (APA, 2000), and in 1993 to the *International Classification of Diseases*, 10th edition (World Health Organization, 1993; Marshall & Klein, 2003).

In terms of the evolving understanding of treatment, Bourne (2010) described how the focus of treatment in the 1990’s revolved around cognitive behavioural therapy (CBT), which was followed by an expansion of treatment approaches, programs and organizations dedicated to specific anxiety disorders.

In the past few years a new approach referred to as acceptance and commitment therapy (ACT), has been gaining recognition in the field. This approach emphasizes mindfulness over anxious feelings and thoughts, rather than the CBT approach of “challenging and changing fear-producing thoughts” (Bourne, 2010, p. ix).

In terms of the scientific understanding, research is currently focusing on the neurobiology of anxiety disorders, and the genetic mechanisms which predispose a person to anxiety (Essau & Petermann, 2001; Muris, 2007; Nutt & Ballenger, 2003). Scientists have identified one

particular gene on chromosome 17, which has a short and long form (Bourne, 2005). If it is a short form, the person is more vulnerable to life stressors, more likely to develop an anxiety disorder, and is less responsive to certain types of medication like Paxil and Zoloft (Bourne, 2005). Although scientists are developing a greater understanding of the genetic components contributing to anxiety disorders, there are also environmental aspects that need to be taken into consideration.

There are several components that need to be addressed when treating anxiety disorders. These include nutritional habits, self-talk, ability to relax, beliefs, feelings, assertiveness and self-esteem (Bourne, 2005; Chorpita & Southam-Gerow, 2006; Kendall, 2002). Furthermore, anxiety can be brought on by many factors operating on numerous levels including heredity, childhood circumstances, cumulative stress over time and recent stressors, biology, family background and upbringing, and conditioning (Bourne, 2005; Essau & Petermann, 2001; Muris, 2007).

Subsequently, there has been some compelling research regarding the development of anxiety disorders in identical twins. The probability of a twin developing an anxiety disorder if the other twin already has a diagnosis ranges from 31 to 88 percent (Bourne, 2005). For fraternal twins it is much lower, but is still higher than the incidence of anxiety disorders in the general population (Bourne, 2005).

Additionally, one's personality type plays an important role in one's predisposition to anxiety. A person with a volatile, excitable, and reactive personality is more at risk to a threatening stimulus, resulting in a higher susceptibility of developing an anxiety disorder (Bourne, 2005).

In terms of childhood circumstances, both the environment and experiences shape the child. If parents are constantly communicating an overly cautious view of the world then the child will

begin to see the world as a dangerous place (Bourne, 2005). When parents are overly critical and set excessively high limits, the child will wonder if they are good enough. If the child feels emotionally insecure and dependent, they have a higher chance of developing an anxiety disorder (Bourne, 2005). Lastly, if parents suppress the child's expression of feelings and self-assertiveness, then the child learns it is wrong to be expressive and assertive, and becomes overly anxious when feelings or impulses arise.

An additional contributing factor to the development of anxiety is cumulative stress over time. Foxman (2004) lists several sources of stressors for children, which include the "death of a parent, parents divorcing, separation from a parent for an extended period of time, a parent who travels for work, a close family member dying" and several others (Foxman, 2004, p. 13). If a child experiences several of these stressors, then there is a strong likelihood of the development of health problems (Foxman, 2004).

Moreover, withheld feelings like anger, frustration, and sadness can all contribute to a state of anxiety. Bourne (2005) stated that expressing feelings in a healthy way can be very beneficial. Expressing feelings has shown to "have a distinct physiological effect that results in reduced levels of anxiety" (Bourne, 2005, p. 54).

Another contributing factor to elevated levels of anxiety is anxious self-talk, which involves many "what if" statements, which are thoughts anticipating the worst case scenario and negative outcomes (Bourne, 2010). Levels of anxiety are also affected by mistaken beliefs, which are distorted views about oneself and the world, which can cause someone to live their life in a restricted way. Thirdly a lack of assertiveness makes it difficult to express feelings to other people (Bourne, 2010).

Overall, an anxiety disorder is a complex system involving many contributing factors, which affect the physical, mental and emotional well being of an individual. Therefore a

holistic approach to treating anxiety disorders should be considered, in order to effectively treat anxiety.

Anxiety in Boys. Anxiety in boys is a broad topic with many components. As all the participants in the study had been exposed to violence or abuse in the home the focus in the following section is about the relationship between witnessing violence or abuse, the impact on young boys, and the development of anxiety. In Canada there have been studies done by the Canadian government on the relationship between witnessing violence, and exhibiting symptoms of aggression and anxiety in children. According to Dauvergne and Johnson (2001), the immediate and longer-term effects of a child witnessing violence depends on their age and gender, their understanding of the violence, the parent's responsiveness, and the length of time and severity of the violence.

Moss (2003) found trends indicating that if the child was classified as having high anxiety, the parent tended to describe them as unhappy, fearful and tense. These characteristics were relatively common among children who had witnessed violence, compared to the sample that had not (Moss, 2003).

In a 1994 to 1995 study conducted by Statistics Canada, 12% of boys who had witnessed violence had a high level of anxiety, compared with 6% of those who had not (Moss, 2003). The earlier children exhibit anxiety, the more likely the symptoms will last and influence their future behaviour (Milan et al., 2006). The study concluded that symptoms of anxiety could start to appear in boys two years after witnessing violence (Moss, 2003).

In boys, there is a tendency to easily identify symptoms of aggression, but not symptoms of anxiety therefore anxiety is most likely under-diagnosed in boys because of how difficult it is to identify.

Treatment of Anxiety and Anxiety Disorders

Cognitive Behavioural Therapy. Cognitive behavioural therapy (CBT) has been widely used with children diagnosed with anxiety disorders (Martin, Volkmar, & Lewis, 2007).

According to Chorpita and Southam-Gerow (2006), the CBT approach helped children to learn “about anxiety and how to cope with it” (p. 273). The majority of evidenced based treatment for childhood anxiety is based in the cognitive behavioural approach (Le Croy, 2008).

Numerous studies have formed core components of CBT, which include psychoeducation, expanding the client’s emotional vocabulary, and developing relaxation techniques. Firstly, psychoeducation involves normalizing the client’s anxiety and helping them to identify their symptoms of anxiety (Chorpita & Southam-Gerow, 2006; Kendall, 2002). Similarly, this art therapy study implemented a psychoeducational approach, which allowed each participant to understand their anxiety and not feel alone in their experience. Secondly, expanding an individual’s emotional vocabulary is an essential component in art therapy. This involves developing the client’s ability to understand and identify their feelings, in order to build self awareness and recognition of situations likely to evoke certain emotions (Chorpita & Southam-Gerow, 2006). Lastly, relaxation training involving breathing exercises and visualization techniques are key elements in CBT and art therapy (Chorpita & Southam-Gerow, 2006).

Subsequently, building problem-solving skills is considered to be important for children with anxiety disorders for two reasons. Firstly, it is important for a child to be able to generate and evaluate alternative solutions to their problems in a safe way (Chorpita & Southam-Gerow, 2006). Secondly, children need to be validated for their problem-solving efforts in order to not get stuck in finding the perfect solution (Chorpita & Southam-Gerow, 2006). In the same way, art therapy allows a child to explore and experiment with various problem-solving strategies in a non-threatening way.

Comprehensive Approach. Key components of the comprehensive approach include countering negative self-talk, developing relaxation techniques, building self-esteem, and establishing a relationship with one's "inner child" (Bourne, 2005).

Countering negative self-talk is important in the treatment of anxiety disorders because it has a major effect on levels of anxiety (Bourne, 2005). Developing strategies to recognize and counter destructive thinking patterns has shown to be effective (Bourne, 2005). In order to reduce negative self-talk, an individual needs to understand that what they say has a huge impact on how they feel (Bourne, 2005). Similarly, art therapy uses strategies to help the client communicate their feelings and their needs to others.

Bourne (2005) stated that relaxation should be at the foundation of any program undertaken to overcome anxiety. In the same way relaxation was a key component in the art therapy sessions of this study. When relaxation becomes more natural overtime, levels of anxiety decrease "preventing stress from becoming cumulative, increasing energy levels, improving concentration and memory, reducing insomnia and fatigue, and increasing availability of feelings" (Bourne, 2005, p. 75).

Bourne (2005) discusses several ways to achieve deep relaxation, which are methods incorporated into many art therapy directives, such as abdominal breathing, visualization of a peaceful place, guided imagery, and meditation. Visualization of a peaceful and safe place with deep breathing is a method often used in art therapy (Shapiro & Sprague, 2009). In terms of meditation, art can help a client reach a meditative state by focusing their mind and energy on the process of art making.

One of the deepest contributing factors to anxiety is low self-esteem (Bourne, 2010). Art therapy has been shown to increase self-esteem overtime because it gives the child a sense of ownership and accomplishment (Lister, Tanguay, Snow, & D'Amico, 2009).

Another important factor in therapy is cultivating a relationship with one's "inner child" (Bourne, 2005). This involves embracing one's playful, spontaneous and creative side, which are all accessible through the process of art therapy.

In the treatment of anxiety there are many components that need to be addressed, including learning relaxation methods, countering negative self-talk, transforming mistaken beliefs, increasing self-esteem, and identifying and understanding feelings. All of these factors can be addressed in art therapy sessions, when using appropriate directives, deep breathing and guided imagery exercises. Art therapy allows the individual to gain a better understanding of themselves, and to explore various coping strategies for their anxiety. Moreover, art therapy builds upon the participant's ability to relax, their assertiveness and their self-esteem (Malchiodi, 2007; Rubin, 2005). Lastly, art therapy is a non-threatening and effective form of therapy, which would be beneficial to anxiety disorder patients.

Art Therapy. According to the British Association of Art Therapists (BAAT, 2010), art therapy is a form of psychotherapy that uses art media as way for the client to express their feelings and thoughts. Similarly, the American Art Therapy Association (AATA, 2010) describes art therapy as a "creative process using various art materials to improve and enhance the physical, mental and emotional well-being of individuals" (Art Therapy section, para. 1). The aim of art therapy, "is to enable the client to effect change and growth on a personal level through the use of art materials in a safe and facilitating environment" (BAAT, 2010, para. 2). The creative process of art therapy can help clients to resolve conflicts and problems, develop interpersonal skills, manage behaviour, reduce stress, increase self-esteem and self-awareness, and achieve insight (AATA, 2010).

In terms of clientele, art therapy can be effective with individuals who find it difficult to express their thoughts and feelings verbally (BAAT, 2010). This is one of the reasons why

children benefit so well from this type of therapy, as they have not reached their full capacity for verbal communication. Furthermore, art therapy is helpful for people suffering from anxiety disorders for two reasons. Firstly, expressing oneself visually is more beneficial than solely relying on words for self-expression and communication (Chambala, 2008; Malchiodi 2003). Additionally, depicting one's experience visually can be less confrontational and less stress inducing, than disclosing information verbally (Malchiodi, 2003). Secondly, art therapy can help the client develop coping skills and relaxation techniques (Chambala, 2008; Hinz, 2006; Rubin, 2005).

According to art therapist Cathy Malchiodi (1997), art therapy can help children express their anxiety in many ways. Malchiodi (1997) has found that somatic symptoms related to anxiety often decrease when the child becomes engaged in the art making. Also, art therapist Judith Rubin (2005) underscored that art therapy can help the child express their anxiety, leaving them feeling relaxed and calm.

Moreover, art therapy has shown to be effective in helping clients with symptoms of pain, nausea and anxiety (Malchiodi, 2003; Nainis, 2008). It has also been used among caregivers and family members of cancer patients, and has been shown to decrease anxiety and stress (Nainis, 2008). A study done by Trauger-Querry and Haghghi (1999), found that art therapy lowers stress, which aids in reducing anxiety.

In addition, art therapy has a similar structure to mindfulness based therapies, which is a well used treatment with anxiety patients (Bourne, 2005). Both incorporate the concepts of being present centered, accepting whatever comes up, and the practice of simply witnessing or observing the contents of experience without passing judgment.

Several studies have used art therapy in the treatment of anxiety. However, there are several gaps between what has already been accomplished and what still needs to be done in

order to move forward in the understanding of art therapy's effectiveness in the treatment of anxiety. Five shortcomings in the literature were found.

The first shortcoming was most of the art therapy research studies conducted thus far with anxiety patients have been qualitative studies and not quantitative studies. The majority of existing qualitative research studies focused on case studies with subjective opinions and non objective measures. For example, Albertini's (2001) study focused on group art therapy in the treatment of people with agoraphobia and panic disorder. Even though it was group art therapy, the article only focused on one case study. In addition, there were no directives or art assessments discussed. Similarly, art therapist Raghurman (1999) in her phenomenological study, focused on one case example of a client in a pediatric setting suffering from separation anxiety.

The second limitation of previous research was anxiety has been looked at as one component in relation to several other symptoms. For example, there have been a few studies done on the effects of art therapy with cancer patients. Nainis (2008) found a strong correlation between the use of art therapy and a significant decrease in tiredness and anxiety. Other symptoms such as pain, breathlessness, insomnia and lack of appetite were also looked at. Another study completed by Nainis, Paice, Ratner, Wirth, Lai, and Shott (2006) found reductions in all nine symptoms of the Edmonton Symptom Assessment Scale (Bruera, Kuehn, Miller, Selmsler, & Macmillan, 1991), which were pain, tiredness, nausea, depression, anxiety, drowsiness, appetite, well-being and breathlessness. The above study showed significant differences in levels of anxiety using the Spielberger State-Trait Anxiety Index (Spielberger, Gorsuch, & Lushene, 1969; Nainis et al., 2006). The participants' symptoms were evaluated based on a one-session art therapy intervention, which was effective in showing immediate results (Nainis et al., 2006).

The third gap in the literature was minimal research in the treatment of anxiety disorders. Out of all the literature relating to anxiety disorders, only two art therapy studies were found: Raghurman's (1999) and Albertini's (2001), which both presented one case example.

The fourth shortcoming in the literature was the lack of art therapy studies with children diagnosed with anxiety. Raghurman's (1999) study presented one four-year-old participant. Albertini's (2001) had one 39-year-old participant. Nainis et al.'s (2008) study included 50 adult cancer patients. Curry and Kasser's (2005) study involved 84 undergraduate students who underwent a brief anxiety-induction, and were randomly assigned to either colour a mandala, a plaid form or on a blank piece of paper. Curry and Kasser's (2005) results showed a greater reduction in anxiety levels for the participants in the mandala- and plaid-colouring groups in comparison to the unstructured-colouring group.

In summary, greater art therapy research is required for the treatment of anxiety, since anxiety disorders are the most prevalent childhood pathology and art therapy can be a useful intervention with children because they tend to connect with art quite readily (Morris & March, 2004).

The fifth limitation in the literature was that there is no long-term art therapy research involving anxiety. The study done by Curry and Kasser (2005) involved one session of colouring mandalas, plaid forms, or a blank piece of paper. Nainis et al.'s (2006) study found that art therapy was effective in reducing anxiety, but only involved one one-hour individual art therapy session. Raghurman's (1999) study, treating a pediatric patient with six individual art therapy sessions, was relatively short considering the age of the patient and reason for referral. Chambala's (2008) eight-week art therapy study on an inpatient psychiatric unit was an effective short-term treatment but a longer intervention may have shown a greater reduction in anxiety.

PPAT Assessment. The art therapy assessment *Person Picking an Apple from a Tree* (PPAT) was developed by Linda Gantt and Carmello Tabone (1998) to evaluate formal element qualities in clients drawings, and to understand the client's level of problem-solving skills (Bucciarelli, 2007). Bucciarelli (2007) stated the PPAT helps in formulating a treatment plan and effectively diagnosing clients. According to Council (2003), the PPAT assessment "is useful in evaluating coping ability and resourcefulness" (p. 211). Furthermore, the PPAT is among the more researched and utilized art therapy assessment and is thought of as one of the most soundly developed art therapy assessments (Betts, 2005; Neale & Rosal, 1993). Additionally, the *Formal Elements Art Therapy Scale* (FEATS; Gantt & Tabone, 1998) used to score the PPAT, has strong inter-rater reliability and validity (Bucciarelli, 2007).

The PPAT has been used in art therapy studies as a pre- and post-test measure (Gussak, 2004, 2006, 2007, 2009). According to Gussak (2004), the PPAT was an effective tool in measuring changes in levels of depression in prison inmates with the following FEATS variables: prominence of color, color fit, energy, details of objects and environment, and space. Also, the FEAT problem-solving scale was assessed to see if prison inmates increased their problem-solving abilities.

The PPAT was also used in an art therapy study with a group children diagnosed with attention deficit hyperactivity disorder (Munley, 2002). The results indicated a relationship between the participants diagnosed with ADHD and their FEATS scores of color prominence, details of objects and environments, and line quality (Munley, 2002).

CHAPTER THREE

Methods

Revisiting the Hypothesis

The purpose of this study was to examine the effectiveness of art therapy on levels of anxiety in children diagnosed with anxiety disorders or exhibiting symptoms of anxiety using the following statistical measures: the *Multidimensional Anxiety Scale for Children* (MASC; March, 1997), a *Feeling Barometer* (Kendall, 1992), and the art assessment *Person Picking an Apple From a Tree* (PPAT; Gantt & Tabone, 1998). Artwork created by participants was analyzed over the course of treatment to see if there were any significant themes, changes or developments.

The PPAT was introduced to determine if a positive correlation exists with anxiety and image variables such as colour usage, abstract images, line pressure, size, and detail loss. Chambala (2008) found the following reoccurring image characteristics completed by anxious patients on a psychiatric unit: a wide range of colour, and abstract images. Braimoh, Rowntree, and Stacey-Corrin (1997) found a positive correlation between line pressure and anxiety scores with outpatient adolescents. Handler and Reyher's (1965) revision of 51 studies found a relationship between anxiety levels and the size and the detail loss in participants drawings. The above characteristics were looked at when comparing the pre- and post- PPAT as well as in the analysis of the participants artwork.

Participants

Four male participants between the age of 11 and 14 partook in the study. Two participants, Anthony and Walter, were diagnosed with generalized anxiety disorder (GAD), and two participants, Pierre and Edward, presented with symptoms of anxiety. Pierre and Edward's symptoms included excessive worry and physiological symptoms such as feeling tense and restless. In addition, Pierre and Edward presented with components of social

anxiety such as fear of rejection and humiliation. It is important to note that both Pierre and Edward also had a diagnosis of Asperger's. According to Elkis-Abuhoff (2008), children with Asperger's tend to have higher levels of anxiety.

Pierre, Anthony and Walter attended a specialized school for children with high needs and behavioural issues. In the classroom the ratio of student to support was three to one. The supports included a teacher and a Child and Youth Worker (CYW). Edward was enrolled in a community school in a behavioural classroom. The participants were recruited from a Children's Mental Health Centre in Ontario.

Inclusion in the Thesis. Each participant completed a one hour intake session and 19 one hour individual art therapy sessions. Initially six participants were recruited for the study. However, two were not able to complete the full 19 individual art therapy sessions due to time constraints or inability to attend sessions on a regular basis.

Human Subjects Approval

The inherent risks for the human subjects by participating in the study included possible anxiety from filling out the pre- and post-test MASC, as they may have felt they were being tested. The scale was administered in order for the research investigator and the participant to gain insight on what makes the participant feel anxious. The second risk was they may have felt a loss of empowerment when given a projective assessment, especially with the PPAT. However, the directives used throughout treatment were meant to help facilitate skills to manage anxiety, and to work towards the treatment goals set by the client and their family. Moreover, the administration of the PPAT in the first and final art therapy session was used to gain insight into the participants' problem-solving skills.

The foreseeable benefits of participating in this study included the client receiving treatment, exploring their anxiety, and developing skills to manage their anxiety. Foreseeable

benefits to others included research involving statistical measures for evaluating treatment, the strengths and weaknesses of specific directives for treating anxiety, and further insight into treating anxiety in children with art therapy.

The participants' parents completed the TATI research consent form and the Children's Mental Health Centre consent form (see Appendix A).

No identifying participant information or images were used in the writing of this thesis. Pseudonyms were used for each participant.

Research Design

The structure of all 19 art therapy sessions integrated the following counselling components for anxiety, based on Foxman (2004):

- a. *Assessment*: to determine the type of anxiety, and to develop an appropriate treatment plan for the participant.
- b. *Reassurance*: normalization of their anxiety. Explained the benefits of practicing new skills and how this would contribute to them feeling better.
- c. *Education*: therapist educated the client about anxiety, and therapist and client figured things out together.
- d. *Relaxation Skills Training*: explained that being relaxed helps their anxiety go away. The goal was for relaxation to become an automatic and natural response.
- e. *Stress Management*: utilized the "three S's" approach of signals, sources and solutions. Signals are physical symptoms. Sources are stressful triggers. Solutions are appropriate coping skills and relaxation techniques.
- f. *Cognitive Change*: identified and restructured attitudes and beliefs to help change negative self talk.

- g. *Emotional Communication*: client needed to learn the language of feelings. By learning this language they could express their feelings and needs in order to reduce anxiety and empower them in their relationships.
- h. *Relationship*: the relationship between the therapist and client tends to be a corrective emotional experience offering patience, understanding, helpful suggestions, emotional safety and positive reinforcement. (p. 199)

The participants completed 19 one hour individual art therapy sessions on a weekly basis with the following structure:

1. Administration of the feeling barometer (Kendall, 1992; see Appendix B)
2. Directive
3. Discussion of the participant's artwork
4. A directive or spontaneous artwork for the other part of the session
5. Discussion of participant's artwork
6. Containment activity to help transition out of the therapy session and back into the classroom
7. Administration of the feeling barometer

The feeling barometer was introduced in the intake session and was administered at the beginning and end of each art therapy session as a way to gauge the effectiveness of the directive for the participant, the effectiveness of the art therapy session, and if treatment reduced participants' levels of anxiety.

Intake Session. Prior to commencing individual art therapy sessions, each participant completed a pre-art therapy intake session. During the intake session the therapist explained confidentiality, rules, staying safe, and treatment goals. The main objectives of the intake were to establish rapport between the therapist and the client, and to explain the next 19 art

therapy sessions. The therapist also described what art therapy is and introduced the participant to the art materials (see list of art materials, Appendix C).

During the intake session, participants were asked to create an art folder to store their artwork. They were directed to design and decorate their folder with their name, hobbies, symbols, and interests. Additionally, participants were instructed to decorate their feeling barometer (see Appendix B). They were asked to create an arrow, which they would use to point towards the emotion they were feeling. The arrow was affixed to the feeling barometer with a push pin. The client was informed that the feeling barometer was a tool they would use at the beginning and end of each art therapy session to gauge how they were feeling.

At the end of the art therapy intake session, the client was invited to explore and engage with art materials. Participants were then welcomed to describe their artwork.

Art Therapy Directives. The art therapy directives introduced in this study were adapted from therapeutic directives used in verbal therapy sessions with anxious clients (Shapiro & Sprague, 2009). Additionally, many of the directives focused on the exploration and expression of feelings related to anxiety. A number of directives were adapted from Shapiro and Sprague's (2009) stress management and relaxation techniques. The order of the directives was dependent upon the needs and the goals of the client. The following directives were introduced in the study with the aim of reducing the participant's symptoms of anxiety and increasing their coping skills.

The first seven directives were adapted from Shapiro and Sprague's (2009) stress management and relaxation techniques:

1. *Special Place*

- Intervention: Close your eyes, begin taking deep breaths, and allow your body to relax. Allow an image of a peaceful and safe place to appear. Notice any

sounds, smells, sights, and tastes you are experiencing (Shapiro & Sprague, 2009). When you are ready, open your eyes and depict your special place using the presented art materials.

- Goal: For participants to use their special place and deep breathing when feeling stressed or anxious (Shapiro & Sprague, 2009).
- Materials:
 - Pencils
 - Oil pastels
 - Chalk pastels
 - Pencil crayons
 - Markers
 - Clay
 - Paint
 - Coloured and white paper: 8"x10" and 12"x16"
 - Plastercine

2. *Inner Helper*

- Intervention: Close your eyes and focus on your breathing by taking deep breaths and letting your body relax. Imagine your helper, it can be anything: an animal, a person, an angel (Shapiro & Sprague, 2009). Your helper represents wisdom, support, love, and safety (Shapiro & Sprague, 2009). It is there to provide advice when facing a difficult decision or problem. At this moment you can ask your helper a question about a problem you are having. Just let it talk to you, there is no rush. It is there to help you. It may bring you a thought or a feeling. Whatever he or she brings is a gift to you. When finished with your helper, open your eyes and depict your helper using the presented art materials.
- Goals: 1. To decrease participants feelings of loneliness when facing problems. 2. To develop the skill of trusting their own instincts. 3. For participants to

begin to internalize messages of love, support, and safety (Shapiro & Sprague, 2009).

○ Materials:

- Coloured and white paper: 8”x10” and 12”x16”
- Oil pastels
- Chalk pastels
- Pencil crayons
- Markers
- Clay
- Pencils
- Popsicle sticks
- Googly eyes
- Toothpicks
- Plastercine
- Clay

3. *Feelings Penny Pitch*

- Intervention: Throw a coin on the sheet of emotions, and then discuss the emotion the coin lands closest to (Shapiro & Sprague, 2009).
- Goals: For participant to be able to identify emotions such as brave, calm, mad, happy, sad, proud, excited, scared, irritable, shy and loving, to provide personal examples, and to expand their emotional vocabulary (Shapiro & Sprague, 2009).
- Materials:
 - One coin
 - One sheet of emotions (see Appendix D)

4. *Thought Changing Machine*

- Intervention: Think of a negative thought and write it down on the left hand side of the page. Then, brainstorm a way to transform the negative statement

into a positive one (Shapiro & Sprague, 2009). Continue the process until you can no longer think of any negative thoughts.

- Goal: Allows participant to identify their negative thinking, and to understand how transforming negative thoughts into positive ones can affect their levels of anxiety and stress (Shapiro & Sprague, 2009).
- Materials:
 - One pen or pencil
 - One Thought Changing Machine sheet (see Appendix E)

5. *Relaxation Jar*

- Intervention: Pick a jar or create a jar, and then decorate it however you like. Then, think of strategies to help you relax (Shapiro & Sprague, 2009).
- Goals: For the participant to identify their current strategies and new ones they can use to help them relax such as reading a book, talking to a friend, going for a walk or hike in nature, holding a stone, and taking deep breaths (Shapiro & Sprague, 2009).
- Materials:
 - One jar
 - Paint
 - Collage: magazine cut-outs
 - Clay
 - Strips of paper
 - List of additional relaxation techniques
 - One pen or pencil

6. *Sand Tray*

- Intervention: Create a scene in the sand tray using any of the objects available in the sand tray area.

- Goals: To help promote relaxation and to allow participants to express themselves using a different medium. Shapiro and Sprague (2009) explained how using sand helps in feeling “more peaceful and focused when worried or stressed” (p. 102).
- Materials:
 - One sand tray
 - Scoop
 - Plastic objects
 - Vehicles
 - Rocks and plant life
 - Figurines
 - Animals
 - Shells
 - Insects

7. *Sock Creature*

- Intervention: Create an animal creature using socks or felt and any other materials available (Shapiro & Sprague, 2009). The directive involves sewing.
- Goal: For participant to create a transitional object to remind them of all the progress and gains they made over the course of therapy.
- Materials:
 - Socks or felt
 - Needle
 - Thread
 - Buttons
 - Scissors

Since research has shown the importance of identifying and labelling emotions in the work with anxious clients (Bourne, 2010; Foxman, 2004), expressing and labelling emotions were an essential component in the structure of this study. Below are directives related to expressing emotions:

8. *Talking, Feeling, and Doing Anger Card Game* (Shapiro & Shore, 2004a)

- Intervention: Roll the dice, and based on the number rolled chose either a talking, feeling or doing card (Shapiro & Shore, 2004a). Talking cards involve discussing various scenarios in relation to anger. Feeling cards involve identifying feelings of anger. Doing cards involve role playing or acting out a scenario related to anger. Therapist and participant take turns rolling the dice and responding to cards.
- Goals: For participant to identify feelings of anger, to be able to role play appropriate responses in situations which could cause them to become angry, and to demonstrate how one can apply coping skills to real life situations.
- Materials:
 - The Talking, feeling, and doing anger card game (Shapiro & Shore, 2004a)

9. *Worry Box* (Darley and Heath, 2008)

- Intervention: Design and decorate a wooden box in which you can place your worries. Then, write down some of your worries on strips of white paper. Share worries with therapist and use art to explore them.
- Goals: 1. To allow participants to identify their worries, and to externalize them by writing them down and placing them into their box. When ready explore them through art (Darley and Heath, 2008). 2. To continue to use their box as a way to cope with personal worries.
- Materials:
 - One wooden box
 - Paint brushes
 - Tempera paint
 - Pencil crayons
 - Markers
 - Strips of white paper

10. *Volcano* (Liebmann, 2008)

- Intervention: Construct a volcano out of clay, and allow the volcano to erupt by combining baking soda, vinegar and paint (Liebmann, 2008).
- Goals: 1. For participants to understand the connection between the eruption of a volcano and the functioning of anger (Liebmann, 2008). 2. To be able to discuss ways to cope and express anger.
- Materials:
 - Clay
 - Baking soda
 - Vinegar
 - Tempera paint
 - Container to hold the liquid after it erupts

11. *What your anger looks like* (Heegaard, 2003)

- Intervention: What does your anger look like using paint or clay (Heegaard, 2003)?
- Goal: Participants to gain a better understanding of their anger.
- Materials:
 - Clay
 - Tempera paint
 - 8"x10" and 12"x16" paper: coloured and white

12. *Emotions with clay* (Liebmann, 2004)

- Intervention: Depict any emotion you would like using clay (Liebmann, 2004).
- Goals: 1. To explore an emotion with the clay. 2. For participant to talk about what the emotion feels like in their body, give examples of when they felt that emotion, and how they cope with the emotion.
- Materials:
 - Clay
 - Tempera paint

Another important component in managing anxiety is developing relaxation techniques and ways to cope with the anxiety in the moment (Foxman, 2004; Shapiro & Sprague, 2009).

Directives 13 to 17 are relaxation techniques:

13. *Mandala* (Curry & Kasser, 2005)

- Intervention: Colour a chosen mandala with the drawing medium provided (Curry & Kasser, 2005).
- Goal: Participants to focus their attention in a meditative manner (Thomas, 2009). Malchiodi (2008) stated that the mandala provides balance and promotes relaxation.
- Materials:
 - One mandala sheet
 - Chalk pastels
 - Colour pencils
 - Markers
 - Oil pastels

14. *Stress Ball* (Sweet, 2001)

- Intervention: Create a stress ball by choosing two balloons from the assortment. Then, use a funnel to fill the first balloon with flour. When full, tie off the first balloon. Next, cut the elongated part off of the second balloon and pull it over the first balloon.
- Goal: For participants to use their stress ball to either reduce anger, tension, stress or other difficult emotions (Sweet, 2001).
- Materials:
 - An assortment of different coloured balloons
 - Flour
 - A funnel
 - Scissors

15. *Breathing Box* (Hendricks, 2005)

- Intervention: Create a breathing box by drawing a square, then labelling the bottom line with the numbers 1 2 3 and “breath in”, then labelling the right side with “hold”, and the top line with “breath out”. The left hand side remains blank and you can either chose to do nothing, close your eyes, or meditate. After completing the box, take three deep breaths using the steps just learned.
- Goals: 1. To become more aware of breathing. 2. For participant to increase the number of relaxed deep breaths (Hendricks, 2005).
- Materials:
 - A piece of white paper
 - One of the following mediums:
 - Markers
 - Colour pencils
 - Pencil
 - Oil pastels
 - Chalk pastels

16. *Finger Labyrinth* (Thomas, 2009)

- Intervention: Trace the path of the circular labyrinth (see Appendix F) with your finger to the centre and back out again (Thomas, 2009).
- Goal: 1. To enhance concentration through the act of tracing the path. 2. To achieve a meditative state. 3. To reduce worrying by distracting the mind, and meditating.
- Materials:
 - One Finger Labyrinth

17. *Mind-in-a-Jar* (MacLean, 2004)

- Intervention: Add sparkles, beads, and/or sequins to a jar filled with a solution of one half gel-medium and one half of water (MacLean, 2004).
- Goal: 1. To reduce anxiety by clearing the mind, and focusing on the objects in the jar falling to the bottom (MacLean, 2004). 2. To gain a better understanding of the human mind when it is constantly in a worry state and ruminating about certain thoughts.
- Materials:
 - A jar with a secure lid
 - Gel medium
 - Water
 - Sequins
 - Sparkles
 - Beads

Termination. The client was told about termination during the 14th session. A countdown of each session began by crossing off the date on the calendar and writing the remaining sessions.

Research Measures

Participants anxiety levels were assessed using the Multidimensional Anxiety Scale for Children (MASC; March, 1997; see Appendix G), the feeling barometer (Kendall, 1992; see Appendix B) and the art therapy assessment Person Picking an Apple From a Tree (PPAT; Gantt & Tabone, 1998). The 39-item MASC was administered in the first session and in the final session to evaluate if art therapy as a treatment reduced the participants levels of anxiety. The feeling barometer was administered at the beginning and end of each session to gauge where the client was at, and to measure the effectiveness of each art therapy session. The PPAT was administered in the first and final session, and was evaluated using the *Formal Elements Art Therapy Scale* (FEATS; Gantt & Tabone, 1998, see Appendix H).

Multidimensional Anxiety Scale for Children (MASC). The Multidimensional Anxiety Scale for Children (MASC; March, 1997; see Appendix G) is a multidimensional self-report measure of anxiety (Shapiro, 2000). It is composed of 39 items which are all positively phrased to minimize variance in responding (Shapiro, 2000). Each item is rated on a four point likert-scale that ranges from zero (never true about me) to three (often true about me). There are two major indexes: 1. the anxiety disorder index and 2. inconsistency index. Furthermore, it includes a scale measuring total anxiety. The total anxiety scale is broken down into three subscales, which are the physical symptoms scale, the harm avoidance scale, and the social anxiety scale. The scoring of norms is broken down depending on the age range, which was standardized on a sample of 2,698 children and adolescents ages eight to nineteen (Shapiro, 2000).

Feeling Barometer. The feeling barometer (Kendall, 1992; see Appendix B) is composed of seven faces with different expressions ranging from very worried to very relaxed. The seven emotions included very relaxed, relaxed, ok, not sure, bothered, worried and very worried. The emotions were assigned the following numbers: very worried a one, worried a two, bothered a three, not sure a four, ok a five, relaxed a six, and very relaxed a seven. The feeling barometer was personalized by the participant in the intake session, and was a tool often used at the Children's Mental Health Centre.

The feeling barometer was a direct measurement of levels of anxiety. It was used to gauge how the client was feeling at the beginning and end of each art therapy session, and for the client to normalize the process of identifying feelings.

In addition, the data from the feeling barometer ratings for 17 directives and the 19 sessions were measured using a dependent t-test to see if there was an increase from pre- to post-session.

PPAT Assessment and FEATS. The art assessment a Person Picking an Apple from a Tree (PPAT) was developed by Linda Gantt and Carmello Tabone (1998) to measure problem-solving skills.

When administering the PPAT the participants were given twelve fine tip markers, which included the following colours: black, brown, yellow, orange, red, purple, magenta, hot pink, turquoise, blue, green, and dark green (Gantt & Tabone, 1998). Participants were instructed to draw a person picking an apple from a tree. The PPAT was administered using an 8½" x 11" piece of white paper.

The Formal Elements Art Therapy Scale (FEATS; Gantt & Tabone, 1998; Appendix H) is comprised of 14 items which include: 1. Prominence of colour, 2. Colour fit, 3. Implied energy, 4. Space, 5. Integration, 6. Logic, 7. Realism, 8. Problem-solving, 9. Developmental level, 10. Details of objects and environment, 11. Line quality, 12. Person, 13. Rotation, and 14. Perseveration (Gantt & Tabone, 1998). All of these components are rated on a 5 point likert-scale.

The data from the PPAT assessment was evaluated using the FEATS by three raters, which included one art therapist, one art therapy intern who was the researcher, and one colleague in finance. In order to keep the participant's identity anonymous, the researcher coded the final data by assigning a number to the six PPAT's. To insure participant confidentiality, the raters not affiliated with the Children's Mental Health Centre signed a confidentiality form (see Appendix I).

The raters were given a handout including the FEATS rating sheet, an explanation of each scale, a breakdown of the scale and one to two examples of each scale. Only seven of the fourteen FEATS image variables were measured based on the anxiety indexes from other studies (Braumoh et al., 1997; Chambala, 2008; Chorpita & Southam-Gerow, 2006; Handler

& Reyher, 1965). In Table 1 the first five FEATS correspond with the first five anxiety index. The two FEATS in Table 1 that did not have a corresponding anxiety index, were related to Chorpita and Southam-Gerow's (2006) research stating that children diagnosed with anxiety disorders tend to have weak problem-solving and reasoning skills.

Table 1

Seven FEATS Used Based on the Anxiety Indexes from Other Studies

FEATS	Anxiety Indexes
Prominence of Colour	Wide Range of Colour
Space	Size
Realism	Abstract Images
Details of Objects & Environment	Detail Loss
Line Quality	Line Pressure
Logic	
Problem-Solving	

The seven FEATS image variables which were analyzed included: prominence of colour, space, logic, realism, problem-solving, details of objects and environment, and line quality.

The data was analyzed using a dependent t-test to see if there was an increase in the FEATS image variables, and to see if there was inter-rater reliability.

The reason for using multiple forms of data was to verify with some certainty that art therapy had a contributing factor in the reduction of anxiety symptoms because most of the participants were receiving treatment from at least one other mental health care professional.

CHAPTER FOUR

Results

The hypothesis of this study was to see if children who received individual art therapy sessions would show a reduction in levels of anxiety. Participants levels of anxiety were measured in three ways; 1. Indirectly using the *Multidimensional Anxiety Scale for Children* (MASC; March, 1997), 2. Directly using a *feeling barometer* (Kendall, 1992), and 3. Using the art assessment *Person Picking an Apple from a Tree* (PPAT; Gantt & Tabone, 1998). Only seven *Formal Elements Art Therapy Scales* (FEATS; Gantt & Tabone, 1998) image variables for the PPAT were analyzed as they corresponded with the seven anxiety indices found in the literature (Braimoh et al., 1997; Chambala, 2008; Chorpita & Southam-Gerow, 2006; Handler & Reyher, 1965). Out of the four measures, the feeling barometer ratings showed a significant decrease in levels of anxiety. In addition, there was strong inter-rater reliability for the seven FEATS image variables. All of the results were analyzed using one-tailed dependent t-test with a 0.05 significance level. Four participants partook in the study and completed 19 art therapy sessions and the MASC. Only one of the participants, Anthony, did not complete the pre- and post-test PPAT as the PPAT was proposed to him twice and both times he said “he did not want to complete it.”

Multidimensional Anxiety Scale for Children

The first results of this study were the pre- (M 51.0, SD 10.4) and post-test results (M 51.8, SD 9.8) for the MASC (March, 1997). The mean T-score results for the pre- and post-test were slightly above the T-score of 50, which indicates elevated levels of anxiety. Only one of the four participants, Edward, showed high levels of anxiety on the pre-test MASC with a T-score of 65. Another participant, Walter, showed moderately elevated levels of anxiety on the pre-test with a T-score of 52.

Furthermore, there were no significant results found in the comparison of the pre- and post-test results for the four participants ($t(3) = -.28, p = .40$). The MASC scores for two of the four participants indicated a decrease in anxiety levels: Edward's T-score decreased the most from 65 to 60, and Pierre's decreased by two points from 41 to 39. The other two participants showed an increase in anxiety levels after participating in art therapy sessions: Walter's T-score increased the most from 52 to 59 and Anthony's increased from 46 to 49 (see Figure 1). The increase in Walter's and Anthony's MASC scores may have been a result of the significant life events that occurred during the art therapy treatment.

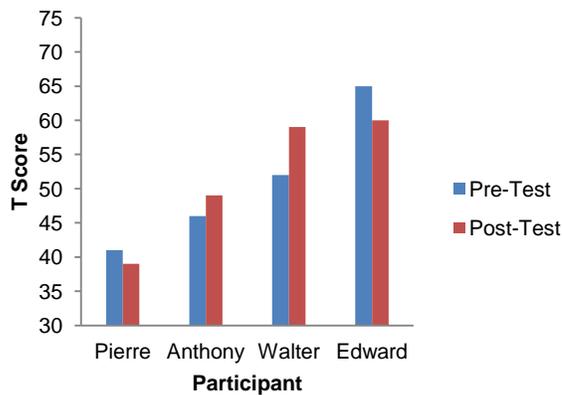


Figure 1. MASC T-Scores for the Four Participants

Next, the seven subscales of the MASC, indicated a reduction in somatic and automatic symptoms, and performance fears. In contrast, the following subscales increased from the beginning to the end of treatment: tense and restless, perfectionism, and humiliation and rejection. Overall, there was no significant difference for the pre- and post-test results of the subscales (see Table 2).

Table 2

Descriptive Statistics of T Scores for MASC Subscales

Subscale	Pre-Test <i>M(SD)</i>	Post-Test <i>M(SD)</i>	<i>t</i>	Significance
Tense/Restless	49.5 (4.36)	50.3 (5.9)	-0,24	0,41
Somatic/Automatic	46.0 (4.8)	45.0 (5.8)	0,28	0,40
Perfectionism	47.5 (11.6)	49.3 (9.5)	-0,40	0,36
Anxious Coping	52.5 (3.9)	52.5 (7.5)	0,00	0,50
Humiliation/Rejection	50.5 (11.7)	52.5 (7.0)	-0,23	0,42
Performance Fears	50.5 (9.9)	49.8 (10.5)	0,15	0,45
Separation/Panic	56.8 (14.7)	57.0 (19.8)	-0,06	0,48

Although there was no significant difference for the pre- and post-test MASC results, each participant showed a decrease in three of the seven subscales with the exception of Walter. Moreover, Pierre, Walter and Edward showed a decrease in anxious coping, which was not reflected in the means of the pre- and post-test. Additionally, Pierre and Anthony both had a reduction in somatic and automatic symptoms, and Anthony and Walter showed a decrease in performance fears.

The first participant, Pierre, showed a decrease in the following subscales: tense and restlessness, somatic and automatic, and anxious coping, counter to an increase in humiliation and performance fears (see Figure 2). Nevertheless, there were more subscales that decreased in levels of anxiety than increased.

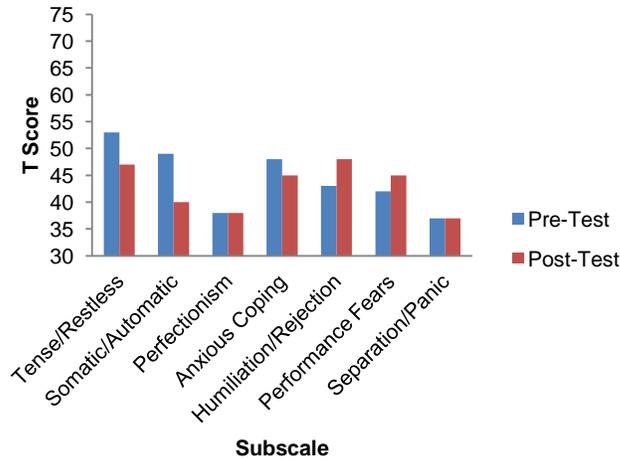


Figure 2. Pierre's MASC T-Scores for the Seven Subscales

The second participant, Anthony, showed a decrease in three of the subscales (see Figure 3). However, he showed a large increase in the other three subscales aside from tense and restless, which remained the same.

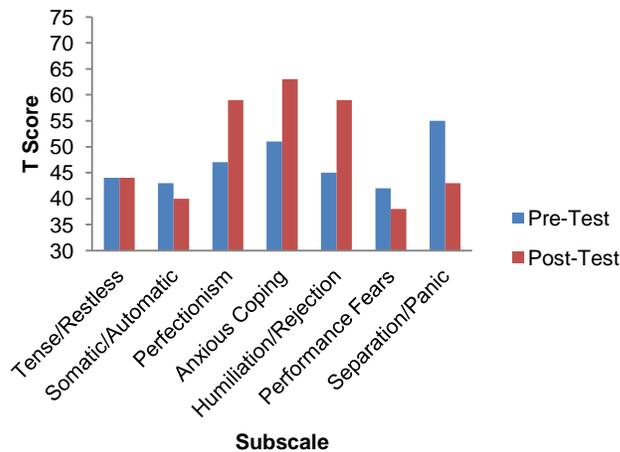


Figure 3. Anthony's MASC T-Scores for the Seven Subscales

The third participant, Walter, showed a decrease in anxious coping, and performance fears (see Figure 4). On the contrary, he demonstrated an increase in five subscales. On the other

hand, Walter’s treatment goals focused on ways to cope with his anxiety in order to reduce stress and worry, which appears to be reflected in the decrease in anxious coping

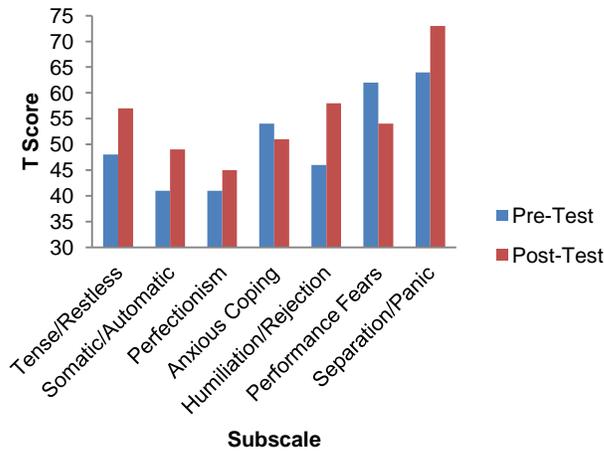


Figure 4. Walter’s MASC T-Scores for the Seven Subscales

The fourth participant, Edward, showed a decrease in three of the subscales (see Figure 5).

In addition, two subscales remained unchanged and two increased.

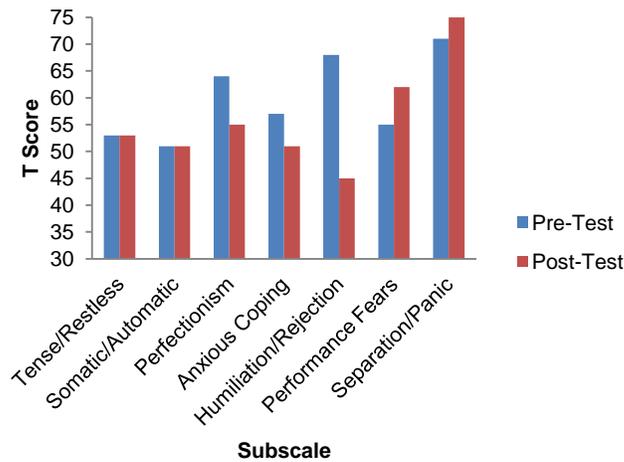


Figure 5. Edward’s MASC T-Scores for the Seven Subscales

Feeling Barometer

The feeling barometer (Kendall, 1992) results for the 19 pre- (M 5.7, SD 0.8) and post-sessions (M 6.5, SD 0.5) showed a statistically significant decrease in levels of anxiety ($t(18) = -6.23, p = .00000035$). In addition, the pre- (M 5.6, SD 0.8) and post-session (M 6.5, SD 0.5) feeling barometer ratings showed a significant decrease in levels of anxiety for the 17 directives ($t(16) = -5.53, p = .00002$).

Moreover, the ratings for the 19 sessions were analyzed separately from the ratings for the 17 directives because the directives were not completed in a specific order, and not all the participants completed all 17 directives.

Ratings for the 19 Sessions. The analysis of the data for the 19 sessions indicated that participants felt very relaxed 71% of the time at the end of the session on their feeling barometers. Furthermore, participants left the session 99% of the time with a higher score on the feeling barometer.

Pierre's results indicated that he left the session 84% of the time feeling very relaxed, and always ended the session with a higher score on the feeling barometer (see Figure 6). This reduction in anxiety levels was reflected in the statistical significance of Pierre's pre- (M 6.2, SD 1.5) and post-session (M 6.7, SD 1.0) results ($t(18) = -2.35, p = .015$).

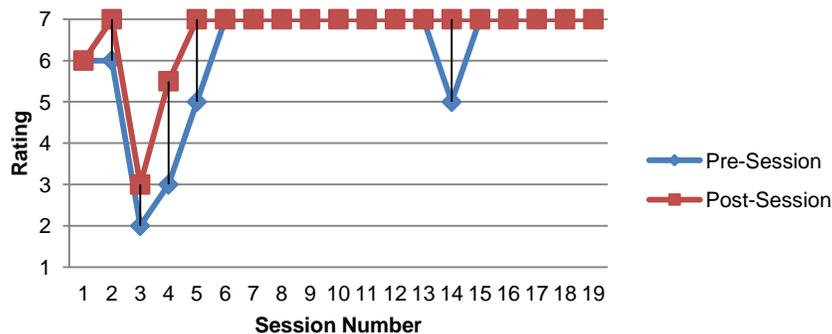


Figure 6. Pierre's Feeling Barometer Ratings for the 19 Sessions

Anthony displayed feeling very relaxed 89% of the time at the end of each session, and he always increased his rating on his feeling barometer (see Figure 7). The results for the pre- (M 6.3, SD 1.6) and post-session (M 6.7, SD 0.8) ratings approached statistical significance, but were only significant at $p \leq 0.1$ ($t(18) = -1.45, p = .083$).

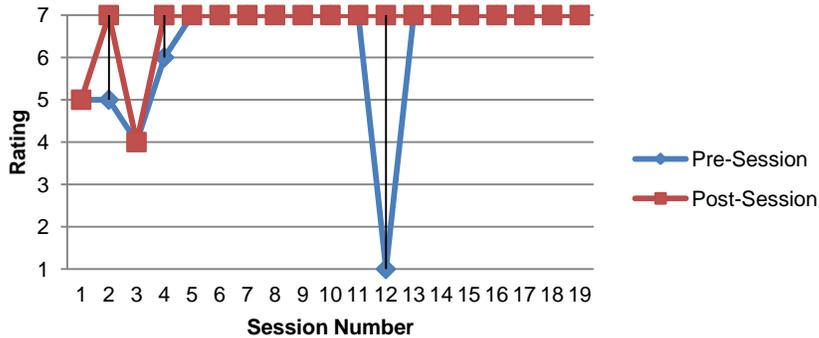


Figure 7. Anthony's Feeling Barometer Ratings for the 19 Sessions

Walter demonstrated feeling very relaxed at the end of each session 42% of the time, and increased his score on the feeling barometer for 18 out of the 19 sessions (see Figure 8). Moreover, statistical significance was present in the comparison of the pre- (M 5.3, SD 0.5) and post-session (M 6.1, SD 0.9) ratings ($t(18) = -3.68, p = .00085$).

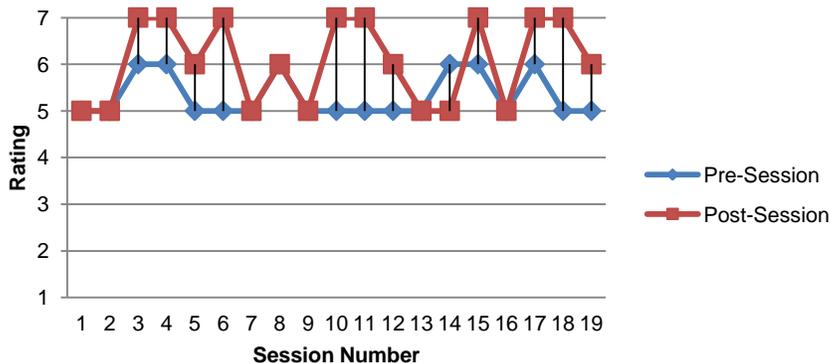


Figure 8. Walter's Feeling Barometer Ratings for the 19 Sessions

Lastly, Edward's ratings pointed to feeling very relaxed 68% of the time at the end of each session, in addition to always feeling less worried post-session (see Figure 9). His pre- (M 5.1, SD 2.3) and post-session (M 6.6, SD 0.6) feeling barometer ratings showed a statistically significant decrease in levels of anxiety ($t(18) = -3.94, p = .00048$).

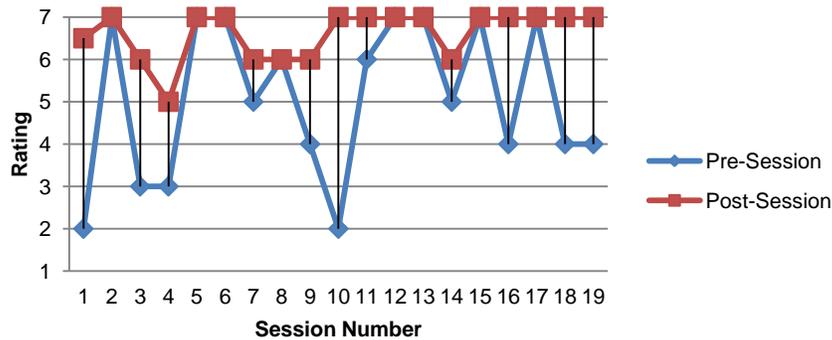


Figure 9. Edward's Feeling Barometer Ratings for the 19 Sessions

Ratings for the 17 Directives. Out of the 17 directives, the Special Place (Shapiro & Sprague, 2009) and the Volcano (Liebmann, 2008) directives demonstrated statistically significant reductions in levels of anxiety (see Table 3).

Table 3

Descriptive Statistics of Feeling Barometer Ratings Pre- and Post-Session for the 17 Directives

Directive	Pre-Test <i>M(SD)</i>	Post-Test <i>M(SD)</i>	<i>df</i>	<i>t</i>	Significance
1. Special Place	4.8 (1.3)	6.0 (1.2)	3	-2.61	0.039*
2. Inner Helper	6.8 (0.5)	7.0 (0.0)	3	-1.00	0.196
3. Feelings Penny Pitch	6.3 (1.0)	7.0 (0.0)	3	-1.57	0.108
4. Thought Changing Machine	5.8 (1.5)	6.8 (0.5)	3	-1.41	0.126
5. Relaxation Jar	6.3 (1.2)	6.7 (0.6)	2	-1.00	0.211
6. Sand Tray	6.3 (1.2)	7.0 (0.0)	2	-1.00	0.211
7. Sock Creature	5.5 (2.1)	7.0 (0.0)	1	-1.00	0.250
8. Talking, feeling, and doing anger card game	5.0 (2.2)	7.0 (0.0)	3	-1.85	0.081
9. Worry Box	4.8 (1.7)	5.6 (1.3)	3	-1.48	0.118
10. Volcano	5.3 (0.5)	6.5 (1.0)	3	-2.61	0.040*
11. What your anger looks like	5.5 (1.9)	6.3 (1.0)	3	-1.00	0.196
12. Depicting an emotion with clay	4.0 (2.6)	6.3 (1.0)	3	-1.57	0.108
13. Mandala	5.0 (1.4)	6.5 (0.7)	1	-3.00	0.102
14. Stress Ball	5.3 (2.4)	5.5 (1.9)	3	-1.00	0.196
15. Breathing Box	6.5 (1.0)	7.0 (0.0)	3	-1.00	0.196
16. Finger Labyrinth	6.5 (1.0)	6.5 (1.0)	3	0.00	1.000
17. Mind-in-a-jar	6.5 (1.0)	6.5 (1.0)	3	0.00	1.000

* $p \leq 0.05$

Overall, 15 out of the 17 directives showed a decrease in levels of anxiety when comparing pre- and post-session feeling barometer ratings. Only, the Finger Labyrinth (Thomas, 2009) and the Mind-in-a-jar (MacLean, 2004) directive ratings remained unchanged.

Furthermore, the pre-session feeling barometer ratings showed a great degree of fluctuation between very worried and very relaxed (see Figure 10), compared to the post-session feeling barometer ratings in Figure 11, which showed an increase in relaxed feelings.

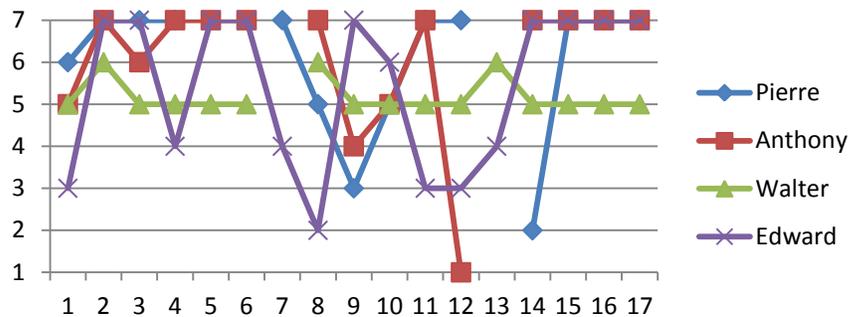


Figure 10. Participants' Pre-Session Feeling Barometer Ratings for the 17 Art Directives

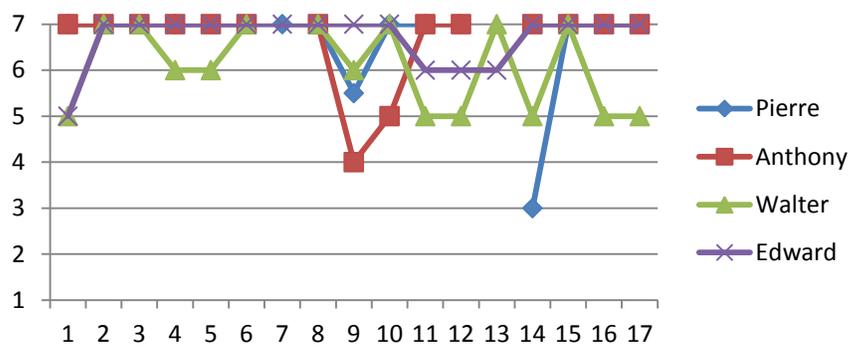


Figure 11. Participants' Post-Session Feeling Barometer Ratings for the 17 Art Directives

The feeling barometer ratings for the 17 art directives were broken down per participant. Out of the four participants only Edward completed all 17 art directives. Walter completed 16 out of the 17 art directives, Anthony completed 15 out of the 17, and Pierre completed 14 out of the 17. All of the directives were proposed to the participants. However, Walter, Anthony and Pierre were not interested in the directive(s) they did not complete.

Edward had significant results when comparing his pre- (M 5.4, SD 1.9) and post-session (M 6.7, SD 0.6) feeling barometer ratings ($t(16) = -3.31, p = .002$). He showed the largest

decrease in levels of anxiety for directive 8, which was the Talking, feeling, and doing anger card game (Shapiro & Shore, 2004; see Figure 12).

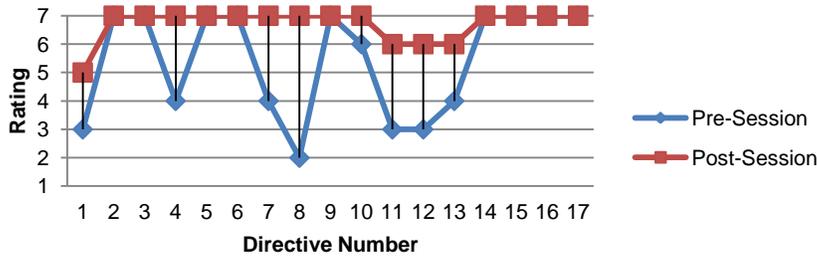


Figure 12. Edward's Feeling Barometer Ratings Pre- and Post-Session for the 17 Art Directives

Additionally, Walter had noteworthy results for the pre- (M 5.2, SD 0.4) and post-session (M 6.1, SD 0.9) ratings ($t(15) = -4.34, p = .0003$). He had the largest decrease in levels of anxiety for directives three, six, 10 and 15, which were the Feeling Penny Pitch (Shapiro & Sprague, 2009), the Sand Tray (Shapiro & Sprague, 2009), the Volcano (Liebmann, 2008), and the Breathing Box (Hendricks, 2005; see Figure 13). Furthermore, Walter did not complete directive seven, the Sock Creature (Shapiro & Sprague, 2009) as he preferred to complete another termination directive involving a joint painting.

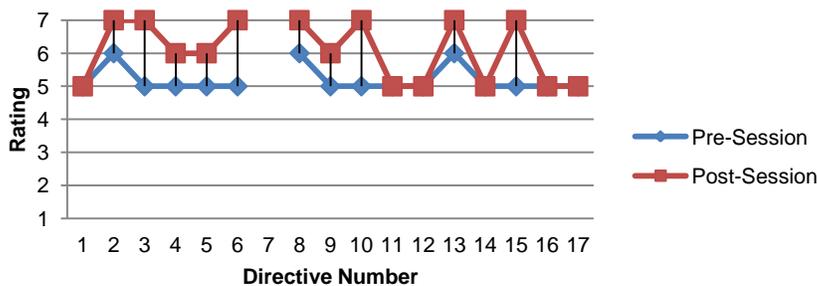


Figure 13. Walter's Feeling Barometer Ratings Pre- and Post-Session for 16 of the 17 Art Directives

The next participant Anthony approached statistical significance for his pre- (M 6.1, SD 1.7) and post-session (M 6.7, SD 0.9) ratings ($t(14) = -1.46, p = .084$; see Figure 14). The

directive that resulted in the largest decrease of levels of anxiety was directive 12, depicting an emotion with clay (Liebmann, 2004).

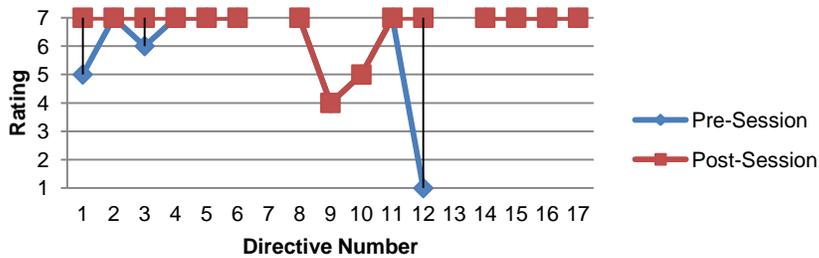


Figure 14. Anthony's Feeling Barometer Ratings Pre- and Post-Session for 15 of the 17 Art Directives

Lastly, Pierre demonstrated a significant decrease in his anxiety levels from his pre- (M 6.0, SD 1.7) to post-session (M 6.6, SD 1.1) feeling barometer ratings ($t(13) = -2.46, p = .014$). Moreover, Pierre was the most relaxed after completing directives eight, nine and 10 which were the Talking, feeling, and doing anger card game (Shapiro & Shore, 2004), the Worry Box (Darley and Heath, 2008), and the Volcano (Liebmann, 2004; see Figure 15).

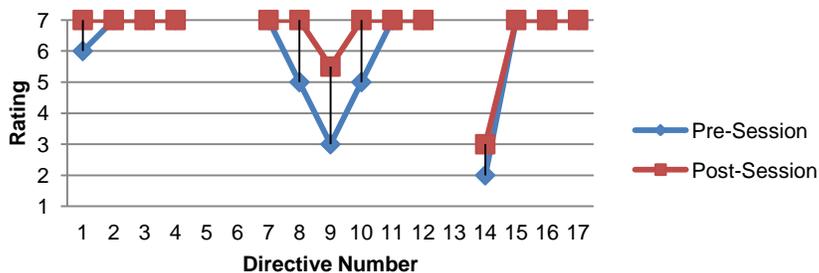


Figure 15. Pierre's Feeling Barometer Ratings Pre- and Post-Session for 14 of the 17 Art Directives

Person Picking an Apple from a Tree (PPAT) Assessment

The FEATS (Gantt & Tabone, 1998) ratings for the PPAT (Gantt & Tabone, 1998) had strong inter-rater reliability between Rater 2 and Rater 3 for all seven scales, and for Rater 1

and 2 for five of the scales. Similarly to Rater 1 and 2, Rater 1 and 3 did not have sufficient inter-rater reliability for logic and realism, in addition to problem-solving (see Table 4).

Table 4

Inter-rater Reliability Correlation Coefficients between Raters for the FEATS

Scale	Rater 1 & Rater 2	Rater 2 & Rater 3	Rater 1 & Rater 3
Prominence of Colour	1.000**	1.000**	1.000**
Space	0.937**	0.965**	0.904**
Logic	0.632	1.000**	0.632
Realism	-0.107	0.951**	-0.171
Problem-solving	0.799*	0.971**	0.632
Details of Objects & Environment	0.926**	1.000**	0.926**
Line Quality	1.000**	1.000**	1.000**

* $p \leq 0.05$

** $p \leq 0.01$

The results for the pre- (M 3.7, SD 0.8) and post-FEATS (M 3.8, SD 0.5) indicated an increase in the seven scales ($t(6) = -.87, p = .21$). The largest increase was the amount of space used with the results approaching statistical significance $p = 0.059$ (see Table 5). Moreover, realism and problem-solving increased, while logic decreased. The scales that remained unchanged were prominence of colour, details of objects and environment, and line quality.

Table 5

Descriptive Statistics of the Seven FEAT Scales for the Pre- and Post-PPAT

Scale	Pre-Test <i>M(SD)</i>	Post-Test <i>M(SD)</i>	<i>df</i>	<i>t</i>	Significance
Prominence of Colour	4.0 (0.0)	4.0 (0.0)	2	0.00	0.500
Space	2.5 (1.3)	3.7 (0.3)	2	-2.65	0.059
Logic	5.0 (0.0)	4.5 (0.5)	2	1.73	0.113
Realism	3.2 (0.8)	3.3 (0.6)	2	-1.00	0.211
Problem-solving	3.8 (0.5)	4.3 (0.6)	2	-0.65	0.290
Details of Objects & Environment	3.0 (1.0)	3.0 (0.9)	2	0.00	0.500
Line Quality	4.0 (0.0)	4.0 (0.0)	2	0.00	0.500

Next, the pre- and post-FEATS scores for the PPAT were broken down for three of the four participants as Anthony did not complete the PPAT. The researcher proposed the PPAT to Anthony in session one and two, and both times Anthony said “he did not want to complete it.”

The results for Pierre’s pre- (*M* 3.4, *SD* 1.0) and post-FEATS (*M* 3.9, *SD* 0.9) scores approached statistical significance ($t(6) = -1.73$, $p = .067$). Walter’s findings for the pre- (*M* 3.4, *SD* 1.4) and post-FEATS (*M* 3.5, *SD* 0.7) scores were statistically insufficient ($t(6) = -0.19$, $p = .43$). The results for Edward’s pre- (*M* 4.1, *SD* 0.5) and post-FEATS (*M* 4.1, *SD* 0.2) scores remained unchanged ($t(6) = 0.00$, $p = .50$).

In terms of the seven FEATS image variables, the main increases in Pierre’s pre- (see Figure 16) and post-PPAT (see Figure 17) were the amount of space used, problem-solving abilities, and the amount of details (see Figure 22). The main increases in Walter’s pre- (see Figure 18) and post-PPAT (see Figure 19) were the amount of space used, and the realism of the elements in the picture (see Figure 23). The main increase in Edward’s pre- (see Figure 20) and post-

PPAT (see Figure 21) was the amount of space used, whereas five scales remained unchanged (see Figure 24).



Figure 16. Pierre's Pre-PPAT



Figure 17. Pierre's Post-PPAT



Figure 18. Walter's Pre-PPAT



Figure 19. Walter's Post-PPAT



Figure 20. Edward's Pre-PPAT



Figure 21. Edward's Post-PPAT

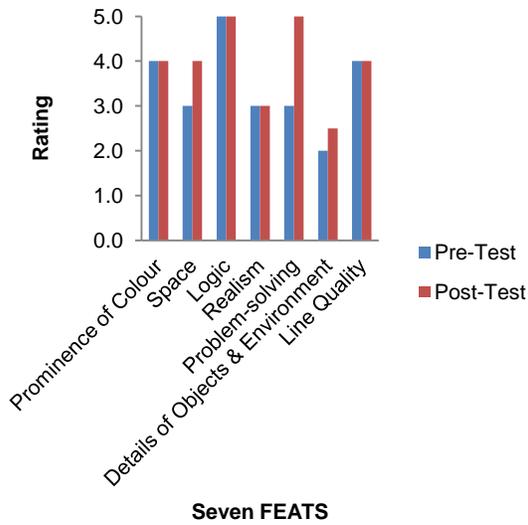


Figure 22. Pierre's Pre- and Post-Test FEATS

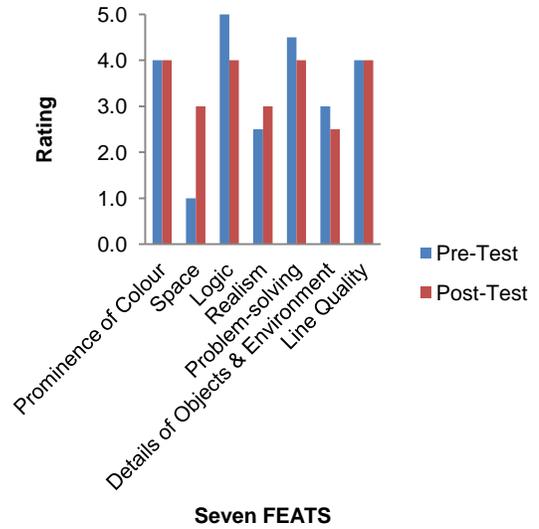


Figure 23. Walter's Pre- and Post-Test FEATS

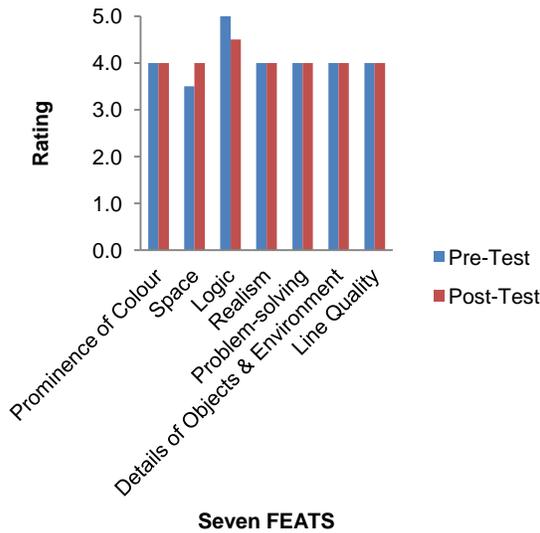


Figure 24. Edward's Pre- and Post-Test FEATS

Summary of the 17 Directives

The 17 directives were analyzed based on the similarities and the differences of the participants artwork.

1. *Special Place* (Shapiro & Sprague, 2009)

Overall, out of the four *Special Place*'s (Shapiro & Sprague, 2009) Walter (see Figure 25) and Edward's (see Figure 26) were abstract and imaginative in nature, and Pierre (see Figure 27) and Anthony's (see Figure 28) were realistic and more figurative. In terms of

colour, Walter used the largest range of colour with the most abstract images. Moreover, Anthony and Walter used heavier line pressure than Edward, and less detail than Pierre and Edward.



Figure 25. Walter's Special Place

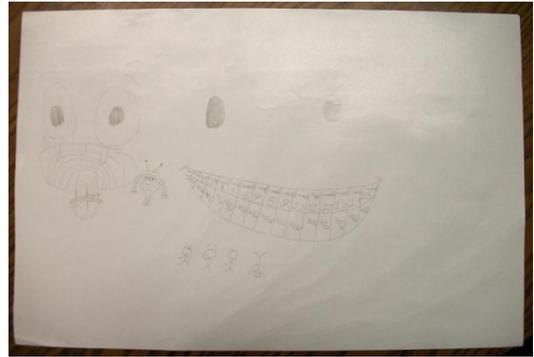


Figure 26. Edward's Special Place



Figure 27. Pierre's Special Place

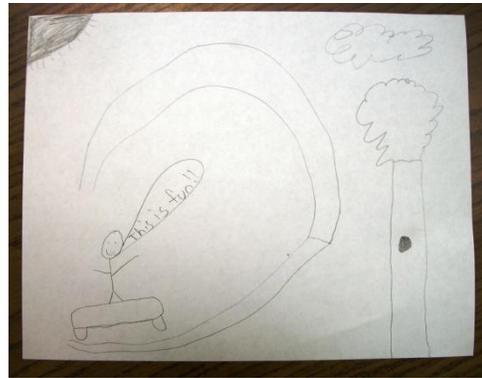


Figure 28. Anthony's Special Place

2. *Inner Helper* (Shapiro & Sprague, 2009)

Three of the four *Inner Helper* (Shapiro & Sprague, 2009) images were of imaginary figures (see Figures 29 to 31) with the exception of Pierre's helper (see Figure 32). There were no abstract images used, and there was not a wide range of colour. Furthermore, Walter and Edward's drawing had heavy pressure for the outline of the figure.

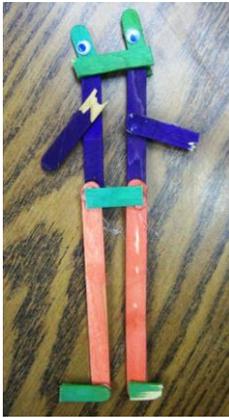


Figure 29. Anthony's Inner Helper



Figure 30. Walter's Inner Helper



Figure 31. Edward's Inner Helper



Figure 32. Pierre's Inner Helper

3. *Feelings Penny Pitch* (Shapiro & Sprague, 2009; see Appendix D)

This directive seemed to be useful for the participants to talk about emotions other than anger, as anger was the emotion most readily accessible when talking about feelings. By and large, this directive was helpful in expanding the participant's emotional vocabulary.

4. *Thought Changing Machine* (Shapiro & Sprague, 2009; see Appendix E)

All four participants found it difficult to transform their negative thoughts into positive ones. They found it difficult to generate more than one negative thought. It appeared to be helpful for the participant to accompany the Thought Changing Machine (Shapiro & Sprague, 2009) directive with an image related to thinking positively. Of the four participants, only

Edward created a drawing for the Thought Changing Machine (Shapiro & Sprague, 2009) directive, and explained it as an “image that helps him to stay positive” (see Figure 33).

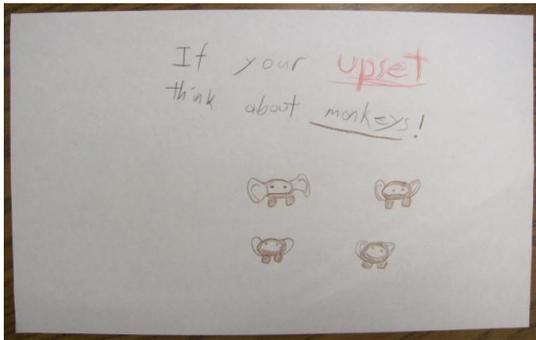


Figure 33. Edward’s Thought Changing Machine Image for Staying Positive

5. Relaxation Jar (Shapiro & Sprague, 2009)

For this directive, all three participants (as Pierre did not complete this directive) included the following strategies in their Relaxation Jars (Shapiro & Sprague, 2009): thinking of their Special Place (Shapiro & Sprague, 2009) and using the Breathing Box (Hendricks, 2005).

Anthony was able to expand his list of strategies by combining his relaxation tips from home and school (see Figures 34 and 35). Both Anthony and Walter (see Figure 36) used an existing structure for their jar, compared to Edward (see Figure 37) who constructed his out of clay.

Even though Edward did not finish his jar, he was still able to brainstorm several ways to help him relax.



Figure 34. Anthony’s Relaxation Jar (outside) Figure 35. Anthony’s Relaxation Jar (inside)



Figure 36. Walter's Relaxation Jar



Figure 37. Edward's Relaxation Jar

6. *Sand Tray* (Shapiro & Sprague, 2009)

This directive was completed by three of the four participants not including Pierre. Both Walter and Edward placed trees and rocks in their sand tray scene (see Figures 38 and 39). In addition, Walter and Edward filled the first two thirds of the sand tray, compared to Anthony who used the perimeter of the sand tray. Furthermore, Anthony made use of almost all of the vehicles available, in contrast to Walter who utilized one vehicle.



Figure 38. Walter's Sand Tray



Figure 39. Edward's Sand Tray

7. *Sock Creature* (Shapiro & Sprague, 2009)

The Sock Creature (Shapiro & Sprague, 2009) for both participants (as Anthony and Walter did not complete this directive) was completed over the course of two sessions. In terms of Pierre and Edward's Sock Creature (Shapiro & Sprague, 2009) both added eyes, and did not include a mouth or a nose (see Figures 40 and 41). Furthermore, the Sock Creature (Shapiro & Sprague, 2009) had great significance for both participants. Pierre stated, "If there was ever a fire in his house, his sock creature would be the first thing he would take." Edward said, "His orange dog makes him happy and helps him to calm down."



Figure 40. Pierre's Sock Creature



Figure 41. Edward's Sock Creature

8. *Talking, Feeling, and Doing Anger Card Game* (Shapiro & Shore, 2004a)

All four participants were able to explore their anger with this directive. Pierre gave examples of how he dealt with his anger in the past, what he does when he is really angry (either walks away from the situation or ignores it), and how he deals with his anger by going on facebook. Anthony was able to give examples of handling his anger. When he is really angry he tries to block out what the other person is saying. Walter explained strategies he uses

for dealing with his anger, which included taking deep breaths and thinking about his Special Place (Shapiro & Sprague, 2009). Finally, Edward explained the somatic symptoms he normally experiences when he is angry, which included his heart pounding, his body feeling warm and shaky, and clenching his teeth and wanting to cry. In order to deal with his anger, he takes a break, goes for a walk, does something else, draws, or finds a solution.

9. *Worry Box* (Darley and Heath, 2008)

In general, blue seemed to be a predominant colour used for painting the worry box. In addition, tempera paint was the preferred medium for three out of the four participants (see Figures 42 to 45). In terms of colour, both Anthony and Walter used only primary colours for their box. Similarly, Pierre used the primary colours as well as a wide range of colour for his initial box. The majority of the boxes were abstract in nature with the exception of Edward's (see Figures 46 and 47).



Figure 42. Pierre's 1st Design of his Worry Box



Figure 43. Pierre's 2nd Design of his Box

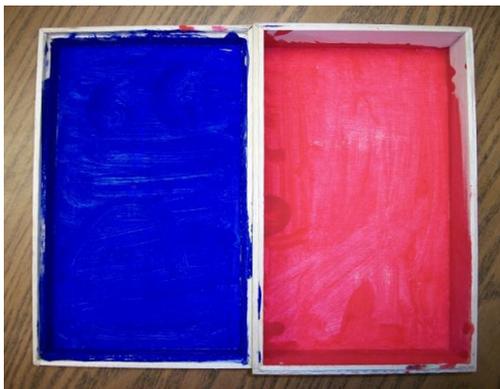


Figure 44. Anthony's Worry Box



Figure 45. Walter's Worry Box



Figure 46. Top of Edward's Worry Box



Figure 47. Bottom of Edward's Worry Box

10. *Volcano* (Liebmann, 2008)

Overall, three out of the four participants chose red for the colour of the eruption with the exception of Anthony (see Figure 48). In addition, Pierre, Walter and Edward chose to construct a volcano of a similar size, which permitted a successful eruption of the baking soda and vinegar (see Figures 49 to 51). Lastly, both Anthony and Walter chose to explode their volcano more than once.



Figure 48. Anthony's Volcano



Figure 49. Pierre's Volcano



Figure 50. Walter's Volcano



Figure 51. Edward's Volcano

11. *What your anger looks like* (Heegaard, 2003)

Overall, red was the main colour used for the depiction of anger (see Figures 52 to 54) with the exception of Walter. Also, Walter was the only one who chose to work with clay. In terms of abstraction, Anthony's image was abstract in nature compared to Pierre, Edward, and Walter's which was more figurative.



Figure 52. Pierre's depiction of anger

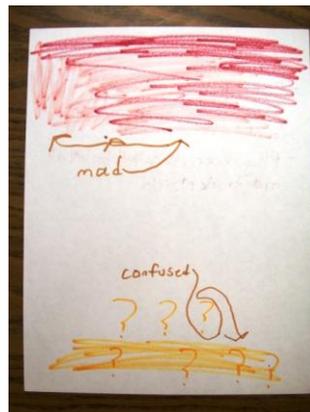


Figure 53. Anthony's depiction of anger



Figure 54. Edward's depiction of anger



Figure 55. Walter's depiction of anger

12. *Emotions with Clay* (Liebmann, 2004)

In terms of the emotions, both Pierre and Anthony chose to depict sadness (see Figures 56 and 57), compared to Walter who portrayed feeling worried (see Figure 58), and Edward who illustrated frustration (see Figure 59). Additionally, there was sufficient detail in the sculptures, no abstract images, and a minimal range of colour with the exception of Edward's sculpture composed of the three primary colours.



Figure 56. Pierre's Depiction of Sadness



Figure 57. Anthony's Depiction of Sadness



Figure 58. Walter's Depiction of Anxiety



Figure 59. Edward's Depiction of Frustration

13. *Mandala* (Curry & Kasser, 2005)

Only Edward and Walter completed the Mandala. Overall, both participants used oil pastel to complete their mandala. Moreover, there was a moderate range of colour used for Edward's mandala (see Figure 60), and a wide range of colour used for Walter's (see Figure 61).



Figure 60. Edward's Mandala



Figure 61. Walter's Mandala

14. *Stress Ball* (Sweet, 2001)

All participants completed this directive, but there was a visual record of Walter's stress ball only (see Figure 62). Furthermore, Pierre and Anthony were already familiar with the

concept of the Stress Ball (Sweet, 2001), as they had used it often as a way to handle their anger and stress. On the contrary, Walter and Edward had never created a stress ball before. Overall, red was the predominant colour used for the stress ball.



Figure 62. Walter's Stress Ball

15. Breathing Box (Hendricks, 2005)

Even though all the participants completed the Breathing Box (Hendricks, 2005) directive, there is a visual record of Pierre and Edward's only. Pierre applied the most colours to his box than the other participants (see Figure 63). On the contrary, Anthony and Walter only used pencil. Edward used a mixture of pencil and brown pencil crayon (see Figure 64).



Figure 63. Pierre's Breathing Box



Figure 64. Edward's Breathing Box

16. *Finger Labyrinth* (Thomas, 2009; see Appendix F)

All four participants completed the Finger Labyrinth (Thomas, 2009), and found it helpful and relaxing. Both Walter and Edward said they would use the Finger Labyrinth (Thomas, 2009) again.

17. *Mind-in-a-Jar* (MacLean, 2004)

Even though, all participants completed this directive there were visual records of Anthony and Walter's only because Pierre and Edward took their jar home right after the session.

Overall, the four participants chose to add beads to their jar. Anthony added the most sparkles and beads out of all the participants (see Figure 65), compared to Walter who included the least (see Figure 66).



Figure 65. Anthony's Mind-in-a-jar



Figure 66. Walter's Mind-in-a-jar

Case Study One

Walter. Male, Caucasian, 14 years old

Presenting Problem. Walter was referred for individual art therapy sessions by his case worker to increase self-esteem, and for him to learn ways to manage and lessen his anxiety. His main presenting problems included struggling with peer relationships and social skills. Walter was diagnosed with Generalized Anxiety Disorder (GAD). His other diagnoses included Attention Deficit Disorder, with features of Obsessive Compulsive Disorder, Separation Anxiety, Parent Child Relational Problems, and Asperger's Disorder.

Medication. Forty-five milligrams of Concerta per day.

History of Current Difficulties. According to a July 2009 Psychiatric Assessment, Walter worries about his parents and wishes they would reconcile. He is particularly worried about his mother when he is at school. He fears the dark, spiders, centipedes and walking home from school alone. His three wishes were for his mom and dad not to separate, to end world hunger, and for everyone to live together. Since grade 2 he has been in a special education class because of his learning disability. During therapy, Walter was attending a specialized school for children with high needs and behavioural issues.

Family Background. Walter is one of triplets, and was born three months prematurely. He has one sister, and one brother who has cerebral palsy. His parents are divorced however they still live in the same house.

In January 2007, Walter's parents separated, and had joint custody of their children. Following their separation Walter's behaviour at school deteriorated and became disruptive in class. In addition, when Walter's father left the family, his mother attempted suicide, and was hospitalized overnight. Following the hospitalization she was treated for depression, which is a

mental illness present on the maternal side (grandmother, aunt and great grandmother all suffered from depression).

Intake Session. At the start of the session Walter appeared timid, as he did not respond to questions about the materials and colours he wanted to use. His first piece was his art folder, done with yellow and blue construction paper with red tempera paint. He painted his initial W, fangs, a bat, a hand, and a ninja on the yellow side. Walter's second piece of artwork was done on orange construction paper with blue tempera paint. He described it as "a turtle, the moon, a star, interlocking waves, a balloon and the date Nov. 3rd." He said, "The moon and the star are in space. The turtle swims in the water and the balloon floats in the air." After he completed his second piece, he had difficulty stating he was finished. For his third piece he constructed a spider with fangs and canons on his back, and titled it the *Fanged Menace*. After completing this piece he was capable of telling the art therapist he was done. Walter also completed his feeling barometer and associated each colour to an emotion (see Figure 67).



Figure 67. Walter's Feeling Barometer

Session 1. Walter started off by completing the MASC. Then he completed his pre-PPAT, which he described as "a basket with apples, a tree with branches and leaves, and a person

climbing a ladder to pick an apple” (see Figure 68). Next, he did a sculpture using plastercine of a robot with a sword and a pet alien mouse. He said, “The robot was going to fight the spider,” referring to the *Fanged Menace*. He titled the piece the *Robot Slasher*, and called the mouse, “red nose”. His second piece of artwork was a drawing of a vampire and a werewolf fighting each other. Lastly, Walter’s feeling barometer ratings remained consistent throughout the session at feeling “ok”.



Figure 68. Walter’s Pre-PPAT

Session 2. Walter started with the visualization of his Special Place (Shapiro & Sprague, 2009), which he depicted using various coloured markers. He described “the drawing as different platforms with the blue platforms being water,” and “the bottom as wood and stones” (see Figure 69). Furthermore, he said, “He would use his special place when he was feeling down or mad.”



Figure 69. Walter's Special Place

Walter's second piece was a war scene drawn with markers. There was an older wooden plane illustrated in the bottom right hand corner, fighting a newer metal plane drawn in the centre of the page. He said "he had seen a similar image in a textbook, and that the image had bothered him." Similar to session one, he indicated feeling "ok" on his feeling barometer pre- and post-session.

Session 3. Walter's first piece was his Inner Helper (Shapiro & Sprague, 2009), which he described as "a floating figure with a key in one hand and a ring in the other hand to help him find his way" and he titled the figure *The Key* (see Figure 70). Walter said, "His helper would be useful in a stressful situation", and that "it could help him with advice to solve a problem."



Figure 70. Walter's Inner Helper

Next, he continued the concept of his Inner Helper (Shapiro & Sprague, 2009) by constructing a key and a ring out of clay. Followed by, an oven made out of clay, which led to a discussion about baking cookies with his sister. Lastly, his fourth piece was a smiling face made out of clay. At the end of the session Walter felt more relaxed than he did at the beginning of the session.

Session 4. At the beginning of the session, Walter decided to work on the following goals: 1. To reduce worrying, and 2. To develop ways of managing stress. He rated the first goal an eight out of ten (with a one indicating he worries a lot, and a ten meaning he does not worry at all). His goal was to work towards a ten out of ten. He rated his second goal a six out of ten (with a one meaning he is unable to manage stress, and a ten indicating a strong ability to manage stress). His goal was to work towards a nine out of ten. Next, he coloured a pre-designed mandala using oil pastels (see Figure 71). When he was finished he said, “Red reminds him of roses, blue is one of his favourite colours, yellow reminds him of the sun, and orange is a colour he likes.” Then, he explained, “Colouring the mandala helped him feel better.”



Figure 71. Walter's Mandala

His second piece involved repairing the *Robot Slasher*, which he created in session one. Walter also added two cobras and a cobra egg to the *Fanged Menace*. After, he put the *Robot Slasher* facing the *Fanged Menace* and said “they are at war because the robot spider (*Fanged Menace*) is trying to take over the land of the *Robot Slasher* (see Figure 72). And the side kick of the *Robot Slasher* named “red nose” has the power to burrow underground and use his tail to fight.” Akin to the previous session, Walter indicated feeling more relaxed post-session.



Figure 72. Walter’s Sculpture of the War between the Robot Slasher and the Fanged Menace

Session 5. Walter’s first piece was his Worry Box (Darley and Heath, 2008), which he painted with tempera paint. He described it as “the blue ocean and the yellow sun” (see Figure 73).



Figure 73. Walter’s Worry Box

Next, Walter completed the Thought Changing Machine (Shapiro & Sprague, 2009; Appendix E) directive. He was able to transform the negative thought “I cannot do it” into the positive thought “I can do it.” His third piece involved completing the directive the *Door of Fear* (Liebmann, 2004). He described “the outside as a spider, and the inside as his fear of heights.” He identified himself as the person looking over the side of the mountain. He explained, “He starts to feel scared when he is on the tenth floor of a building.” In terms of his feeling barometer ratings he felt “ok” pre-session and relaxed post-session.

Session 6. Firstly, Walter was given the directive *Three Wishes* (Dalley, 1984). His wishes were to end world hunger, to have a good Christmas, and to have some money. After he completed his drawing, the researcher proposed the directive “*My Sadness Looks Like...*” (Liebmann, 2004), and Walter said, “He feels sad when he loses someone.” Then, he shared that his grandpa had passed away two months ago. Walter said, “He was not close to his grandpa, but he used to come over a lot.” His second piece was done in the sand tray and he told the following story: “Alligators and dinosaurs are fighting each other over the shade. The lizards are hiding from the dog and the cheetah, and the chameleons are trying to blend into their surroundings. The warrior and his dog are about to kill the lion, and they have a horse to help them go faster. Then, the elephant is being attacked by the snakes” (see Figure 74). On his feeling barometer he indicated feeling “ok” pre-session and very relaxed post-session.



Figure 74. Walter's Sand Tray Scene

Session 7. Firstly, Walter created a scene in the sand tray (see Figure 75). When he was finished the scene, he dictated a three page story to the researcher. In the story he talked about several battles with one battle occurring between two men called the tans, and two other men called the greens.

Walter's ability to tell this story demonstrated his capability to verbally express himself, as he went from an inability to state that he had completed a piece, to being able to dictate a story. Using his feeling barometer, Walter indicated feeling "ok" pre- and post-session.



Figure 75. Walter's Second Sand Tray Scene

Session 8. At the beginning of the session Walter rated his goals, which were discussed in session four. He rated his first goal an eight out of ten, with the original rating being an eight

out of ten. Then, he rated his second goal a seven out of ten, with the original rating being a six out of ten.

The first piece he did was a collage, which he described as “a person he recognized from a movie, a forest fire, and elephants” (see Figure 76). He said, “He felt excited about the fire, funny about the person, and happy about the elephant.” He explained that all of the images were related to the elements of land, fire or water.



Figure 76. Walter's Collage

During the session, the researcher read Walter the three stories he had created since starting art therapy, which were already described in sessions four, six, and seven. This led to Walter wanting to create a book of his stories out of construction paper, titled *My Book of Stories*. On the front cover there was a book and a happy face. In the session, he did not have time to complete his book of stories. Furthermore, his feeling barometer rating remained at relaxed from pre- to post-session.

Session 9. Six days prior to this session, Walter's mother disclosed to the treatment team that Walter's father was planning to leave the home and split up the siblings, meaning he would take custody of Walter and his sister, and leave Walter's brother with their mother.

During the session, Walter depicted four emotions using clay. The first emotion was happiness, and he said, “He feels happy when people smile and are nice.” The second emotion

was shyness, and he stated, “He feels shy when he does not know people well and does not know what to say.” Next, he completed the directive Emotions with Clay (Liebmann, 2004), and he chose to illustrate anxiety (see Figure 77). Walter said, “He feels worried when he is nervous and does not know what will happen.”



Figure 77. Walter’s Depiction of Anxiety

The last emotion depicted using clay was What His Anger Looks Like (Heegaard, 2003; see Figure 78). Walter said, “When he feels angry he wants to be alone in his room,” and in order to deal with his anger “he takes deep breaths and visualizes his special place.” Lastly, he made a sculpture out of clay about his future. He described it as a badge, and explained “how he wants to be a police officer, and catch bad guys when he is older.” At the end of the session, Walter said he felt “ok”, similar to how he felt pre-session.



Figure 78. Walter’s Illustration of What his Anger Looks Line

Session 10. At the beginning of the session Walter continued to work on his book of stories (see Figure 79). He added a green hat and a cobra to the front cover of the book (see Figure 80).

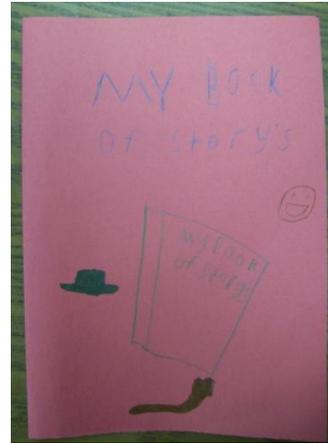
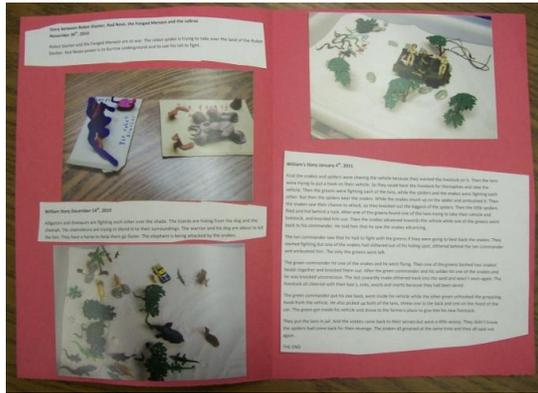


Figure 79. Inside of Walter's Book of Stories Figure 80. Outside of Walter's Book of Stories

The first directive he completed was the Breathing Box (Hendricks, 2005), however there is no image available because Walter took it home the same day. After, he asked about meditation, so the researcher explained the steps and the benefits of meditation. The second directive Walter completed was the Feeling Penny Pitch (Shapiro & Sprague, 2009; Appendix D). When Walter landed on the emotion of sadness, he was able to talk about feelings of loss in regards to his cat Coco dying and being buried in the backyard. Overall, he was able to discuss various emotions freely and provide personal examples. Lastly, his feeling barometer rating increased from feeling “ok” to feeling very relaxed.

Session 11. Walter started off the session by completing an exercise about meditation (Ali, 2006). He said, “Meditation could help him to relax and be calm, and could be helpful when he is angry.” Then, Walter and the researcher reviewed the book *Peaceful Piggy Yoga* (MacLean, 2008), and Walter looked at various yoga poses he could use to help him relax. He chose the following four poses: the tree, the full lotus, the warrior and the cobra. After, Walter completed

the Volcano (Liebmann, 2008) directive (see Figure 81). He described his volcano as small, and thought the eruption was cool. He was able to brainstorm ways he could handle his anger, which included being active and taking deep breathing. Post-session Walter felt very relaxed compared to feeling “ok” pre-session.



Figure 81. Walter’s Volcano

Session 12. At the beginning of the session Walter completed a deep breathing and grounding exercise, which involved putting his feet flat on the ground, hands on his knees, and taking deep breaths. His first piece was a drawing done in pencil about the death of his grandfather. He drew four emotions, which articulated the range of emotions he felt after he heard about the death of his grandfather. First, “he felt shocked when he heard his grandfather was dead, then confused, then sad when a relative told him about the death, and then sad with tears when his dad told him, his brother and his sister.” He said, “His grandfather was a good person and that they shared a lot of memories together.” Also, Walter was able to share what he remembered about the funeral. He said, “They showed images of his grandfather on a large screen, and the photos made him cry because he thought of all the memories.” Walter’s second piece of art was his Relaxation Jar (Shapiro & Sprague, 2009) directive, which he made using Styrofoam and tempera paint (see Figure 82). However, he did not have enough time to

complete his jar. In terms of his feeling barometer ratings, he felt “ok” pre-session and relaxed post-session.



Figure 82. Walter’s Relaxation Jar

Session 13. During this session termination was discussed, and the researcher normalized any feelings that might come up in the process of termination. In addition, the researcher introduced a calendar that would be used each session to count down to the final art therapy session. At the start of the session, Walter seemed quieter and more withdrawn than normal, with his head down and avoiding eye contact. When asked about his week he was able to talk about his brother being in the hospital, and having to have his muscles stretched. He said, “His brother would have to lie on the couch for six weeks.” He explained, “He felt sad and that it was difficult to see his brother on the couch for so long.” After, he continued to work on his Relaxation Jar (Shapiro & Sprague, 2009), and added strategies he could use to help him relax, which included doing deep breathing, going to a quiet place, trying meditation and yoga, and reading a book. Once he was finished, he tried the Finger Labyrinth (Thomas, 2009) directive, and found it relaxing. Next, he used pencil and paper to draw what he misses about his grandfather (see Figure 83). He said, “He misses his grandfather’s smile, his hug, his laugh,

seeing him, hearing him say how much Walter has grown, him being more active, and the way he said hi.” Lastly, Walter felt “ok” pre- and post-session on his feeling barometer.

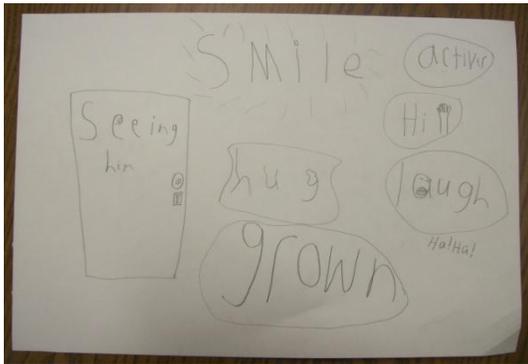


Figure 83. Walter’s Drawing of What he Misses about his Grandfather

Session 14. The session started off with a review of all Walter’s artwork and accomplishments thus far in art therapy. He acknowledged that, “He had done a lot since the beginning.” After, he completed the Mind-in-a-jar (MacLean, 2004) directive, and said, “He really liked it” (see Figure 84). The second piece Walter did was the Stress Ball (Sweet, 2001) directive (see Figure 85), which he made with green and red balloons. He stated “he had never made one before.” Furthermore, Walter used the same colours for the beads in his jar, as he did for his stress ball. In regards to his feeling barometer ratings, he felt “ok” pre- and post-session.



Figure 84. Walter’s Mind-in-a-jar



Figure 85. Walter’s Stress Ball

Session 15. During the session Walter stated, “He felt more relaxed and less anxious than before.” The first directive he completed was the Talking, feeling, doing anger card game (Shapiro & Shore, 2004a). Next, he wanted to play the Talking, feeling, doing shyness game (Shapiro & Shore, 2004b). One of the questions asked was if he would change anything about himself, and Walter replied, “He would not change anything because he likes who he is.” Another question was about Walter’s strengths, which he listed as “making jokes, making friends and being nice.” Another interesting response was if he were to write a book about himself he would title it *My Life* because he thought his life was interesting. At the end of the session, he used the musical gong three times to transition out of the session. In addition, he felt more relaxed post-session than pre-session.

Session 16. At the beginning of the session, Walter discussed a school project about the Canadian territories. Then, Walter read two affirmation statements from the book *Meditations to Heal Your Life* (Hay, 2002). The first affirmation statement was about freedom of choice, and the second was about dreams. Walter stated, “He enjoyed reading them.” Next, the researcher proposed a choice between a directive about family (he could either depict his own family or an animal family) or a spontaneous artwork. Walter chose the theme of family, and did a drawing on white paper using fine tip markers. He described the drawing as “a family of deers with the buck deer, the mom deer, and young deer hiding behind the mom” (see Figure 86). At the end of the session, Walter said, “He was not finished the drawing, and would still like to add a sun and a background.” In terms of his feeling barometer ratings, he indicated being “ok” pre- and post-session.

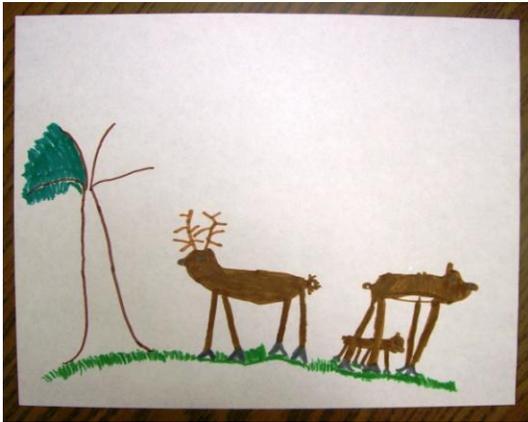


Figure 86. Walter's Drawing of a Deer Family

Session 17. At the start of the session Walter talked about spending time with his sister over March Break, and he stated, “Being happy about his brother being able to go back to his wheelchair.” Walter continued to work on his deer family drawing, while he talked about spending time with his brother. He said, “It was difficult because his brother does not want to go outside or do the same things as Walter.” In the drawing he added a hill to the background, a knot in the tree, and some sky (see Figure 87). He said, “He wanted to add mountains and a river.” On his feeling barometer, he indicated being very relaxed at the end of the session compared to being relaxed at the beginning.



Figure 87. Walter's Continuation of the Deer Family Drawing

Session 18. Walter continued to work on his deer family drawing (see Figure 88), while he talked about spending time with a friend. He told the researcher, “He had decided on a school for next year, but unfortunately his friend was not attending the same school.” However, Walter said, “He would still keep in touch.” Then, the researcher proposed doing the Sock Creature (Shapiro & Sprague, 2009), but Walter was not intrigued by this directive. During the session Walter rated both of his goals at a nine out of ten, which were mentioned in session four (see page 73). At the end of the session, he felt very relaxed compared to feeling “ok” pre-session.



Figure 88. Walter’s Completion of the Deer Family Drawing

Session 19. First Walter completed the MASC. Following this, he and the researcher comparing his post-MASC scores with his pre-MASC scores. After, Walter completed the post-PPAT, and he described “his person as jumping on a trampoline” (see Figure 89).



Figure 89. Walter's Post-PPAT

Next, the researcher and Walter briefly reviewed his artwork and he chose the pieces he wanted to take home. He took everything aside from the Relaxation Jar (Shapiro & Sprague, 2009), as he decided to transform his Worry Box (Darley and Heath, 2008) into a relaxation box. For the last part of the session the researcher proposed doing a joint drawing (Liebmann, 2004). He chose watercolour as the medium, and the researcher and Walter took turns adding to the painting (see Figure 90). Followed by, a joint discussion of the elements added.

During the session the researcher presented Walter with a certificate for completing 19 sessions, and a personalized letter articulating his progress and accomplishments. Then, the researcher acknowledged Walter's ability to utilize new coping strategies to manage his stress and worry. In addition to Walter's capability to work through some difficult emotions in relation to his grandfather. In terms of his feeling barometer ratings, he felt "ok" pre-session and relaxed post-session.



Figure 90. Walter's Joint Drawing

Conclusion. The art therapy seemed to help Walter reach a relaxed state post-session. He was able to use the Breathing Box (Hendricks, 2005), meditation, and his Stress Ball (Sweet, 2001) outside of sessions to cope with his anxiety. In addition, the art therapy gave him an opportunity to express his feelings of anger and sadness in a safe way. Also, the art therapy gave him a chance to reminisce about his grandfather, and to verbalize his relationship with his brother and his compassion for his brother.

In regards to Walter's response to the art therapy sessions, he stated, "He feels more open and more confident because of the art and he is feeling more relaxed and less anxious than before."

Case Study Two

Edward. Male, 11 years old

Presenting Problem. Edward was referred for individual art therapy sessions by his case worker to manage his worrying, and to understand and handle his feelings better. His main presenting problems included struggling with social skills, external stimuli, and a diagnosis of Attention Deficit Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Asperger's. In addition, he presented with symptoms of social anxiety and separation anxiety.

History of Current Difficulties. According to a November 2009 Service Inquiry Record, Edward was described as threatening to kill himself and others. He attempted to kill his brother and physically hurt his father. Also, Edward was verbally aggressive towards his paternal grandmother. Furthermore, he said he hears voices, and was sensitive to noise. In addition, the report stated that Edward will become aggressive, if his surroundings become too noisy. Moreover, he has poor interactions with other children, and difficulty reading social cues.

As a result, Edward, his brother, his father, and his paternal grandmother received Intensive Child and Family Services in the home from July 2010 to August 2010.

During therapy, Edward was attending a Public School in a supported program for students with Asperger's.

Family Background. At the time of the art therapy treatment, Edward was living with his brother, his paternal grandmother, and his father. His parents were divorced, and he saw his mother infrequently.

In April 2009 Edward, his brother and his father moved in with the paternal grandparents then four months later Edward's grandfather died. It was a huge loss for the family and Edward, as they had been very close to their grandfather.

A November 2009 Health Systems report indicated a marital separation with pending custody and access issues that were going to be taken to court. In addition, a Children's Aid Society (CAS) worker was involved with the family because his father required extensive support in managing Edward's behaviour.

Intake Session. Edward appeared to have low self-esteem, as he frequently stated that he was doing the artwork wrong or had made a mistake. The researcher did reassure Edward that there are no mistakes in art therapy because the focus is on expressing oneself. His first piece was his art folder done with green construction paper and various coloured markers. He said,

“He normally does not use a lot of colour.” On his folder, he wrote Edward’s Art in large bold letters. In the top left corner he drew a yellow happy face. He stated, “He drew the smiling face because doing art makes him happy.” Edward’s second piece was his feeling barometer. He associated a colour to each of the emotions (see Figure 91). While he was working on his feeling barometer, he talked about a previous teacher getting mad at him because he spent too much time on his artwork. The researcher emphasized that art therapy was different, and Edward could take as much time as he needed to complete a piece. Overall, he seemed quite anxious about the art making process because he was continually asking if he was doing it right or if he should add anything. Furthermore, he only made eye contact a few times while doing the artwork, but not when he was talking. Prior to the session there was a team meeting with his father, the caseworker and the researcher present. At this time the following art therapy treatment goals were decided upon: 1. Edward to understand his own feelings better, 2. Edward to cope better with external stimuli, and 3. Edward to work on his social skills.

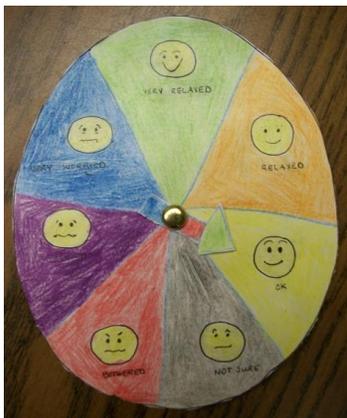


Figure 91. Edward’s Feeling Barometer

Session 1. Edward started off by completing the MASC. Then he did his pre-PPAT (see Figure 92). While he was working on the PPAT, he continually said, “He was sorry because he was taking too long.” In response the researcher assured him that there was no rush. During

the session Edward and the researcher talked about him being sensitive to noises. He stated, “He does not really need help with noises anymore, and that only his brother’s noises bother him.” At the end of the session, he rang the metal gong, and appeared to enjoy it. Lastly, he indicated feeling in between relaxed and very relaxed compared to feeling worried at the beginning of the session.



Figure 92. Edward’s Pre-PPAT

Session 2. At the beginning of the session the researcher proposed the Worry Box (Darley and Heath, 2008) directive. He was eager to get started, and explained that earlier in the week he asked his teacher for a box to put his worries in. Edward chose to draw on his box with pencil crayons. He explained the top of the box as a happy place with a red x across it (see Figure 93). On the side of his box he wrote the word evil and said “it is not good to have evil thoughts” (see Figure 94). The other three sides had a happy face, an angry face and a sad face. On the bottom, he drew a devil and stated “bad thoughts are not good.” The inside of the box had a happy face on one side, and a face of a light switch cover he had when he was younger. After Edward finished his box, he wrote down two worries which were “strangely I feel stressed,” and “my classmate kept yelling today so I got a headache...ouch.” Edward explained that, “His classmate had been screaming in the class for several days.” So, the researcher

encouraged Edward to use the art to depict his frustration about his classmate, thus Edward completed the directive Emotions with Clay (Liebmann, 2004). Edward started his sculpture, but did not have time to complete it. On his feeling barometer, Edward indicated feeling very relaxed pre- and post-session.



Figure 93. Edward's Worry Box (top)



Figure 94. Edward's Worry Box (bottom)

Session 3. At the start of the session Edward said, “He did not have a good week because now there were more kids in his class who were screaming, plus he got mad at his grandmother.”

Edward decided to continue working on his sculpture from the previous session about his frustration towards his classmate (see Figure 95). While he was working on the sculpture, the head fell off which Edward handled well. He wanted to glue it back together, but was not comfortable using the glue gun, so the researcher glued the head back on with Edward's guidance. This was an important moment for Edward, as he was able to assert his boundaries by acknowledging his discomfort. Once he finished the sculpture, he talked about his frustration towards his classmate and the other kids in the class. Then, the researcher proposed the directive What Your Anger Looks Like (Heegaard, 2003). He explained his image as “a person in the centre saying blah, blah, blah, and a person on the right shooting a gun.” There were also the words “mean” and “yelling”, and images of a cloud and lightning, all which he

associated with anger (see Figure 96). In addition, Edward said he associates red, black, orange and yellow with anger. After he completed his painting, Edward listed six ways to deal with his anger which included, 1. Taking a break, 2. Going for a walk, 3. Doing something else, 4. Drawing, 5. Doing what you want to do, and 6. Finding a solution. For the last part of the session, Edward wanted the researcher to read him a chapter from a book about bullying. After, Edward stated “Bullies make fun of others to feel better about themselves, and so the attention is on someone else.” In terms of his feeling barometer ratings, he felt bothered pre-session and relaxed post-session.



Figure 95. Edward’s Depiction of Frustration



Figure 96. Edward’s Depiction of his Anger

Session 4. At the beginning of the session Edward indicated feeling bothered on his feeling barometer because he had had another fight with his grandmother. So, Edward and the researcher discussed ways to prevent the arguments from happening. In addition, Edward appeared to be worried about a French test he had taken earlier that day, thus the researcher proposed the Special Place (Shapiro & Sprague, 2009) directive. Edward used paper and pencil to complete the drawing. He explained his drawing as “all white because it can be continually changed based on what he wants” (see Figure 97). He said, “The mouth on the left side is how people enter. There is a guard standing beside with the tongue tied down so the person could

get in. The face in the middle has teeth, which can be pressed in order to enter.” The four figures at the bottom were described as his mini-series. The first was angry, the second was frustrated, the third was normal and the fourth was silly. Edward said, “He could use this place when he is upset or sad.” Then, Edward did a second drawing of his Special Place (Shapiro & Sprague, 2009) using paper and pencil. He described the drawing as “having a sun, a fence, and the people on the right trying to capture the *minis*.” Next, Edward brought up the topic of bullies, so the researcher and Edward had a conversation about ways to handle bullies. Edward thought walking away was a good solution. At the end of the session Edward felt “ok”. After the session Edward’s father said “Edward’s behaviour and mood really improves after art therapy.”

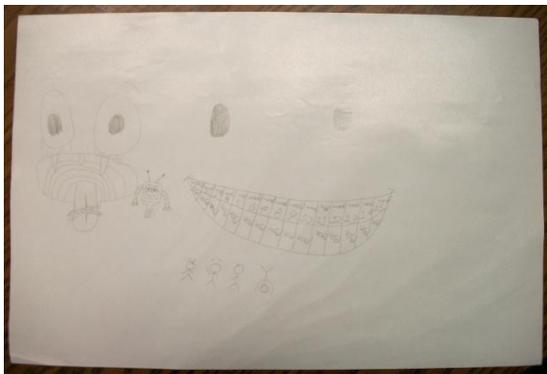


Figure 97. Edward’s Special Place

Session 5. The session started off with Edward stating, “He did not get into an argument with his grandmother this week, and that his classmate had stopped screaming in class.” The researcher emphasized Edward’s ability to cope and minimize conflict. Then, the researcher proposed the Inner Helper (Shapiro & Sprague, 2009) directive, which Edward illustrated using pencil and pencil crayon on green construction paper. He described his helper as a “miniature version of himself who talks to him and helps him answer questions” (see Figure 98).

Additionally, his helper tells Edward to stay calm, and it helps him when he is angry. He titled

his helper *The Brain*, and he said, “It helps a lot with everything.” Next, Edward chose to do a dream catcher, which he did not complete in session. After a few minutes of working on the dream catcher, he wanted to play with the puppets instead. He showed a real interest in the puppets, and asked if he could make one in art therapy. At the end of the session Edward used the drums and the gong as a way to transition out of the session. In addition, he indicated feeling very relaxed pre- and post-session.



Figure 98. Edward’s Inner Helper

Session 6. Edward’s first piece was done on blue construction paper with pencils. It was a spontaneous piece, which he described as several stars. After he was done the drawing he wanted to play with the Styrofoam bricks. He built stairs and a puppet stage. Then, the researcher proposed doing a directive involving the depiction of tension and anxiety versus relief (Darley & Heath, 2008), or the Door of Fear (Liebmann, 2004). Edward chose the Door of Fear (Liebmann, 2004), but modified the concept. Instead, he did a door of greetings using turquoise construction paper, white paper and pencil. He created pop-ups with various greetings. Next, Edward completed the Sand Tray (Shapiro & Sprague, 2009) directive as a way to transition out of the session, and to feel more relaxed (see Figure 99). He described the scene as rocks and trees. Lastly, he indicated feeling very relaxed pre- and post-session.



Figure 99. Edward's Sand Tray Scene

Session 7. At the start of the session the researcher asked Edward what he thought about art therapy. Edward replied, “He thinks it is helping because his dad says he seems to be much happier, and also it helps him to cool down and think of strategies.” Then the researcher proposed two directives for Edward to choose from; either *Three Wishes* (Dalley, 1984) or a relaxation book (Darley & Heath, 2008). Edward chose the first option, but said “he wanted to do both.” He explained that “he could only think of one wish, which was to have a beagle dog because he really likes them” (see Figure 100). While Edward was working on his clay sculpture, he discussed significant events from his week. After, he wanted to use the sand tray to depict a scene about an argument he had with his father. However, there were no building figurines available, thus Edward abandoned the idea and began to construct a clay wall for his beagle dog. He explained the structure as “a dog house that was not finished yet.” On his feeling barometer, he indicated feeling “ok” at the beginning of the session and relaxed at the end of the session.



Figure 100. Edward's Beagle Dog

Session 8. Edward wanted to continue working on the clay dog house from the previous session. He appeared to be frustrated that the clay was not holding together in the way he wanted it to. The researcher offered Edward new clay, but he said no. He decided a few minutes later that he no longer wanted to do the dog house, so the researcher proposed a relaxation book (Darley & Heath, 2008). Edward chose three magazine images of different landscapes to put inside, and then designed the cover of the book (see Figure 101). He titled the book *Calming Stuff*. He described the cover as a bee buzzing around, and a hay ball blowing in the wind. Once he had drawn the cover, he did not want to continue working on his book. So, for the last five minutes of the session Edward placed several tree figurines in the sand tray. At the end of the session he indicated feeling relaxed on his feeling barometer, which was the same rating pre-session.

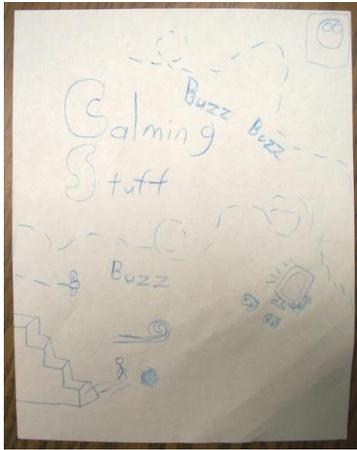


Figure 101. Edward's Cover for his Relaxation Book

Session 9. At the start of the session, the researcher proposed Edward choose between one of three directives. The first was a mandala, the second was a challenging element, and the third was artwork about making friends. Edward chose the mandala (Curry & Kasser, 2005) directive. He coloured the mandala with oil pastels, which was a medium he had not used before (see Figure 102). Edward said “colouring the mandala helped him calm down.” After, he chose to do a spontaneous piece using clay and tempera paint. He explained it as a cheeseburger titled *The Big Mac*. This sculpture led to a conversation about friendship. During the session Edward rated his goals, which were already discussed in the summary of the intake session (see page 89). He rated his first goal a ten out of ten and he said before it was a six out of ten. The second goal was rated a ten out of ten and before it was a four point five out of ten. The last goal was rated a seven point five out of ten, with the prior rating being a five out of ten. Since, Edward felt he had already worked on his first two goals, he chose a new goal: to work on his anger. At the end of the session Edward stated, “When he is upset he knows he cannot change the past, but he can change the future.” Lastly, Edward indicated feeling not sure pre-session and relaxed post-session.



Figure 102. Edward's Mandala

Session 10. At the beginning of the session Edward indicated feeling worried because he wanted to play his video games. The researcher encouraged Edward to explain further, and he was able to articulate the importance of his video games. For the first part of the session Edward completed a directive about empathy (Ali, 2006). He was able to identify the body language indicating an empathetic listener, and why empathy is useful. Part of the directive involved creating three puppets expressing happiness, sadness, and anger (see Figure 103 and 104). He made the puppets using toothpicks, white paper and pencil. Once Edward completed the puppets, the researcher and Edward took turns role playing an empathetic listener. Then, for the last part of the session the researcher discussed an anger chart for Edward to use over the coming week. In terms of his post-session feeling barometer rating he felt very relaxed.



Figure 103. Edward's Sadness Puppet



Figure 104. Edward's Anger Puppet

Session 11. Since the last session, Edward had not used his anger chart, so the researcher encouraged him to use it during the coming week. Next, Edward was able to summarize his understanding of empathy from the previous sessions, and stated, “Empathy was useful this past week in understanding his brother’s feelings, which prevented a fight between them.” Next, Edward completed an exercise about anger (Ali, 2006) and was able to explain how “anger sometimes hurts friendships because it effects communication and can cause the other person to feel hurt.” Then, he completed the Volcano (Liebmann, 2008) directive using clay and tempera paint (see Figure 105). Edward was able to connect his anger to the eruption of the volcano. Lastly, he continued another part of the anger directive discussed in this session (Ali, 2006), which involved depicting a range of anger. He chose yellow for a “little angry”, orange for “medium angry”, and red for “extremely angry”. In terms of his normal level of anger, he said, “He usually feels a little angry and then uses his strategies to deal with his anger.” On his feeling barometer he indicated feeling relaxed pre-session and very relaxed post-session.



Figure 105. Edward's Volcano

Session 12. At the start of the session, Edward stated, “Things were going well with his grandmother.” Since, there were escalating problems between Edward and his grandmother over the course of the last few weeks, the researcher proposed a role play between a grandmother and a grandson. Edward was the grandmother and the researcher was the grandson. Edward explained how he usually yells at his grandmother in the morning, when she tells him the bus is outside. He was able to brainstorm alternative responses to the situation. Next, Edward completed the Breathing Box (Hendricks, 2005) directive using paper, pencil and brown pencil crayon (see Figure 106). He took three deep breaths using his breathing box. After, the researcher proposed the Stress Ball (Sweet, 2001) directive. Edward chose a red and a black balloon for his stress ball because they were colours that reminded him of anger. In addition, Edward felt very relaxed pre- and post-session.

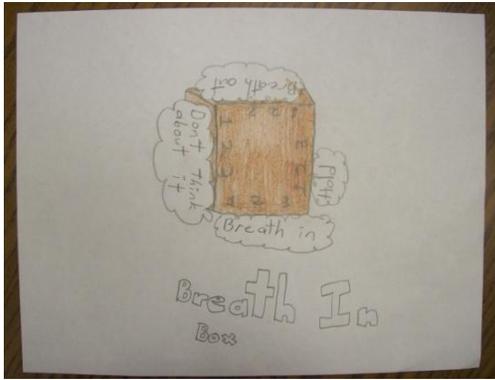


Figure 106. Edward's Breathing Box

Session 13. At the beginning of the session Edward talked about spending time with his mother during the weekend. Then, the researcher proposed doing an anger exercise or reading a book about social skills. Edward chose the anger exercise, which involved discussing situations that can bring about an outburst of anger (Heegaard, 2003). He connected sadness to anger and drew a sad creature at the side of the pre-drawn volcano. The other part of the exercise entailed identifying how often he feels angry. He said, “He sometimes feels angry, but is always able to control his anger by using his coping strategies.” During the exercise Edward brought up the death of his grandfather, and some of the happy moments they shared together. After, the researcher and Edward discussed eye contact, and Edward was able to identify who he can keep eye contact with, and when it is difficult for him. Next, he completed the Finger Labyrinth (Thomas, 2009) directive and said, “It would be something he would use again in the future.” Subsequently, he finished the Mind-in-a-jar (MacLean, 2004) directive, which he described as the earth and the planets. There was no image of his jar because he took it home after the session. At the end of the session he used the gong, the drums and the rain stick to transition out of the session. In terms of his feeling barometer ratings, he felt very relaxed pre- and post-session.

Session 14. At the beginning of the session, Edward talked about being mad at his grandmother this morning, thus the researcher encouraged him to draw out the argument (see Figure 107). The drawing helped Edward to see both sides of the situation, and he was able to identify what could be done differently the next time. The second drawing he did was in response to the exercise *People or Things I Feel Angry About* (Heegaard, 2003). Edward used pencil to draw his father, his brother, homework, unfinished work, having to do projects he does not like, a bully who used to bother him, and a friend that talks too much. After, he was able to identify some positive aspects about his father and his brother. Next, he continued the second part of the exercise, which involved scribbling his anger on a piece of newspaper in red crayon (Heegaard, 2003). However, he did not have the time to complete it in this session. On his feeling barometer, Edward indicated feeling “ok” pre-session and relaxed post-session.

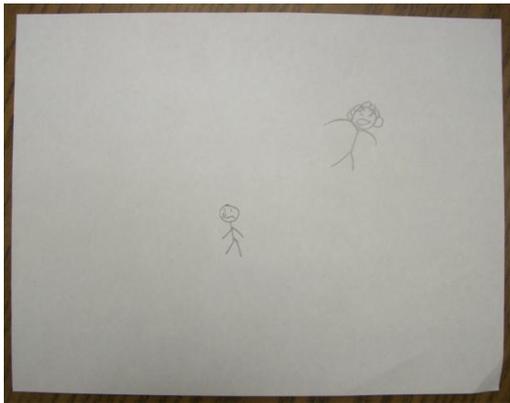


Figure 107. Edward’s Drawing of an Argument Between him and his Grandmother

Session 15. At the beginning of the session, Edward said “he was getting rewards for his good behaviour with his grandmother.” Then, he decided to continue working on his newspaper drawing about anger from the previous week (see Figure 108). He described his drawing as “three strict teachers who come into his classroom to help out, and are especially mean with his classmate,” who was discussed in session three. Furthermore, Edward was able

to empathize with his classmate's situation in the classroom. In addition, he drew a gun with the words bang, bang, bang. After, Edward wanted the researcher to read *A Weekend with Wendell* (Henkes, 1995), and he was able to identify the morale of the storybook, which was to not be controlling in friendships but to learn to compromise. For the last part of the session Edward wanted to play the Feelings Penny Pitch (Shapiro & Sprague, 2009) directive. He was able to describe each emotion and provide examples. In terms of his feeling barometer rating he felt very relaxed pre- and post-session.



Figure 108. Edward's Newspaper Drawing of Anger

Session 16. At the beginning of the session Edward expressed feeling upset about his father taking his brother to see a movie, while Edward visited his mother. Edward seemed to understand his father's actions, since he knew that his brother did not want to see his mother because she was physically abusive to him. Thus, the researcher proposed three directives, which were to draw an animal family, the Thought Changing Machine (Shapiro & Sprague, 2009) or the Relaxation Jar (Shapiro & Sprague, 2009). Edward chose the Thought Changing Machine (Shapiro & Sprague, 2009). However, instead of completing the sheet for the directive (see Appendix E), he created an image using pencil crayon. He described his drawing as "animals from a game he plays" (see Figure 109). Edward said, "This image could help him to stay positive because thinking of monkeys makes him happy." For the second part of the

session, the researcher asked Edward to name his strengths, which included “being good at math, art, science and French, learning things quickly, making friends easily, and understanding empathy.” Next, the researcher read Edward the book *We Can Get Along* (Payne, 1997), and he was able to understand the importance of “thinking about his words before he says them and choosing what to do before he does it.” In the last part of the session, Edward used the sand tray to depict a scene of “a knight riding on a camel through the desert, fighting off scorpions.” Lastly, Edward indicated feeling not sure on his feeling barometer pre-session and feeling very relaxed post-session.

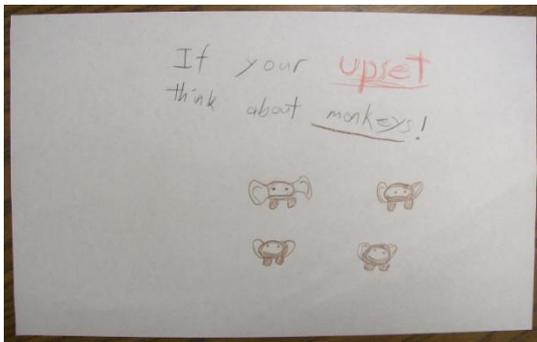


Figure 109. Edward’s Thought Changing Machine Image

Session 17. At the start of the session the researcher proposed three options, which were the Relaxation Jar (Shapiro & Sprague, 2009) directive, an anger exercise, or reading a storybook. Edward chose the Relaxation Jar (Shapiro & Sprague, 2009) and constructed it out of clay (see Figure 110). While he was building the jar, he brainstormed strategies to help him relax, which included taking five deep breaths, counting to ten, and putting his headphones on. Then, he said, “He does not really get upset anymore, and a lot of the strategies he has learned in art therapy have been helpful.” Edward did not get a chance to complete his jar so he wrapped it up.



Figure 110. Edward's Relaxation Jar

Session 18. At the start of the the session Edward rated his goals, which were discussed in session nine. His first goal of working on his social skills was at an eight point five out of ten because “they were good but not perfect.” His second goal of working on ways to manage anger was at a nine point five out of ten. Edward said, “He does not get very angry anymore because he can better handle his anger.” After, he wanted to do a drawing of an orange dog from his classroom at school. He explained that his teacher took the orange dog away from him, and he really liked it. Once Edward completed his drawing of the orange dog, the researcher proposed doing it as a Sock Creature (Shapiro & Sprague, 2009) with orange felt. While he was sewing his creature, he talked about doing needle point at his old school and really enjoying it (see Figure 111). On his feeling barometer he indicated feeling not sure pre-session and very relaxed post-session.



Figure 111. Edward's Sock Creature

Session 19. First Edward completed the MASC. Then, he and the researcher compared the scores of his current MASC with his previous MASC, and looked at the items that had decreased. After, Edward completed the post-PPAT, and he said “the person is not sad – it was just the way the marker was” (see Figure 112).



Figure 112. Edward's Post-PPAT

Next, the researcher and Edward briefly reviewed his artwork, and he chose the pieces he wanted to take home. The only two pieces he did not want were his relaxation book (Darley & Heath, 2008) and his Relaxation Jar (Shapiro & Sprague, 2009). After, he continued to work on his Sock Creature (Shapiro & Sprague, 2009). He cut out the ears and sewed them on, as

well as the eyes (see Figure 113). He said “his orange dog makes him happy and helps him to calm down.” During the session, the researcher presented Edward with a certificate for completing 19 sessions, and a personalized letter articulating his progress and accomplishments. The researcher discussed all the coping strategies Edward had worked on over the course of art therapy to help him manage his worry and anger. In terms of his feeling barometer ratings, he felt not sure pre-session and very relaxed post-session.



Figure 113. Edward’s Sock Creature Completed

Conclusion. Over the course of 19 art therapy sessions, Edward was able to use the directives to help manage his anger towards one of his classmates and family members, and to help handle his worry about being able to control his anger and his level of stress. He also showed a greater ability to deal with conflict in more constructive ways. He was willing to work on his social skills by exploring concepts of eye contact, empathy and compromising. The art therapy allowed him to identify and understand his emotions, especially anger. Moreover, the art therapy gave him an opportunity to reminisce about his grandfather. In regards to the art therapy sessions, Edward said, “He thinks it helped him because he is able to cool down and think of strategies.” In addition, Edward’s father stated, “Edward’s mood really improved after sessions, and that art therapy is really helping him.”

CHAPTER FIVE

Discussion

In the present study the direct measurement results from the feeling barometer (Kendall, 1992) supported the hypothesis that children who received individual art therapy sessions would have a reduction in levels of anxiety. The pre- and post-session feeling barometer ratings for the 19 sessions and the 17 directives were significant at the 0.01% level.

Among the 17 directives used in this study, the Special Place (Shapiro & Sprague, 2009) and the Volcano (Liebmann, 2008) directives were statistically significant at the 5% level. In addition, the Talking, feeling and doing anger card game (Shapiro & Shore, 2004a) approached statistical significance as $p = 0.081$. The other 14 directives did not approach statistical significance, however the feeling barometer ratings for 12 of the 14 directives decreased in levels of anxiety by one to two points.

For the Thought Changing Machine (Shapiro & Sprague, 2009) directive, all four participants found it difficult to transform their negative thoughts into positive ones, and to generate more than one negative thought. Additionally, it appeared to be helpful for the participant to accompany the Thought Changing Machine (Shapiro & Sprague, 2009) directive with an image related to thinking positively.

The drawing characteristic that changed the most in the pre- and post-PPAT (Gantt & Tabone, 1998) was the amount of space used. The drawings increased in size, and approached statistical significance ($p = 0.059$). Furthermore, the problem-solving scale increased, which indicates improved problem-solving skills. Moreover, increasing problem-solving abilities was an important component in the treatment of anxiety disorders in children (Chorpita & Southam-Gerow, 2006).

In addition the FEATS (Gantt & Tabone, 1998) had strong inter-rater reliability for Rater 2 and Rater 3 for all seven scales, and for Rater 1 and 2 for five of the scales. There was weak

inter-rater reliability for the logic and realism scale. According to Bucciarelli (2007), realism is a difficult scale for obtaining inter-rater reliability.

No statistically significant differences were found in the indirect measurement results of the MASC (March, 1997) scores or the subscales, which may have been the result of an increase in the MASC scores for Anthony and Walter. The increase in anxiety levels may have been due to the significant life changes that occurred during treatment, which may have acted as a confounding variable. In the middle of treatment, around session 12, there was a report made to the Children's Aid Society (CAS) about Anthony's mother physically abusing him. This was not the first incident as other reports had been made in 2008 and 2009. Additionally, in session 12 there was a huge drop in Anthony's pre-session feeling barometer rating. Then, after session nine Walter's mother reported to the treatment team that Walter's father was planning to move out of the family home and split up the siblings. Furthermore, from session nine to 13 Walter's pre-session feeling barometer ratings were at *ok*. Although Anthony and Walter's MASC increased, Pierre and Edward's both decreased.

Based on the MASC scores art therapy affected the following symptoms of anxiety: performance fears, and somatic and automatic symptoms. The most common symptom of anxiety is excessive worry, which was indicated in Walter and Edward's pre-test MASC (March, 1997) scores (Essau & Petermann, 2001). In addition, all four participants exhibited worry about school and family, which were common symptoms found in the literature (Foxman, 2004; Muris et al., 1997). The first participant, Pierre, appeared to have muscle tension and worried about punctuality. Moreover, at the beginning of treatment he was often very rigid in sessions, but became more at ease as the art therapy progressed. Anthony exhibited symptoms of restlessness, difficulty concentrating, and irritability in session. On his pre-test MASC, he indicated a high score for nightmares, and perfectionistic tendencies. However, his symptoms

dissipated after the fourth session and started to reappear around session 12. Walter indicated having the following symptoms on his pre-MASC: nightmares, performance fears, and a fear of the dark, heights and bugs. Lastly, Edward had the highest pre-test MASC score with symptoms of social anxiety and separation anxiety. His social anxiety appeared to diminish as he worked on his social skills in art therapy. In contrast, his post-MASC T-score for the separation and panic scale increased which may have been due to art therapy ending.

Another important factor in the understanding of anxiety is fears, which were indicated by all four participants. Pierre stated having a fear of fire, Walter indicated having a fear of heights, and Edward said he had a fear of crowded places. In addition, Pierre, Anthony, and Walter both indicated keeping their eyes open for danger on their pre-test MASC. Furthermore, the fears stated by the participants were related to Muris et al.'s (1997) list of the top ten fears for boys.

The positive outcomes of the art therapy sessions included an increase in the participants expression of feelings, development of skills to manage anger, stress, and anxiety, ability to change negative self talk by identifying strengths and positive characteristics, and establishment of a positive relationship with the art therapist, which were all key counselling components when working with children with anxiety (Foxman, 2004). The following participant comments support the above components. Anthony stated, "Art therapy was helpful because I can express my feelings better. Before I never felt good. I was misbehaving and I never felt happy. Then when I came here I felt better." Anthony was also able to explore feelings of happiness, anger, sadness, boredom and pain through the art. Pierre said, "It helps me to come here. I've learned some things, and I wish I could come to art therapy every day." Walter stated, "The Safe Place (Shapiro & Sprague, 2009), Inner Helper (Shapiro & Sprague, 2009), and Mind-in-a-jar

(MacLean, 2004) were useful to me in stressful situations by helping me relax.” Edward explained that “Art therapy helped me to cool down and think of strategies.”

In addition, there was an increase in the participants’ eye contact, reminiscence of grandparents, and self-esteem. Edward increased the number of times he made eye contact with the art therapist, and was able to identify when it was difficult for him to keep eye contact with someone. Edward expressed his feelings about his grandfather’s death and some of the happy moments they shared together. Walter explored the range of feelings he experienced after hearing of his grandfather’s death, and discussed what he missed about his grandfather. Pierre explained, “Doing art helped me to feel better about myself.” Anthony stated that in art therapy, baking cookies and learning new things he could pass on to his classmates, helped him to feel better about himself.

Limitations

There were six main limitations in the study. The first limitation was the small sample size. Even though there were statistically significant results, with only four participants the results cannot be generalized.

The second limitation was only male participants partook in the study. Including female participants may have provided a richer understanding of anxiety disorders in children.

The third limitation was two participants had multiple diagnoses. Edward and Pierre both had Asperger’s and presented with symptoms of anxiety, making it difficult to determine if the results from the study were due to the anxiety or the Asperger’s diagnosis.

The fourth limitation was the directives were not administered in the same order, which made it complex to determine patterns in the feeling barometer ratings. In addition, it was difficult to make conclusions about the directives, since most were done at different points in the art therapy treatment.

The fifth limitation was that the participants were receiving treatment from at least one other mental health care professional. Therefore, it was difficult to conclude with certainty that art therapy had a contributing factor in the reduction of levels of anxiety. However, three forms of data were analyzed to allow for a more sound justification of the effectiveness of art therapy.

The sixth limitation was that there was no control group. Therefore, it was difficult to provide evidence that art therapy was more effective or equivalent in effectiveness to other forms of therapy.

Future Research

Future studies wanting to replicate this study may want to: 1. Obtain a larger sample size, 2. Include female participants, 3. Administer the directives in the same order for each participant, and 4. Have a control group.

Additionally, it may be more effective to assess anxiety levels using the 10-item MASC (March, 1997) compared to the 39-item MASC for three reasons. Firstly, the participants found the 39-item MASC too lengthy. Secondly, the 10-item MASC is easier to administer and score. Thirdly, since the 10-item is significantly shorter the researcher could administer the MASC in the middle of treatment in addition to pre- and post-treatment.

Conclusion

The purpose of the study was to examine the effectiveness of art therapy on levels of anxiety in children diagnosed with anxiety disorders or exhibiting symptoms of anxiety. Overall, the data supported that art therapy had a direct impact on levels of anxiety. In addition, the study added to the art therapy literature on levels of anxiety in two ways. Firstly, it provided knowledge of art therapy directives that can be useful in the treatment of anxiety disorders. Secondly, the study allowed for a greater understanding of statistical measures that can be used in future studies when assessing levels of anxiety. Furthermore, the integration of quantitative

measures helps to justify art therapy as an evidenced-based practice. Finally, the study provides evidence to support the use of art therapy in the treatment of anxiety.

References

- Aaron, R. E., Rinehart, K. L., & Ceballos, N. A. (2011). Art-based intervention to reduce anxiety levels among college students. *Arts and Health: An International Journal for Research, Policy and Practice*, 3(1), 27-38.
- Albertini, C. (2001). Contribution of art therapy in the treatment of agoraphobia with panic disorder. *American Journal of Art Therapy*, 40, 137-147.
- Ali, R. (2006). *The ABC's of anger*. Duluth, MN: Whole Pearson Associates.
- American Art Therapy Association. (2010). *Art Therapy*. Retrieved from <http://www.arttherapy.org/aata-aboutus.html>
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed.). Arlington, VA: American Psychiatric Association.
- Anxiety Disorder Association of Canada. (2003). *Mental health and mental illness*. Retrieved from <http://www.anxietycanada.ca/english/pdf/kirby.pdf>
- Austin, W., & Boyd, M. A. (2010). *Psychiatric and mental health nursing for Canadian practice* (2nd ed.). Philadelphia, PA: Lippincott Williams & Wilkins
- Bell-Dolan, D. J., Last, C. G., & Strauss, C. C. (1990). Symptoms of anxiety disorders in normal children. *Journal of American Academy of Child and Adolescent Psychiatry*, 29, 759-765.
- Betts, D. (2005). *A systematic analysis of an art therapy assessment and rating manual literature*. Dissertation. Tallahassee, FL: Florida State University. Retrieved from http://www.art-therapy.us/images/Donna_Betts.pdf
- Bourne, E. J. (2005). *The anxiety and phobia workbook* (4th ed.). Oakland, CA: New Harbinger Publications.
- Bourne, E. J. (2010). *The anxiety and phobia workbook* (5th ed.). Oakland, CA: New Harbinger Publications.
- Braimoh, G., Rowntree, C., & Stacey-Corrin, R. (1997). The relationship between self-drawing and self-reports in the evaluation of emotional well-being in outpatient adolescents assessments. British Association of Art Therapists. (2010). *What is art therapy?* Retrieved from

- http://www.baat.org/art_therapy.html
- Bruera, E., Kuehn, N., Miller, M. J., Selmsler, P., & Macmillan, K. (1991). The Edmonton Symptom Assessment System (ESAS): A simple method for the assessment of palliative care patients. *Journal of Palliative Care*, 7(2), 6-9.
- Bucciarelli, A. (2007). *Normative study of the PPAT assessment on a sample of college students*. Retrieved from <http://www.art-therapy.us/images/normativestudyofPPAT.pdf>
- Cairney, J., & Streiner, D. L. (2010). *Mental disorder in Canada: An epidemiological perspective*. Toronto, ON: University of Toronto Press.
- Chambala, A. (2008). Anxiety and art therapy: Treatment in the public eye. *Art Therapy: Journal of the American Art Therapy Association*, 25(4), 187-189.
- Chorpita, B. F., & Southam-Gerow, M. A. (2007). Fears and anxieties. In E. J. Mash & R. A. Barkley (Eds.), *Treatment of childhood disorders* (3rd ed., pp. 271-335). New York, NY: Guilford Press.
- Council, T. (2003). Medical art therapy. In C. A. Malchiodi (Ed.), *Handbook of art therapy* (pp. 207-219). New York, NY: Guilford Press.
- Curry, N. A., & Kasser, T. (2005). Can colouring mandalas reduce anxiety? *Art Therapy: Journal of the American Art Therapy Association*, 22(2), 81-85.
- Dalley, T. (1984). *Art as therapy: An introduction to the use of art as a therapeutic technique*. New York, NY: Tavistock Publications.
- Darley, S., & Heath, W. (2008). *The expressive arts activity book: A resource for professionals*. London, UK: Jessica Kingsley Publishers.
- Dauvergne, M., & Johnson, H. (2001). Children witnessing family violence. *Juristat*, 21(6), 1-13. Retrieved from <http://dsp-psd.tpsgc.gc.ca/Collection-R/Statcan/85-002-XIE/0060185-002-XIE.pdf>
- Dellaria, A. (2006). Anxiety disorders. In V. P. Arcangelo & A. M. Peterson (Eds.), *Pharmacotherapeutics for advanced practice: A practical approach* (2nd ed., pp. 622-638). Philadelphia, PA: Williams & Wilkins.
- DuPont, R. L., DuPont, C. M. & Rice, D. P. (2002). Economic costs of anxiety disorders. In D. J. Stein

- & E. Hollander (Eds.). *Textbook of anxiety disorders*. American Psychiatric Publishing: Washington, D.C.
- Emilien, G., Durlach, C., Lepola, U., and Dinan, T. (2002). *Anxiety disorders: Pathophysiology and pharmacological treatment*. Basel: Birkhauser Verlag.
- Essau, C. A., & Petermann, F. (2001). *Anxiety disorders in children and adolescents: Epidemiology, risk factors and treatment*. Sussex: Brunner-Routledge.
- Foxman, P. (2004). *The worried child: Recognizing anxiety in children and helping them to heal*. Alameda: Hunter House Publishers Inc.
- Gantt, L., & Tabone, C. (1998). *The formal elements art therapy scale: A rating manual*. Morgantown, WV: Gargoyle Press.
- Gantt, L., & Tabone, C. (1998). *Person picking an apple from a tree*. Morgantown, WV: Gargoyle Press.
- Glatzer, J., & Foxman, P. (2002). *Conquering panic and anxiety disorders: Success stories, strategies and other good news*. Alameda, CA: Hunter House Inc.
- Gussak, D. (2004). A pilot research study on the efficacy of art therapy with prison inmates. *Arts in Psychotherapy, 31*(4), 245-259.
- Gussak, D. (2006). The effects of art therapy with prison inmates: A follow-up study. *Arts in Psychotherapy, 33*, 188-198.
- Gussak, D. (2007). The effectiveness of art therapy in reducing depression in prison populations. *International Journal of Offender Therapy and Comparative Criminology, 51*(4), 444-460.
- Gussak, D. (2009). The effects of art therapy on male and female inmates: Advancing the research base. *Arts in Psychotherapy, 36*, 5-12.
- Handler, L., & Reyher, J. (1965). Figure drawing anxiety indices: a review of the literature. *Journal of Projective Techniques and Personality Assessment, 29*, 305-313.
- Hay, L. (2002). *Meditations to heal your life*. Carlsbad, CA: Hayhouse.
- Heegaard, M. E. (2003). *Drawing together to manage anger*. Minneapolis, MN: Fairview Press.

- Hendricks, G. (2005). *The breathing box: 4 weeks to healthy breathing*. Louisville, CO: Sounds True Inc.
- Henkes, K. (1995). *A weekend with Wendell*. New York, NY: Greenwillow Books
- Kendall, P. C. (1992). *Coping cat workbook*. Ardmore, PA: Workbook Publishing.
- Kendall, P. C. (2002). *Coping cat therapist manual*. Ardmore, PA: Workbook Publishing.
- Le Croy, C. W. (2008). *Handbook of evidence-based treatment manuals for children and adolescents*. New York: NY: Oxford University Press.
- Liebmann, M. (2004). *Art therapy for groups: A handbook of themes and exercises* (2nd ed.). New York, NY: Brunner-Routledge.
- Liebmann, M. (2008). *Art therapy and anger*. Philadelphia, PA: Jessica Kingsley Publishers.
- Lister, S., Tanguay, D., Snow, S., & D'Amico, M. (2009). Development of a creative art therapies centre for people with developmental disabilities. *Art Therapy: Journal of the American Art Therapy Association* 26(1), 34-37.
- Machover, K. (1949). *Personality projection in the drawing of the human figure*. Springfield, IL: Thomas.
- MacLean, K. L. (2004). *Peaceful piggy meditation*. Markham, ON: Fitzherry & Whiteside.
- MacLean, K. L. (2008). *Peaceful piggy yoga*. Morton Grove, IL: Albert Whitman & Company.
- Malchiodi, C. A. (1997). *Breaking the silence: Art therapy with children from violent homes*. Florence, KY: Brunner/Mazel Inc.
- Malchiodi, C. A. (2003). *Handbook of art therapy*. New York, NY: Guilford Press.
- Malchiodi, C. A. (2007). *The art therapy sourcebook*. New York: NY: McGraw-Hill.
- Malchiodi, C. A. (2008). *Creative interventions with traumatized children*. New York, NY: Guilford Press.
- March, J. S. (1997). *The Multidimensional Anxiety Scale for Children (MASC)*. Toronto: Multi-Health Systems Inc.
- Marshall, R. D., & Klein, D. F. (2003). Conceptual antecedents of the anxiety disorders. In D. J. Nutt & J. C. Ballenger (Eds.), *Anxiety disorders* (pp. 3-24). Oxford: Blackwell Science Ltd.

- Martin, A., Volkmar, F. R., & Lewis, M. (2007). *Lewis's child and adolescent psychiatry: A comprehensive text book* (4th ed.). Philadelphia, PA: Lippincott Williams & Wilkins.
- Milan, A., Hou, F., & Wong, I. (2006). Learning disabilities and child altruism, anxiety, and aggression. *Statistics Canada* 11(8), 16-22. Retrieved from <http://www.statcan.gc.ca/pub/11-008-x/2006001/pdf/9197-eng.pdf>
- Morris, T. L., & March, J. S. (2004). *Anxiety disorders in children and adolescents* (2nd ed.). New York, NY: Guilford Press
- Moss, K. (2003). Witnessing violence: Aggression and anxiety in young children. *Statistics Canada* 82(3), 53-66. Retrieved from <http://www.statcan.gc.ca/pub/82-003-s/2003000/pdf/82-003-s2003006-eng.pdf>
- Munley, M. (2002). Comparing the PPAT drawings of boys with ADHD and age-matched controls using the formal elements art therapy scale. *Art Therapy: Journal of the American Art Therapy Association*, 19(2), 69-76.
- Muris, P., Merckelbach, H., Meesters, C., & Van Lier, P. (1997). What do children fear most often? *Journal of Behavioural Therapy and Experimental Psychiatry*, 28(4), 263-267. Retrieved from <http://arno.unimaas.nl/show.cgi?fid=1555>
- Muris, P. (2007). *Normal and abnormal fear and anxiety in children and adolescents*. San Diego, CA: Elsevier Inc.
- Nanis, N. A., Paice, J. A., Ratner, J., Wirth, J. H., Lai, J., & Shott, S. (2006). Relieving symptoms in cancer: Innovative use of art therapy. *Journal of Pain and Symptom Management*, 31(2), 162-169.
- Nanis, N. A. (2008). Approaches to art therapy for cancer inpatients: Research and practice considerations. *Art Therapy: Journal of the American Art Therapy Association*, 25(3), 115-121.
- Neale, E., & Rosal, M. (1993). What can art therapists learn from the research on projective drawing techniques for children? A review of the literature. *The Arts in Psychotherapy*, 20, 37-49.
- Nutt, D. J., & Ballenger, J. C. (2003). *Anxiety disorders*. Oxford: Blackwell Science Ltd.

- Ollendick, T. H., & King, N. J. (1994). Diagnosis, assessment and treatment of internalizing problems in children: The role of longitudinal data. *Journal of Consulting and Clinical Psychology, 62*(5), 918-927.
- Payne, L. (1997). *We can get along*. Minneapolis, MN: Spirit Publishing Inc.
- Pine, D. S., Cohen, P., Gurley, D., Brook, J. S., & Ma, Y. (1998). The risk for early-adulthood anxiety and depressive disorders in adolescents with anxiety and depressive disorders. *Archives of General Psychiatry, 55*(1), 56-64.
- Rachman, S. (2004). *Anxiety* (2nd ed.). New York, NY: Psychology Press Ltd.
- Raghurman, R. S. (1999). Battling separation anxiety. *American Journal of Art Therapy, 37*(4), 120-126.
- Regier, D. A., Rae, D. S., Narrow, W. E., Kaelber, C. T., & Schatzberg, A. F. (1998). Prevalence of anxiety disorders and their comorbidity with mood and addictive disorders. *British Journal of Psychiatry, 173*(34), 24-28.
- Rubin, J. A. (2005). *Child art therapy*. Hoboken, NJ: John Wiley & Sons Inc.
- Ryan-Wenger, N. A., Sharrer, V. W., & Campbell, K. K. (2005). Changes in children's stressors over the past 30 years. *Pediatric Nursing, 31*(4), 282-291.
- Salvador-Carulla, L., Segui, J., Fernandez-Cano, P. & Canet, J. (1995). Costs and offset effect in panic disorders. *British Journal of Psychiatry, 166*(27), 23-28.
- Shapiro, E. S. (2000). *Behavioural assessment in schools: Theory, research and clinical foundations*. New York, NY: Guilford Press.
- Shapiro, L., & Shore, H. (2004a). *Talking, feeling, and doing anger card game*. Woodbury, NY: Childsworld/Childsplay.
- Shapiro, L., & Shore, H. (2004b). *Talking, feeling, and doing shyness card game*. Woodbury, NY: Childsworld/Childsplay.
- Shapiro, L., & Sprague, R. K. (2009). *The relaxation and stress reduction workbook for kids: Help for children to cope with stress, anxiety and transitions*. Oakland, CA: New Harbinger Publications.
- Silverman, W. K., La Greca, A. M., & Wasserstein, S. (1995). What do children worry about? Worries and their relation to anxiety. *Child Development, 66*(3), 671-686.

- Silverman, W. K., & Treffers, P. D. A. (2001). *Anxiety disorders in children and adolescents: Research, assessment and intervention*. New York, NY: Cambridge University Press.
- Spielberger, C. D., Gorsuch, R. L., & Lushene, R. (1969). *The state trait anxiety inventory manual*. Palo Alto, CA: Consulting Psychologist Press.
- Spirito, A., Stark, L. J., Grace, N., & Stamoulis, D. (1991). Common problems and coping strategies reported in childhood and early adolescence. *Journal of Youth and Adolescence*, 20(5), 531-544.
- Stein, D. J., Hollander, E., & Rothbaum, B. O. (2009). *Textbook of anxiety disorders*. Arlington, VA: American Psychiatric Publishing Inc.
- Sweet, J. E. (2001). *365 activities for fitness, food and fun for the whole family*. New York, NY: McGraw-Hill.
- Thomas, B. (2009). *Creative coping skills for children: Emotional support through arts and crafts activities*. London, UK: Jessica Kingsley Publishers.
- Tramonte, L., & Willms, D. (2010). The prevalence of anxiety among middle and secondary school students in Canada. *Canadian Journal of Public Health*, 101(3), 19-22. Retrieved from journal.cpha.ca/index.php/cjph/article/download/2127/2317
- Trauger-Querry, B., & Haghighi, K. R. (1999). Balancing the focus: Art and music therapy for pain control and symptom management in hospice care. *Hospice Journal – Physical, Psychosocial, & Pastoral Care of the Dying*, 14(1), 25-38.
- Turgeon, L., Kirouac, C., & Denis, I. (2005). *Anxiety disorders in children and adolescents*. Retrieved from <http://clinic.psych.ubc.ca/files/2010/07/Anxiety-in-Children-and-Adolescents-ADAC.pdf>
- Wagemaker, H. (2003). *Psychiatric medications and our children: A parent's guide*. Ponte Vedra Beach, FL: Ponte Vedra Publishing.
- Wagenfeld, A., & Kaldenberg, J. (2005). *Foundations of pediatric practice for the occupational therapy assistant*. Thorofare, NJ: SLACK Inc.
- World Health Organization. (1993). *International classification mental and behavioural disorders: diagnostic criteria for research* (10th ed.). Geneva: World Health Organization.

Appendix A

Consent Forms



CONSENT FORM: CHILD

I [Name].....
(Please print)

Relationship.....

Name of Child

Date of Birth

By signing this consent form agree to the following:

- A. I agree on my own behalf and behalf of my child, to my child participating in art therapy sessions.
- B. I agree to the release of information and artwork or images of artwork by the

(Name of Agency, Hospital or School)

to the Toronto Art Therapy Institute student.

C. I agree to the release of images of artwork to the Toronto Art Therapy for the purpose of providing services to me and or my child and, for the general educational work of the **Toronto Art Therapy Institute**.

D. I agree and understand that the information provided by my child during the art therapy sessions might be included in professional publications. I consent to the use of that information in professional educational publications and for that purpose only. I understand that any information used regarding my child's identity will be changed to ensure my child's anonymity.

This consent is valid until revoked.

Date:

Witness: Signature

NAME OF TATI STUDENT:
(Please print)

Signature of TATI Student:

AUTHORIZATION TO USE TAPES OR PHOTOGRAPHS

RE: _____
(Client's Full Name)

Birthdate: _____
(Year) (Month) (Day)

This authorizes The _____ Centre to use: (Audio tapes) (Audio visual tapes) (Photographs)

Photographs of the client's artwork
(Specify Authorization)

Of: _____
(List All Persons)

Concerning: _____
(Specify Situation)

For the purpose of: (Supervision and case conference) (Internal training of professionals) (External training of professionals) (Research) (Public relations) (Other)

Research, supervision and case conference
(Specify Purpose)

I understand that I may request to see or hear any or all recordings or see photographs and may request that part or all be erased or destroyed.

Expiration Date: _____
(Year) (Month) (Day)

This authorization may be rescinded or amended in writing at any time prior to expiration date except where action has been taken in reliance on the authorization.

Signed: _____
(Parent or Legal Guardian)

Signed: _____
(Other Adult if Applicable)

Signed: _____
(Case Responsible Worker as Witness)

Signed: _____
(Client 16 Years or Older)

Signed: _____
(Case Responsible Worker as Witness)

Date: _____
(Year) (Month) (Day)

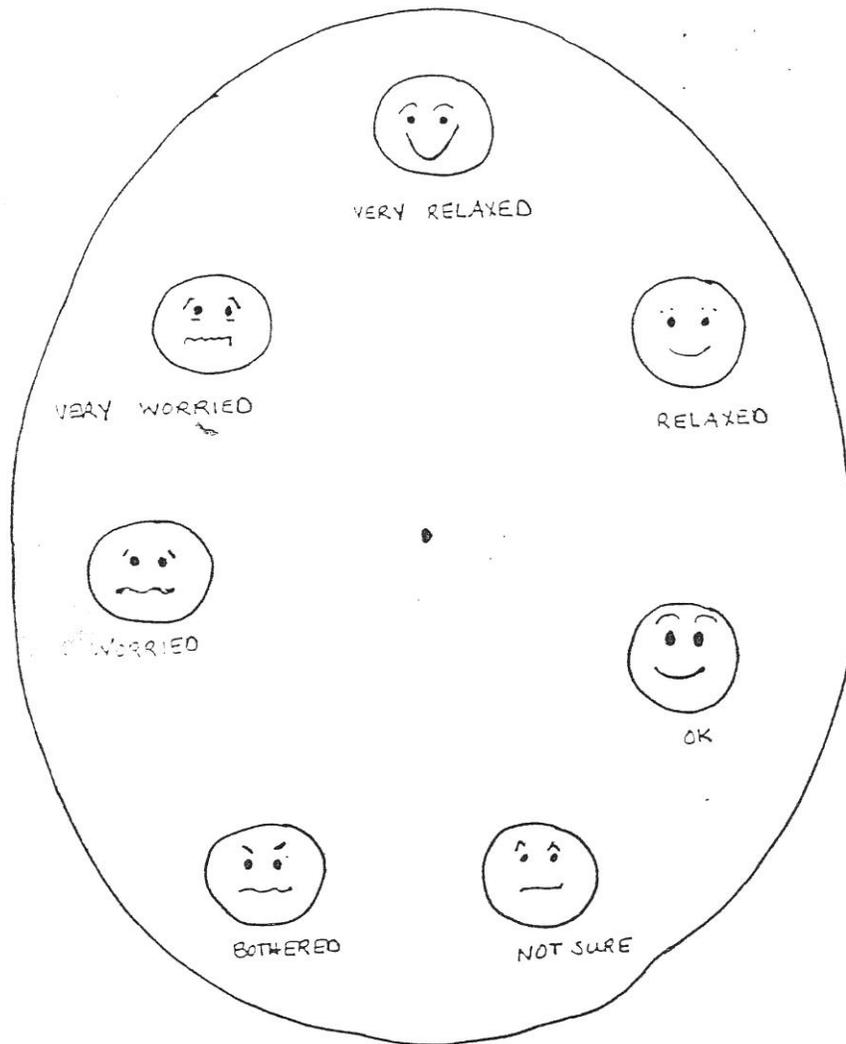
Date: _____
(Year) (Month) (Day)

In addition consent was obtained from the participant by stating the following: "Your parents have given consent for you to participate in an art therapy study. I will tell you about the study and then you can tell me yes or no to whether you want to participate. The study focuses on art therapy and anxiety. Your artwork will be photographed, but your identity will remain anonymous. By participating in the study you will help other children with anxiety."

Appendix B

Feeling Barometer

Feelings Barometer



CUT ARROW AND ATTACH TO CENTER • ON BAROMETER

Appendix C

List of Art Materials

- Scissors
- Glue sticks
- Erasure
- Pen
- Hot glue gun
- Tape
- Water container
- Pencil sharpener
- Cardboard
- Clay
- Tools for clay
- Plastercine
- Paper: coloured and white
 - 8"x10"
 - 12"x16"
- Collage: magazine cut-outs
- Feathers
- Felt
- Glitter glue
- Sequins
- Pipe cleaners
- Tissue paper
- Beads
- Pompoms
- Googly eyes
- Sparkles
- Yarn
- Popsicle sticks
- Toothpicks
- Wooden boxes
- Paint brushes
- Tempera paint
 - Brown, black, white, grey
 - Red, yellow, orange, green
 - Blue, purple, pink, turquoise
- Watercolour paint
 - Red, yellow, orange, green
 - Blue, purple, white, black
- Drawing
 - Pencil crayons
 - Chalk pastel
 - Oil pastels
 - Pencils
 - Markers: thick and fine tip
 - Crayons

Appendix D

Feelings Penny Pitch

Talking About Your Feelings Activity 10

Feelings Target

brave

calm

happy

scared

excited

mad

proud

irritable

shy

loving

sad

Appendix E

Thought Changing Machine

Optimist or Pessimist? Activity 13

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

INPUT
NEGATIVE
THOUGHTS

OUTPUT
POSITIVE
THOUGHTS

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____
7. _____
8. _____
9. _____
10. _____

Appendix F

Finger Labyrinth



Trace the path of the labyrinth with your finger. Follow the path to the center of the labyrinth AND back out again without lifting your finger.

Appendix G

Multidimensional Anxiety Scale for Children

<h1 style="margin: 0;">MASC</h1> <p style="margin: 0; font-size: small;">by John March, M.D., M.P.H.</p>																																																																															
Client ID: _____	Age: _____	Gender: Male Female <small>(Circle One)</small>																																																																													
Date: ____/____/____ <small>Month Day Year</small>	School Grade: _____																																																																														
<p>This questionnaire asks you how you have been thinking, feeling, or acting recently. For each item, please circle the number that shows how often the statement is true for you. If a sentence is true about you a lot of the time, circle 3. If it is true about you some of the time, circle 2. If it is true about you once in a while, circle 1. If a sentence is not ever true about you, circle 0. Remember, there are no right or wrong answers, just answer how you have been feeling recently.</p> <p>Here are two examples to show you how to complete the questionnaire. In Example A, if you were hardly ever scared of dogs, you would circle 1, meaning that the statement is rarely true about you. In Example B, if thunderstorms sometimes upset you, you would circle 2, meaning that the statement is sometimes true about you.</p> <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 70%;"></th> <th style="width: 7.5%; text-align: center;">Never true about me</th> <th style="width: 7.5%; text-align: center;">Rarely true about me</th> <th style="width: 7.5%; text-align: center;">Sometimes true about me</th> <th style="width: 7.5%; text-align: center;">Often true about me</th> </tr> </thead> <tbody> <tr> <td>Example A I'm scared of dogs</td> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> <tr> <td>Example B Thunderstorms upset me</td> <td style="text-align: center;">0</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>						Never true about me	Rarely true about me	Sometimes true about me	Often true about me	Example A I'm scared of dogs	0	1	2	3	Example B Thunderstorms upset me	0	1	2	3																																																												
	Never true about me	Rarely true about me	Sometimes true about me	Often true about me																																																																											
Example A I'm scared of dogs	0	1	2	3																																																																											
Example B Thunderstorms upset me	0	1	2	3																																																																											
<p>Now try these items yourself. Don't forget to do the items on the back of the questionnaire as well.</p> <table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>1. I feel tense or uptight</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>2. I usually ask permission</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>3. I worry about other people laughing at me</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>4. I get scared when my parents go away</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>5. I keep my eyes open for danger</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>6. I have trouble getting my breath</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>7. The idea of going away to camp scares me</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>8. I get shaky or jittery</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>9. I try to stay near my mom or dad</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>10. I'm afraid that other kids will make fun of me</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>11. I try hard to obey my parents and teachers</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>12. I get dizzy or faint feelings</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>13. I check things out first</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>14. I worry about getting called on in class</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> <tr><td>15. I'm jumpy</td><td style="text-align: center;">0</td><td style="text-align: center;">1</td><td style="text-align: center;">2</td><td style="text-align: center;">3</td></tr> </tbody> </table>					1. I feel tense or uptight	0	1	2	3	2. I usually ask permission	0	1	2	3	3. I worry about other people laughing at me	0	1	2	3	4. I get scared when my parents go away	0	1	2	3	5. I keep my eyes open for danger	0	1	2	3	6. I have trouble getting my breath	0	1	2	3	7. The idea of going away to camp scares me	0	1	2	3	8. I get shaky or jittery	0	1	2	3	9. I try to stay near my mom or dad	0	1	2	3	10. I'm afraid that other kids will make fun of me	0	1	2	3	11. I try hard to obey my parents and teachers	0	1	2	3	12. I get dizzy or faint feelings	0	1	2	3	13. I check things out first	0	1	2	3	14. I worry about getting called on in class	0	1	2	3	15. I'm jumpy	0	1	2	3
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8. I get shaky or jittery	0	1	2	3																																																																											
9. I try to stay near my mom or dad	0	1	2	3																																																																											
10. I'm afraid that other kids will make fun of me	0	1	2	3																																																																											
11. I try hard to obey my parents and teachers	0	1	2	3																																																																											
12. I get dizzy or faint feelings	0	1	2	3																																																																											
13. I check things out first	0	1	2	3																																																																											
14. I worry about getting called on in class	0	1	2	3																																																																											
15. I'm jumpy	0	1	2	3																																																																											
<p><i>Please flip the questionnaire over; the items are continued on the back page...</i></p>																																																																															



MASC

by John March, M.D., M.P.H.

	never true about me	rarely true about me	sometimes true about me	often true about me
16. I'm afraid other people will think I'm stupid	0	1	2	3
17. I keep the light on at night	0	1	2	3
18. I have pains in my chest	0	1	2	3
19. I avoid going to places without my family	0	1	2	3
20. I feel strange, weird, or unreal	0	1	2	3
21. I try to do things other people will like	0	1	2	3
22. I worry about what other people think of me	0	1	2	3
23. I avoid watching scary movies and TV shows	0	1	2	3
24. My heart races or skips beats	0	1	2	3
25. I stay away from things that upset me	0	1	2	3
26. I sleep next to someone from my family	0	1	2	3
27. I feel restless and on edge	0	1	2	3
28. I try to do everything exactly right	0	1	2	3
29. I worry about doing something stupid or embarrassing	0	1	2	3
30. I get scared riding in the car or on the bus	0	1	2	3
31. I feel sick to my stomach	0	1	2	3
32. If I get upset or scared, I let someone know right away	0	1	2	3
33. I get nervous if I have to perform in public	0	1	2	3
34. Bad weather, the dark, heights, animals, or bugs scare me	0	1	2	3
35. My hands shake	0	1	2	3
36. I check to make sure things are safe	0	1	2	3
37. I have trouble asking other kids to play with me	0	1	2	3
38. My hands feel sweaty or cold	0	1	2	3
39. I feel shy	0	1	2	3

Thank you for completing the questionnaire.

Appendix H

Formal Elements Art Therapy Scale

Picture #: _____

Rater: _____

FORMAL ELEMENTS ART THERAPY SCALE (FEATS)® RATING SHEET

Linda Gantt, Ph.D., ATR-BC, & Carmello Tabone, M.A., ATR

The FEATS uses scales that measure **more or less** of the particular variable. Look at the degree to which a picture fits the particular scale by comparing the picture you are rating with the examples in the illustrated rating manual. **You may mark between the numbers on the scales.** Approach the picture as if you did not know what it was supposed to be. Can you recognize individual items? If you have a picture that is hard to rate, do your best to compare it to the illustrations and the written descriptions. Do not worry whether your rating is the same as another rater's. Concentrate on giving your first impression to the variable being measured.

#1 - Prominence of Color

Color used for outlining only	0 1 2 3 4 5	Color used to fill all available space
----------------------------------	-----------------------	---

#2 - Color Fit

Colors not related to task	0 1 2 3 4 5	Colors related to task
-------------------------------	-----------------------	---------------------------

#3 - Implied energy

No energy	0 1 2 3 4 5	Excessive energy
-----------	-----------------------	------------------

#4 - Space

Less than 25% of space used	0 1 2 3 4 5	100% of space used
--------------------------------	-----------------------	--------------------

#5 - Integration

Not at all integrated	0 1 2 3 4 5	Fully integrated
--------------------------	-----------------------	------------------

#6 - Logic

Entire picture is bizarre or illogical	0 1 2 3 4 5	Picture is logical
---	-----------------------	--------------------

From: L. Gantt & C. Tabone, 1998, *The Formal Elements Art Therapy Scale: The Rating Manual*, Morgantown, WV: Gargoyle Press. Copyright © 1998 Linda Gantt.

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#7 - RealismNot realistic (cannot
tell what was drawn)

0 | 1 | 2 | 3 | 4 | 5

Quite realistic

#8 - Problem-solvingNo evidence of
problem-solving

0 | 1 | 2 | 3 | 4 | 5

Reasonable solution
to picking apple**#9 - Developmental Level**Two-year-old
level

0 | 1 | 2 | 3 | 4 | 5

Adult level

#10 - Details of Objects and EnvironmentNo details or
environment

0 | 1 | 2 | 3 | 4 | 5

Full environment,
abundant details**#11 - Line Quality**Broken, "damaged"
lines

0 | 1 | 2 | 3 | 4 | 5

Fluid, flowing
lines**#12 - Person**No person
depicted

0 | 1 | 2 | 3 | 4 | 5

Realistic person

#13 - RotationPronounced
rotation

0 | 1 | 2 | 3 | 4 | 5

Trees & people,
upright, no rotation**#14 - Perseveration**

Severe

0 | 1 | 2 | 3 | 4 | 5

None

From: L. Gantt & C. Tabone, 1998, *The Formal Elements Art Therapy Scale: The Rating Manual*,
Morgantown, WV: Gargoyle Press. Copyright © 1998 Linda Gantt.

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Appendix I

Rater Confidentiality Form

**Rater Confidentiality Form for the Art Assessment a *Person Picking an Apple From a Tree*
(PPAT)**

A. I [Name] _____ agree to not disclose any information regarding the six PPAT images I rated.

Date _____

Witness _____

Name _____

Signature _____