2019

Art and Play Therapy for Children with Anxiety

Kaitlin Messmer

Art and Play Therapy for Children with Anxiety

by

Kaitlin Messmer

Fall, 2019

Art Therapy

_____

Faculty Advisor, Naomi Schwartz

_____

Reader, Diane Scanlan

_____

Date

Abstract

Generalized Anxiety Disorder (GAD) can be defined as, “Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school performance)” (DSM- V, 2013). Generalized Anxiety Disorder is one of many disorders that can be detected in children as early as infancy. As the child grows, both internal and external factors contribute to the development of anxiety disorders diagnosed by the presentation of the symptoms of excessive worry, etc. There are many methodological studies that have been conducted to test children and evaluate for these symptoms such as: self assessment surveys, one to one interviews, and medical tools that can identify symptoms of the disorder. While detecting different types of anxiety is crucial to researchers, it is even more essential to find treatments that can prevent these symptoms from manifesting into more severe forms of anxiety later in life. Studies have shown that both Art and Play Therapy can increase feelings of general wellness and self esteem, especially in group therapy dynamics, thus diminishing the anxiety symptoms. Within these therapeutic settings, children can practice social networking and overcome types of anxiety that can distract children from healthy growth.

Table of Contents

Introduction

Expressive Therapy with Children

Art Therapy.

Therapy is a useful modality that provides a format which allows children to communicate their problems while responding to issues in the outside world. However, unlike adults, children are not experienced with language, which can be a bridge or a barrier between therapist and client. The use of art in therapy for children has been groundbreaking in the sense that it can be a substitute for the language that may be seemingly too complex for children. The images created by children can be analyzed and assessed by therapists to recognize and understand the thoughts that reside in the client's deepest subconscious feelings (Case, 1992). Additionally, Art Therapy sessions can provide a safe, non-threatening environment in which the therapist can obtain information about the child. Therapists can refer to the artwork and ask questions in order to gain a better understanding of the meaning of what was created by the client. This process gives children the chance to express themselves openly and aid in the creation of a tangible version of their feelings, which can be referred to at any time. The relationship between the Art Therapist and child is unique in comparison with the child's previous relations with adults; the art therapy environment provides the child with open communication that has no judgement or grades. The artwork only serves to heal instead of evaluate, the quality of the child's art. The therapist can store these creations, and even refer back to them in the future in order to track the progress of the child's state of mind in a holistic way (Case, 1992).

Group Art Therapy.

Group Art Therapy contains the same principles as Individual Art therapy, except the communication that takes place in a session extends to several clients in the same space, working together and as individuals. The relationships that the children will make in group is intended to help show that they are not alone. Each member of the group interacts with the others to some degree, developing a rapport that is essential to group healing. Throughout this thesis, studies will be included that demonstrate the need for group therapy in working with certain issues of child psychology and its response to different forms of expressive therapy.

Play Therapy.

Play Therapy uses self expression in similar ways as Art Therapy; however, the protocols of play therapy usually involve more active participation in terms of body movement and character creation, to name a few examples. The interactive protocols mimic child play as to its character creation and storytelling. This familiarity can feel less intimidating, so the children can explore their feelings with activities that won't seem as different from play that they might do at home or school. Play Therapy techniques will allow them to engage creating different types of social situations, and emoting their feelings in a healthy manner (Schaefer, 2016). There is also that connection to language, since the play is the language that all children can understand in varying levels (Schaefer, 2019).

Group Play Therapy.

Group work is important with many Play Therapy protocols that call for story creation and character interaction. Acting out as a character incorporates a level of escapism, but can also highlight some unconscious thoughts as the child acts out their character. These unconscious thoughts might be revealed as the client describes why their character behaves in a certain way. Additionally, therapists will utilize the fun side of play to encourage participation in the group. Participation will help growth in areas of individual deficits, which can be social skills, problem solving, and/or confidence. While the group's progress grows in sessions, the members will be able to leave the group and use their new strengths in school, and at home (Schaefer, 2019).

Alternative Therapy for children

Cognitive Behavioral Therapy (CBT).

Cognitive Behavioral Therapy (CBT) is a psychological treatment that has been effective with treating many disorders by its use of conditioning. In order to treat a disorder, CBT therapists have to reason with the client, and use specific wording to highlight the thoughts that result from the disorder (APA, 2019). The use of CBT in child therapy differs in the directness that therapists would be towards their adult clients; however, the same principle stands. Therapists will carefully guide the sessions while also encouraging children to work towards certain goals that lead to a better quality of life. In order to reach or maintain these goals, the clients will be taught different techniques to practice in order to develop that positive outlook that can be difficult to have with a disorder (APA, 2019). CBT can be used with individuals or

groups, and has proven to be very effective for many childhood disorders including the many forms of anxiety.

Anxiety in Children

Definition and Diagnostic Criteria

The term anxious is frequently used by many people to describe their feelings and behaviors when reacting to different stressors. When someone has an anxiety disorder, the symptoms range more than just feeling slightly nervous, they need to be interfering with daily functioning to be called a disorder. There are many anxiety disorders, but the type that best describes overall anxiety, is General Anxiety Disorder, or GAD. According to the Diagnostic Statistical Manual (DSM-5, 2013), GAD can best be described as, "Excessive anxiety and worry (apprehensive expectation), occurring more days than not for at least 6 months, about a number of events or activities (such as work or school activities)." For children this would occur more with school performance, and afterschool activities. Other areas of stress that children might internally struggle with include making friends, and family situations. Not only does the duration of anxiety have to be at least six months to be classified as a disorder, but three or more symptoms of the disorder need to be present for those six months (DSM-5, 2013). For children with GAD, it has been observed that the usual fears common in childhood would be exceed normal behavior.

Forms of Anxiety

Generalized Anxiety Disorder (GAD).

To be even more specific concerning the symptoms of GAD, the key element of the disorder is avoidance. Children having GAD will worry about the possibilities of something negative happening at any time. This incessant fear will prompt them to ask others (often their parents) for words of encouragement, to make sure everything is fine. Even with the constant encouragement and reassurance the child will try to avoid negative news, or even new situations in general (Rapee, 2015). Some psychological symptoms associated with Generalized Anxiety Disorder are restlessness, irritability, difficulty sleeping, feelings of fear and embarrassment. Physical symptoms can include headaches, trembling, perspiration, fatigue, nausea and diarrhea (Boston Children's Hospital, 2005-2019). It is important to mention that the different forms of Anxiety will have symptoms in common, even though there are unique characteristics to each disorder.

Social Anxiety Disorder (SAD).

Social Anxiety Disorder (SAD) differs from GAD because it specifies anxiety in relationships with other people. Meeting new people and maintaining relationships of any kind are challenging for children with SAD, typically resulting in avoidance of social events. They find these relationships difficult due to the fear of not meeting expectations or the fear of being embarrassed about people they care about. Events like parties, performances, and group hangouts can cause bouts of anxiety for SAD children. Physical symptoms can include increased heart rate, shaking, headaches,nausea, and vomiting. Another aspect of this disorder is the self-consciousness and low self esteem that can happen as children obsess over others opinions of them. (Rapee, 2015)

Separation Anxiety (SA).

Separation anxiety is a condition which occurs when the child worries that he/she will be abandoned, if a parent, or someone close to them, leaves their line of sight. This is usually first noticed in children from one to two years old, and typically shows symptoms that are similar to onset anxiety disorders. It is natural for children to worry about their parents absence; however, it is unnatural for the worry to last more than just a short amount of time (Rapee, 2015). Excessive crying in young children shows signs of anxiety, especially when its beyond the normative range of behavior, as recognition of object permanence is a common developmental stage for infants (McCann, 2001). Older children who have separation anxiety might worry about being away from home, taking part in group activities such as attending sleepovers, or just going to school. Even if the emotional worrying ceases, the child can develop physical symptoms including diarrhea, upset stomach, or vomiting.

Parents play a crucial role in determining the severity of the disorder. If they can desensitize the fear of separation for the child, they can gradually decrease the symptoms of the disorder in the child, preventing the risk of developing other anxiety disorders later in life. In order to desensitize the symptoms of separation anxiety, the parents must provide sufficient care and attention to their children, making separation less threatening (McCann, 2001).

Selective Mutism (SM).

Sometimes children will have difficulty with communicating with other people, to the point where they are too anxious to speak in many social settings. This is known as Selective Mutism. It is common if they do speak at home, the reason being that they feel safe in their home

Child Mind Institute, 2019). When the child leaves their home, they feel incapable of communicating, even if they are in distress or want to participate in school activities. It can be very frustrating for the child, because the lack of communication will isolate him/her from other kids at school or recess. This condition is also comorbid with Social Anxiety Disorder, due to the similar limitations that are present within social interactions. In order to diagnose this disorder, the parents should take their child to a profession that specializes in Selective Mutism, as it is very similar to other conditions. The therapist will rely heavily on gathering information from family members, since the child will most likely be too anxious to talk during the interviewing sessions. After enough information has been collected, the professional will make a diagnosis only if the child exhibits forms of verbal communication in some environments and not others. Additionally, children who begin school in September tend to be shy, so it is recommended that the interviews are conducted after the first month of school (Child Mind Institute, 2019). The key to treating Selective Mutism is help them build confidence in speaking, which will be a gradual process. Enough positive rapport must be established between therapist and child so that they feel comfortable taking steps to boost socializing skills (Child Mind Institute, 2019).

Specific Phobias.

Phobias are fears, "...without apparent justification of a specific place, thing, or situation" (DSM-5, 2013). However, the phobia may be related to a specific past life experience. When someone has a specific phobia, any stimulus that reminds him/her of that phobia will cause a reaction based on the fight or flight response, as if the stimulus was about to cause harm to the individual. For children, a phobia can be anything such as, fear of the dark, spiders, or clowns. A

case example of a child with a phobia is a girl named Kylie, who had been showing signs of anxiety at around three years old (Cioppa, 2019). She developed a fear of vomiting after an actual experience of throwing up food. She processed the memory of the event even as she would with the actual traumatic event. She couldn't stand the sight of it, and eventually developed an obsessive worry about it happening again. This inability to focus on day to day tasks, because of a fear of something bad that could happen, is the characteristic of having a specific phobia.

Physical Changes Due to Anxiety

Body chemistry.

After discussing the types of anxiety and their symptoms, it is important to note the changes in body chemistry that take place during feelings of anxiety. When a stressful stimulus is presented, the body reacts in many ways. The immediate trigger signals an increase in cortisol and epinephrine, hormones that are responsible for the fight or flight response (McCann, 2001). The neural pathways that contribute to stress symptoms include the autonomic system, hypothalamic pituitary- adrenal axis, and the interaction between the endocrine/immune system (McCann, 2001). When these systems are affected by stress, children can actually make themselves ill, when allowing anxious feelings to take over their thoughts.

Behavioral coping strategies.

Feelings of stress can be overwhelming for children, so they often develop coping strategies, in order to buffer the effects of anxiety symptoms. Coping strategies are, "volitional

efforts to regulate emotion, cognition, behavior, physiology, and the environment in response to stressful events or circumstances" (Thorne, 2013). Some coping mechanisms common in child behavior are support seeking, distraction, and avoidance. In order to counteract feelings of negative self worth, children with anxiety might ask close friends or families questions to hear about their positive qualities or stability of the relationship, this strategy is called support seeking (Thorne, 2013). If that method of coping was successful, children would use it more often in the future, a process called coping efficiency.

Causes of Anxiety Disorders

Genetics.

Genetics is one of the major factors in the development of anxiety disorders. Studies show that if one or both parents have a form of anxiety, there is a greater risk for inheritance of an anxiety disorder (Dabkowska, 2014). There is a forty-seven percent risk for social anxiety inheritance. There is also a high risk of anxiety in twins, especially identical. The forms of anxiety associated with high risk inheritance for twins include GAD, SAD, panic disorder, and phobias (Dabkowska, 2014). Panic attacks are linked to genetic coding on various chromosomes.

Fragile X Chromosome.

Studies such as a genetic study by Dr. Susan Rivera of the University of California, show that children with fragile X syndrome (chromosome abnormality) express high rates of negative emotion, in ways corresponding with anxiety disorders (Burris, 2017). The researchers examined pictures of the faces of forty-seven children with the chromosome disorder, in comparison with a

control group. The groups were presented with coupled images of faces, expressing a certain emotion. There was a probe on the head of each participant, on the same side of the face of the test images, and as the children examined each pairing, they had a tendency to observe one image for more time than the other. The results supported the hypothesis that children with the disorder were more attracted to the negative emotions expressed in some of the images, than to the positive ones. The study proves how the fragile x chromosome condition causes a tendency towards threatening emotions, which is also common with anxiety (Burris, 2017).

Neurological factors.

Mental disorders such as GAD, SAD, and panic disorders, can be the result of abnormalities in brain function. One way of testing anxiety symptoms, is by examining the functionality of the amygdala. The amygdala is a part of the brain that controls emotions, including fear. Damage or over stimulation in the amygdala can cause the development of anxiety disorders. Abnormalities can include if the amygdala is unusually large, or has increased connectivity with brain regions that are responsible for attention, emotional perception, and regulation (Qin, 2014).

Environmental factors.

The environment is arguably the factor with the greatest impact on anxiety for children, as their learning depends largely from their interaction with others and their surroundings. There are many examples of environmental risk factors that can cause children to show symptoms of anxiety.

Parenting skills.

Parenting skills can both positively and negatively impact children. The focus of anxiety disorders is usually on the more negative aspects of parent skills. When children feel disattached from their parents, it can lead to insecurities as they develop. The lack of attachment can be a result of many factors, such as the parent having anxiety. The anxious behavior and feelings of the parents can make them hesitate to interact with their children, possibly causing the development of uncomfortable feelings in the child (Dabkowska, 2015). Anxious parents also will usually socialize less, providing fewer opportunities for their children to interact with others as well. The risk of anxiety increases if the parents are overcontrolling, judgemental, emotionally distant, inconsistent with attachment, and are associated with negative events (Norton, 2017). The disorder associated with these types of parenting mistakes is social anxiety. Children who don't experience healthy relationships with their parents won't feel secure in their relationships with others, resulting in low self esteem. As time passes, children will question their self worth and not see themselves as good enough in response to the negative experiences they encounter with their parents (Norton, 2017). Negative parenting also includes overprotective parenting, as it restricts the ability for children to learn how to face challenges in life, making future obstacles more stressful than they need to be.

Trauma.

Trauma can play a huge role in the development of anxiety for children. When an event is frightening or dangerous to the child it triggers an intense negative response, and it can possibly traumatize the child, creating a perpetual fear of that specific stimulus. This can result in the

development of symptoms of social anxiety disorder, general anxiety disorder, or specific phobia. Traumatic events can either be a singular event or a repeat of traumatic situations, including forms of abuse, neglect, loss of a family member, divorce, or any major life change that can be perceived as negative to children (Norton, 2017). Child abuse can be in the form of sexual abuse, physical abuse, verbal abuse, or emotional abuse. Abuse can make children less social with their peers, in fear of being punished, or rejected, and can cause the child to act out in aggression or develop depression. Social anxiety can develop if the child feels unsafe at home, with parents that fight or struggle with substance abuse, and can make the child feel unsafe around people in general. Other traumatic events, like moving into a new home, or the loss of a loved one, can cause anxiety as well. What connects these different events is not the content of the trauma but the fact that it represents a sudden life changing moment, that can cause extreme psychological damage to the children in a way that can develop serious forms of anxiety (Norton, 2017).

Peer relationships.

Peer relationships are extremely important to child development. If a child is not liked by their peers, they will not socialize, which is an essential part of child development. The fewer social encounters children make, the less confident they will feel about themselves, especially if they compare their behavior to children that thrive in social settings (Grills, 2002). Constant rejection when trying to make friends leads to internal stress, that can manifest itself into a more severe anxiety (Grills, 2002). Bullying, also known as peer victimization, is even more damaging to self esteem in children showing symptoms of anxiety, as it is a form of harassment that can

soon be learned and then replayed in the child's inner monologue (Dabkowska, 2014). If the negative impact of peer victimization increases to an overwhelming amount, the child's grades can drop, he/she may refuse to go to school, and feel an increased sense of loneliness (Grills, 2002).

Cultural differences.

Cultural differences can be another cause of anxiety disorders. Parenting norms can be different among cultures; correlation has been shown when the responses of different ethnicities were compared in different regions of the world. Symptoms of anxiety were analyzed in cuacasian, mixed, and black youths from South Africa (Brook, 2008). The results showed that the prevalence of anxiety symptoms causes was higher in the other ethnicities than in the caucasian youths. Overall, symptoms documented by the participants matched the symptoms of western countries as well, in terms of anxious parental rearing, overprotection, and rejection (Brook, 2008). The specifics of the causes of anxiety disorders can be unique to each culture, as the expression of symptoms depends on the societal norms within the region. Researchers found that social anxiety was different within collectivistic countries than from individualistic countries (Dabkowska, 2014). Collectivistic countries focus heavily on being part of a group, and require behavior that represents that society's ideals. This is different from individualistic cultures that recognize the individual contributions.

Education.

The importance of educational setting and philosophy also affects a child's anxiety. Very frequently there is an increasing emphasis on score achievement that the educational setting

makes educational institutions a major environmental contribution to anxiety disorders. Public schools are held responsible for the academic achievement of their students, which frequently puts unrelenting pressure on children, causing anxiety at overwhelming levels (Wren, 2004). Teachers sometimes push students to perform at levels that only increase anxiety, and can lead to students fear of failing tests. Typically, there is a lack of emphasis on other forms of intelligence besides quantitative test taking skills, which inherently increases the pressure of doing well on exams.

Technology.

The achievement of technical progress can be both praised and condemned, when observing its effects on child development and behavior. Today, social media, the internet, video gaming, and portrayals of virtual "reality," have distorted the expectations of children, who are trying to make sense of what is important in life. Previously, it was discussed how the use of imagery in art can have a positive lasting effect for children; this can unfortunately be contrasted to the sometimes negative impact of imagery on the internet, tv, and video games.

Television.

Children have a blurred sense of what is real and what is fictional when watching tv. This is especially apparent when commercials are shown between shows, displaying manufactured "authenticity" and expectations that can affect their sense of worth later on in life. Children cannot differentiate what is shown in an ad, not realizing that advertisement lacks authenticity (AACAP, 2015). The violence on TV can also shock children, and can trigger fear based behavior, as scary movie scenes can be mistaken for reality, perceiving the world as being unsafe

(Chakraburtty, 2005). Some anxiety based behaviors that can be the result of watching frightening programs on television are sleeplessness, night terrors, bedwetting, and crying. (Chakraburtty, 2005). This is why parents should monitor what their children watch on tv and play in terms of video games. If a particular disturbing image pops up, parents can reassure the fictional aspects of the image and have their kids wait to watch certain content until they are older.

Video games.

Video gaming contains an addictive quality that can hinder children in their ability to socialize with others. While videogames can prove an entertaining way to pass the time, too much time playing can distract from peer and family interactions. Peer socialization is crucial to child development, a lack of interactive playtime amongst peers can lead to anxieties, mainly social anxiety disorder, concerning social encounters. According to research conducted by the Arizona State University and the California School of Professional Psychology a survey evaluated any symptoms present in individuals who played immersive story based games (Lee, 2017). The results conveyed that the participants who spent more time playing video games, and showed signs of being addicted to videogames, showed greater levels of symptoms of SAD (Lee, 2017). When children play video games, it is very important that they are limited so that they can benefit from a socializing experience like parallel play, school clubs, and spending time with their family.

Social media.

Social media (such platforms for interaction such as Facebook, Snapchat, Instagram, etc) is another major risk factor for anxiety disorders in the sense that it distorts reality. It is a catalyst for bullying, harassment, and public scrutiny that can be traumatizing for children. Also social media is dangerous,because it gives a false sense of control for children to use, when given a device that they can access any time of the day. The false sense of control is risky; for example, children are able to edit photos of themselves with ease, in order to create "perfect" versions of themselves (Ehmke, 2019). Certain children have perfectionist qualities and being able to change their appearance in a photo can allow them to indulge in the harsh criticisms of their self image. Selfies are not causing mental disorders, they can negatively influence children who have anxieties, because they draw attention to physical beauty, allowing children to view themselves as not good enough (Ehmke, 2019).

While there is much negativity concerning technology and anxiety, there is also some positive uses for the internet. There are many online resources, including self help information that can help people in the right direction to receive the help they need. For parents, it may be helpful to look up what anxiety is, and then seek out professionals to be able to diagnose and treat their child's anxiety. Medical websites can be very helpful or confusing for parents that struggle with understanding the forms of anxiety.

Measuring Anxiety

Assessment Tools.

There are many forms of measuring anxiety that have proven useful for therapists in diagnosis of anxiety disorders. Some of the many tools for diagnosis are self assessment tools, also known as assessment surveys, imagery scales and interviews.

The most widely used form of interview is the Anxiety Disorders Interview Schedule for Children and Parents (Reardon, 2014). This form of assessment allows for the examination of the severity of anxiety, and the persistence of fear based emotions. Other surveys include the Revised Children and Depression Scale, and the Spence Children's Anxiety Scale (Reardon, 2014). Not only can these scales be a way to detect and compare symptoms and their severity, but also monitor any progress during treatment. Therapists have found that it is best for children to be interviewed by a professional, both alone and with a parent; this can give young people the chance to discuss their past openly (Reardon, 2014).

Questionnaires /interviews.

Assessment tests, usually in the form of questionnaires, are another type of measurement to determine levels of anxiety. Effective assessment tests should be easy to navigate, and can be presented as question based prompts, or even imagery based scales. If someone had symptoms of generalized anxiety disorder, certain questions on the assessment tests might be, "Trouble Relaxing?" and the responses would vary from "Not at all" to "nearly every day" (Spitzer, 2006). Each answer would then be evaluated, and used for a possible diagnosis, from a licensed professional. The score that is generated from the test can show how severe the symptoms are present, as described by the client. It might be difficult for children to evaluate themselves and

they might even struggle with the format of the wording. Luckily, there are many other ways to evaluate a child's state of mind related to anxiety.

Picture scales.

Picture scales that depict facial expressions can be a valuable method for young children to assess how they perceive their feelings of different emotions, which can later be assessed for any onset symptoms of anxiety. For comparison, there was a study where researchers conducted a study using imagery to determine the presence of anxiety in children as young as five years old (Nilsson, 2018). The emotions expressed in the imagery varied in degrees of expression, and were compared by children when choosing what images best represent a specific emotion. The facilitators then shared a story, using images to best narrate the scenario of a girl named Anna who visits the hospital after breaking her arm. Throughout the story, the narrator prompted the children to select the image that based represents the emotions described in the story and represented below:

Figure 1. Visual representations of the story presented to the children (Nilsson 2018).

After these images were presented, another scale of twelve images, ranging in a set scale of three images from "a little" to "a lot" was shown to the participants. The children pointed to

the scale based on questions asked about the story's content, such as "If Anna wants to say that she feels very afraid [while at the hospital], which of these pictures do you think she would choose?" (Nilsson, 2018). Comparatively, additional scales were then presented, each with a different measurement of "good/bad" or "like/dislike" scales. The results of the 103 children selected between 5 and 8 years old had most frequently chosen the following images to represent the emotions presented in the story.

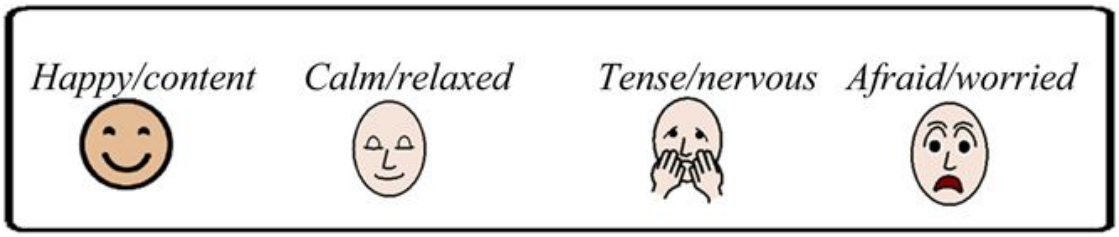

Figure 2. Most frequently chosen image for each emotion, (Nilson 2018).

Overall, the children who participated in this study were able to identify emotions and match the intensities of these feelings to different emotional categories with varying levels of success. The researchers examined the differences in results based on age and concluded that the older children were able to choose the images intended to represent an emotion such as "tense", which the younger children misidentified, naming these images as "afraid/worried." Despite this discrepancy, most of the children represented the other emotions quite successfully, as each emotion was represented by a distinct mouth shape (Nilsson, 2018). The accuracy of the participants to connect intensities with imagery, shows the effectiveness of imagery for child anxiety measured tests.

Children understanding quantities and facial expressions based on imagery allows for a way to effectively express their feelings. If the researchers began to ask questions that pertain to how the child is personally feeling, the images can be selected by the child to describe what emotion they are feeling, and how intense that feeling is. This assessment can be connected to the use of imagery for art therapy, as it combines both verbal communication with visual imagery to express feelings.

Medical testing.

The use of medical testing devices is another way that anxiety disorders are measured. One way to detect levels of anxiety is by use of equipment called an IMU (Inertial Measurement Unit) sensor (McGinnis, 2018) which measures the response of the individual to stressful stimuli (in this case a mild electrical stimulation).

Using an IMU, the subject was to be subjected to stressful stimuli, which caused a startle response, detected by the sensor on the equipment, and reported as a movement produced by the reaction to the stimulus. The IMU sensor was worn around their waists to detect any movement produced from the reactions. After briefing the child that the caregiver wanted to show the child something on the table, a fake snake was shown, initiating a startled response. The caregiver then reassures the child that the snake was fake. The testing and retrieving of the data only takes about ninety seconds to collect, and upon examination, the sensors provide a quick way to objectively measure stress response in terms of acceleration and angular velocity data in hertz (McGinnis, 2018). By using the sensors, the researchers were able to collect an objective method of diagnosing anxiety. The results proved that the higher performing patients, those without an

internal diagnosis, had more similar results of movement. The children with a diagnosis had more variability in results, proving a fifty-five percent accuracy with the sensors detection, contrasting with the seventy-five percent accuracy in sensing a lack of internal disorder (McGinnis, 2018). With more research, the experimenters can better the detection accuracy, and explain the reason for variability when researching the nuances between different disorders.

Additional forms of medical technology that can detect physical or psychological symptoms are Electroencephalogram and electrocardiogram signals acquisition (Pintelas, 2018). These devices can detect abnormalities using high frequency forms of data collection, providing essential information to detecting mental disorders. Over the years, more and more children have been diagnosed with mental disorders, especially stress or anxiety disorders (Pintelas, 2018). Another way to detect symptoms of anxiety is by monitoring heart rates with multiple heart rate variability descriptors. An example of such technology is the Bayesian Network Model, which was able to predict with 73.3% accuracy by using a probability based classification approach on a specified populated area (Pintelas, 2018). These are only a few of the many ways technology can be beneficial with measuring anxiety, as more experimentation leads to new ways of studying the various types of anxiety disorders.

Treatment of Anxiety Disorders

Medication

While therapy can assist in managing anxiety symptoms, medication prescribed by professionals can further aid in calming the child's worrisome thoughts. Some types of medication that are effective in anxiety treatment include antidepressants and benzodiazepines.

Similar to the symptoms of depression, anxiety involves unwanted negative thoughts, which can be a result of low quantities of serotonin, a hormone that is associated with happiness (Walkup, 2019). The antidepressant medication blocks the reabsorption of serotonin after it is activated, prolonging the feelings of positivity (Mayo Clinic, 2019). This inhibition will increase the child's mood, rendering them less focused on negative thoughts, thus decreasing anxiety symptoms fairly quickly (Walkup, 2019). Benzodiazepines are potent medications that are only used for intense anxiety, as they will reduce overwhelming symptoms very effectively. The caution with this medication is to not take them for too long, because tolerance build up will cause the body to require incremental dosages, in order to make the effects last long term. Additionally, the effects of antidepressants might become a crutch that can take away from learning how to manage negative thoughts naturally, so it is strongly advised to not let children rely on medication as their only source of anxiety management (Walkup, 2019).

Art Therapy

Environment.

Art therapy is an effective form of treatment for children with anxiety because it can provide a non-threatening approach based on therapy and creative expression. It is important to note that for children who have anxiety, there needs to be a sense of safety in the space, as it is the only way the client will feel open to art creation (Haas-Cohen, 2008). There are many ways to make the child feel comfortable in the session; one way is to establish that the child's artwork isn't to be viewed as "bad" or "good." The quality of the art created is not important in determining the progress of art therapy; therefore, any art created only serves to benefit, and

shouldn't be judged based on art technique and aesthetic quality. This will help eliminate any preconceived notions on whether or not the progress of the art imagery will be graded or subjected to criticism and/or punishment. This is one of the many causes of anxiety.

Sensation.

Another way that art therapy can be turned into a safe space for art creation is by using mindfulness techniques that can be attributed to material manipulation. Touching,smelling, and visual stimulation of art media work together to gently overcome any feelings of anxiety, as they promote feelings of groundedness and achievement. This feeling channels a type of focus that empowers clients to create and manipulate in experimental ways, in order to express how they feel through the materials (Hass-Cohen, 2008). Experimentation in the art making is very important because challenging comfort zones in healthy ways will promote growth towards treating anxiety symptoms. But in order to facilitate a space that will successfully integrate therapeutic protocols with open communication, there are a few safety parameters that must be present in the sessions. The room must be properly ventilated, with adequate lighting and access to water (Stepney, 2008). The artwork itself must be stored confidentially by the therapist, if the child does not choose to take the piece home (Stepney, 2008). Any exhibiting of artwork without the knowledge and agreement of the client is unethical and against the law. These guidelines are discussed with the legal guardians/parents of the child, and even explained to the child in a way that can provide a sense of comfort. Honesty is a way to reassure the child that the therapist is in no way going to trick them, or make them feel unsafe. A document will be signed by the parent, and/or the child, to provide permission to share any artwork. By establishing safety, the

relationship between art therapist and client, will be able to grow as the time spent one on one is confidential.

Composition/Context of the space.

The arrangement and ambience of the room is also critical; it should have a comfortable, welcoming atmosphere so that the child will feel free to express themselves openly and not have emotions restricted. The room must be private, because art making and the discussion of it can provide very sensitive information. There must not be too many distractions, like toys, or else some children might become so excited that they lose sight of the protocol. Additionally, the room must not be a place where making a mess is unacceptable. The creation of art for therapeutic purposes is presented as non restricting, so the room must be located in a space that allows for a mess to be created as a result of free expression. If any of these factors are missing in the session, the anxious child might feel less inclined to communicate (Malchiodi, 1998). The therapist can playfully encourage the child to clean the materials and room when the session is over. Having this type of non-threatening related activity together is a good way to say goodbye.

The role of the Art Therapist.

In order to witness the, "conscious mind at work," the presence of the therapist is required while the child creates his/her work (Malchiodi, 1998). Not only does the therapist facilitate the protocol with directions and follow up questions, but they maintain the safe space in the session. Without the therapist, the activities would just be art making, lacking that therapeutic

dimension that is meant for healing. The anxieties that children have can be at traumatized levels, so the facilitator's job is to provide a nurturing presence, in order to develop that important therapeutic relationship (Malchiodi, 1998). As the child draws or creates art, the therapist will observe, usually in silence. The quiet atmosphere eliminates many distractions that could take away from the experience, which is why the therapist carefully chose a room suitable for therapy sessions. Another aspect that the therapist controls is the length of time each step takes in the activity. If given insufficient time for art making, the child will feel rushed, causing anxiety that will only contradict the goal of the session (Malchiodi, 1998).

Assessment in Art Therapy.

In order to get a sense of the child's emotional state, when meeting a new client, art therapists use therapy assessments to evaluate client characteristics as a way to develop the specific treatment plan for their clients. One of the many types of assessments is called spontaneous drawings; this is both open ended and simple to explain (Stepney, 2008). The client will be asked to draw something, usually anything. This gives control to the child in that they can choose the subject matter. It is beneficial for the therapist to examine a protocol that is unprompted, because these images have been theorized to be derived of the subconscious mind (Arnett, 2013). If the lack of prompt proves too anxiety provoking, a loose directive may be applied. While creating art by use of line, shape, texture, and form, children access their deepest thoughts without even knowing it and creates a drawing whose elements that can be utilized in session. This characteristic is applied in all art protocols, not just spontaneous drawings.

In contrast to spontaneous drawings, structured art protocols are more specific and are facilitated to collect certain data from the client (Stepney, 2008). Art evaluations can be experimental, and will have been designed using a specific material, based on using a different subject matter. The therapist will present the art task clearly, with planned follow up questions after the art making. These procedures can be easily repeated over time, which (reciplicity) is important with any type of evaluation. When repeated, the therapist can make connections to the results of previous studies, and be able to evaluate symptoms based on comparison of previous research.

Storytelling in artwork.

The process of storytelling in Art Therapy sessions can be broken down into three steps, the story, the physical drawing, and the child's story relating to the drawing. (Crenshaw, 2004). The story provided by the therapist guides the child to imagine their own story, and activate their creative form of expression. After the story is shared, the child will take that time to relate to their own life and then create a drawing, or sculpture, that resonates with their perception of the directive. The final step is arguably the most important part for the Art Therapist, because he/she will facilitate a conversation concerning the artwork. Even the most trained Art Therapist will make a conclusion about a detail that is inaccurate, so when the child is requested to "tell a story" based on their image, personal feelings might be revealed that are not known to the therapist.

Art Therapy protocols.

Art therapy protocols (also known as directives) are art based activities which allow art therapists to obtain information from their clients. The art imagery produced may give the therapist insight into the patient's feelings and emotions. The activities can vary based on the objectives, materials, and subject matter. Calling upon the wide variety and scope of protocols, the therapists can create a specific plan in order to work with the child to achieve their goals in therapy sessions. In order to achieve those goals, whether it is to diagnose and assess the child's level of anxiety, determine triggering stimulus, or provide a successful treatment plan, protocols will be used to challenge and enlighten everyone in the space.

House-Tree-Person protocol.

Figure 3. House-tree-person protocol example (Schorr, 2011.)

A common protocol presented to clients is the House-Tree-Person technique, which highlights the client's personality traits and important relationships (Stepney, 2008). Each object

or person in the drawing may reflect another meaning; for example, a tree represents hidden feelings or personal growth, the person represents ego, and the house represents the functionality of the person within their environment (Burns, 1987). The three objects in the drawing more effectively help in understanding the child's anxiety when they are drawn in the same space, as the interactions can be clearly seen (Brooke, 1996).

When looking at the house, the therapist will take into consideration, the size of the house, and the details the child decided to include in the house. For example, a lack of door might represent a lack of feeling safe at home, or a sense of being shut in from the outside (Burns, 1987). If the home appears to be aggressively drawn, or has fewer windows and no chimney, that might show insight to the state of vulnerability that the client feels. When evaluating the drawing of the person there is significance to the orientation of the facial features, and the size/detail of the characteristics. A characteristic worth mentioning would be if there are small features, that might indicate shyness, or if the mouth is omitted, which might hint of negative emotions (Burns, 1987). For the tree, the art therapist might take into consideration the height of the trunk, and other important details. Additionally, if the features if the tree are sexualized (tree parts resemble genetalia or portayal of sexual acts is present) these are common signals of trauma. The spacing of the three objects is very important to note as well, because if one is overpowering the other two, that generally has significance. (Burns, 1987). When done carefully, the art therapist could definitely get a sense to the child's sense of self, and their levels of self esteem when viewing this type of protocol.

Safe Space Protocol.

Figure 4. Safe space protocol example. (Eluna, 2019).

A directive specific to addressing symptoms of anxiety is the safe space protocol. This activity provides a "structured method for acknowledging and managing both comfortable and disturbing emotional experiences simultaneously (Tripp, 2019)." The client will be prompted to create an image, whether its by collaging images or using art materials, and create a place that evokes feelings of relaxation for that child. This can be either a made up place or a place that is a real life place. In order to create this image of a safe space, the color and sensations of the place should be imagined, in order to connect similar feelings of relaxation when creating the image

onto paper (Rappaport, 1998). After the place has been drawn or collaged, it can be referred to when needed in the future. The goal of this protocol is to develop a relaxing coping strategy for when negative worries become overwhelming for the client. It can also serve as a tool to calm down the child if any conversation becomes too comfortable, the art piece can be accessed and focused on to revisit the feelings or calmness (Rappaport, 1998).

Bridge protocol.

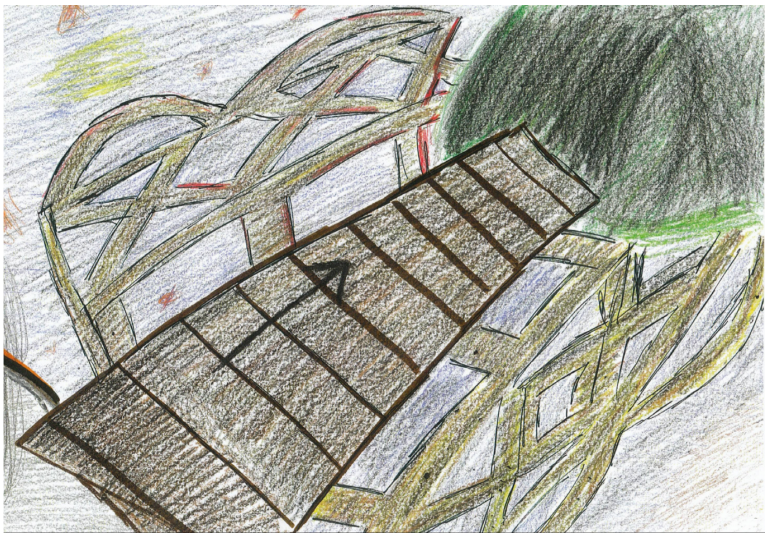

Figure 5. Bridge protocol example. (Bania, 2009)

Another type of protocol is the bridge protocol, a directive that provides both insight to environmental influences and obstacles. Bridges are symbolic as a way of providing passage towards the future, to reach a goal, possible needing to go over an obstacle, or more deeply, a subject that induces fear. The function of this protocol is to reveal thoughts that the child may have concerning the future, which might be disclosed when looking at the design of the bridge (Stepney, 2010). After discussing the fears, discussions comes after the drawing is completed. The therapist is looking for the shape and strength of bride parts, and how the bridge is attached

to the land. Asking the child to place themselves on the bridge is key to indicate which direction he/she is traveling. This is important to identify where the traveler has been and where they are traveling toward. It is also very common that the therapist is general about what the bridge should look like, additionally prompting the client to indicate the direction of the travel (Stepney, 2010). Including a mark that will place the child within the image is also essential to the protocol, as it connects the progress that the child has made towards their goal with how far along the path their are in the drawing. If the dot or mark is at the beginning, that might represent the newness of the journey. Any obstacles indicated will occur along the path, and the end of the drawing should be representative of the end result, a goal, or physical destination. Additional subjects can be added around the bridge to provide more context to the goal or fear that the child might wish to portray. The emphasis that is placed on the bridge or the surroundings will be recognized by the elaboration of the details. Depending on the child, the bridge can be created over water-children may draw dangerous animals (or rocks etc.) in the water that might hinder their journey over the bridge. These obstacles can be linked to problems in his/her real life.

Mask Making protocol.

Figure 3. Mask making protocol example (Bentley, 2016).

Children with anxiety would also reveal deep thoughts from the mask making protocol. In comparison with the bridge protocol, the mask also can uncover hidden feelings, but is more related to self image. When describing the image of the bridge, it is symbolic in providing passage over an obstacle, or fear while trying to real a goal. Comparatively, the choices made in decorating the mask are different. The child may be asked to share what they think about

themselves, and how they think they are viewed by others (Stepney, 2010). Discussing the views on other's opinions can provide sensitive to children with anxiety, so it is important to be gentle with the protocol, and careful evaluate beforehand whether this child is ready for the prompts. The mask may provide a lot of information about the child's level of self esteem, identity, and the perceptions that the have about their personality (Stepney, 2010). The therapist can get into what the child thinks everyone else feels about him/her after they talk about their sense of self.

Sculpting.

Figure 4. Clay modeling example (Sherwood, 2004).

The method of creation that occurs during sculpture differs from the drawing protocols, due to its involvement with the tactile experience. The sensory involvement with touching and molding the materials, whether playdough, model magic or clay, provides a strong method of healing. Early stages of learning, specifically birth to early childhood, can be categorized by oral and motor sensory learning (touching) (Sholt, 2006). This makes sculpting a very effective way

to engage children in a safe way, that also utilizes the developmental stage of environmental interaction. One reason why sculpting can be a helpful tool for children with anxiety, is due to its building process. The manipulator of the clay has complete control, as to the movements of which the clay is being touched, while each fingerprint and physical gesture alters the substance to the will of the user (Sholt, 2006). Additionally, art therapy protocols created by clients tend to represent a form of their identify, as they subconsciously create images that represents aspects of themselves. The organic nature of sculpting can provide a safe, non-threatening outlet for creating more distorted imagery that might be frightening to the child using other media (Sholt, 2006). For younger children, this might be too complicated to accurately examine; however, the actual physical manipulation of the clay can be equally therapeutic for the child's progress.

In combination, these protocols, along with others, will reveal personal information about the child that has to be treated carefully by the therapist. After the information revealed is evaluated, the art therapist can establish a treatment plan, evaluate the progress of the child, and determine the steps to bring the client closer to their goals.

Materials.

The materials themselves have a profound impact on the child's motivation and interest in taking part in the art therapy session. The aspects that determine the results of the protocol, in terms of materials, can be the quality, the texture of mark making, and color of the materials. The goal of the therapy is for children to express themselves, they be most stimulated to to this if they are presented with a variety of materials that are in good condition and inviting to use. A child may not feel inclined to explore the prompt if there are a lack of variety in materials or if some of

the drawing utensils were broken, they might not even be used (Malchiodi, 2010). The therapist must also be aware of the correct usage of each art tool in order to accurately describe and demonstrate them to the child, who may be seeing something for the first time. The more information provided about the tools, the more willing the participant will be to try and experiment with the protocol. After a clear description of the materials, the decision to pick some materials over others is within the child's control, and that is why a large variety of art supplies should be present. The therapist should not overwhelm the child with a large number of possible materials, and should be sure that the use of each material is with the child's capabilities.

Chalk pastels.

Chalk pastels are a common material used in subject matter that the creator wishes to appear delicate and transparent. The pastels are vibrant in color and require a small amount of pressure when pressed to the page. A benefit to using these materials is the ease in mixing colors, as the powdery finish can be rubbed against the paper using hands or a napkin, which blends the colors effortlessly. Any non artist could use these materials and get the desired results, which can be de-stressing for clients who suffer from anxiety (Elbrecht, 2019). The downside to using chalk pastels is the fragility of the tool, which can be frustrating to the user if it breaks. Also, the powdery finish can be messy and sometimes difficult to remove from clothing or skin. Overall, this tool would be beneficial to a child that is a little older, because they would be able to control their pressure on the tool when applying to the paper.

Oil pastels.

Alternative tools to use instead of chalk pastels are oil pastels. They are less expensive, more durable, and easy to use for any client who does not view themselves as "artistic." In addition to the durability, these tools range in thickness, so a preschooler can hold these tools with an easier time than with other materials (Elbrecht, 2019).

Hand held materials.

For those who are uncomfortable with directly putting hands on the material, other tools allow separation from immediately touching the source of the material. These various types of materials, such as paint brushes, colored pencils, and crayons. Sometimes sensory stimulation can be overwhelming, especially to children that have difficulties with experimentation. The level of discomfort that a child displays towards touching paint, in combination with how tightly they hold these materials, could signal trauma involving interpersonal abuse (Elbrecht, 2019). Apart from that possibility, the overall experience of feeling the brush, or crayon can be very relaxing and grounding in terms of the stimulation.

Finger painting.

A type of painting that doesn't require using a paintbrush, is fingerpainting. This technique is commonly used in schools and at home, so including this technique as an option to use would be beneficial, due to its familiarity. The paint itself is easy to wash out, so there wouldn't be any difficulty in cleaning the paint off the child's hands. Using this material can have different results for different types of children, some might have a comfort level where they are too anxious to touch wet paint. However, including the paint is important because later in the treatments, sessions later, if the child has made progress towards managing their anxiety

symptoms they might pick up the paints with an eagerness to use them. The direct contact with layers of paint, color mixing, and smearing of the material on paper could bring back earlier childhood memories and allow that playful escapism from their possibly stressful present (Elbrecht, 2019). Color technique is also a huge strength with this material, as the paint applies to the paper in bold, vivid marks. With the powerful visual impact of color, these paints serve as a valuable tool for possibly creating a color based piece that represents a specific emotion (Elbrecht, 2019).

Modeling materials.

Other than drawing and painting materials, children enjoy using modeling materials. Natural clay with its slimy surface and difficult manipulation might be inappropriate for anxious children. Model magic, playdough, etc, offer the opportunity to manipulate a softer easier material, than can be played with or used to create something that the child can take ownership of.

Essential Elements of the Artwork.

In order to reveal the emotional context within a child's artwork, there are certain compositional elements that are evaluated by the art therapist. These elements can be symbolic of hidden messages, unconsciously repressed within the mind of the child (Malchiodi, 1998). The Art Therapist can assess the content of the child's work and make possible deductions as to the current level of functioning of the child, by asking questions for clarification. Some of the elements evaluated in art protocols include color, line shape, size, and overall organization (Malchiodi, 1998). It is essential that after every time an image is created by the child in

sessions, the therapist asks the child to describe the image with as much context that they are comfortable with, in order to fill in the details.

Color.

The use of color in a piece can be a powerful way for children to express their emotions. There is such a close relationship between color and emotion, that it would be difficult for the client to have used color without processing a certain emotion when incorporating it into the image (Malchiodi, 1998). This idea however, is not usually represented in children earlier than four years old, as they have not yet associated color with emotional impact. Children older than four have the capability of discerning colors with specific emotions. There is variation in the perceptions of what emotion can be associated with what color, a discrepancy amongst children who have experienced different situations (Malchiodi, 1998). Color meaning can be subjective; however, there are some colors with strong residual emotions. For example, red is often associated with anger and aggression, while also representing love and passion. Yellow has strong ties to feelings of positivity, energy, and light. In contrast, blue is closely viewed to peacefulness, depression, and the elements of water and sky (Malchiodi, 1998). Considerably one of the strongest indicators of negative emotions, black seems to have dark connotations when represented in excessive amounts. Different cultures assign different meanings to the different colors, for example, red might mean blood and/or anger in Western civilizations, red is used to represent happiness and good fortune in many Asian cultures.

Size.

The size of the subject matter can also be connected to strong emotions, specifically representing feelings of self-esteem and levels of competency. The human figure drawing is a common example where proportion plays a significant role in hidden meanings. Children tend to express themselves through self portraits, which can reveal insecurities or aspects of themselves that bear significance (Malchiodi, 1998). If a child were to draw an aspect of themselves very small, that could hint to an insecurity concerning that area. If the overall size of the image is small, that could represent a feeling of insignificance, or a desire to hide (Malchiodi, 1998). If a self-image is drawn overly large it might indicate that the child is over-compensating for negative feelings he has himself.

Detail.

The amount of detail, or lack thereof, can signify emotional reactions to the subject matter. When a drawing shows minimal detail, it can represent a form of trauma or restriction of expression (Malchiodi, 1998). When presented with the opposite, for example excessive shading in an area, art therapists might deduce that the child might be traumatized by an event or have a form of anxiety. This is because of the impulsive or excessive nature when overly applying a material. It is important to be wary of making finite conclusions from these elements, because excessive shading might also be the result of excitement with the creative process. When given materials, children might find the mark making soothing, thus the overly drawn image could be that the child enjoys the kinesthetic nature of art making (Malchiodi, 1998).

These are some of the many elements that make up the complex nature of artwork analysis by art therapists. In combination, the elements can explain the nuances to the complicated emotions that the client feels, and allow an opening to conversation concerning these difficult feelings.

Play Therapy

Much like Art Therapy, Play Therapy is a form of expressive therapy that provides a holistic view of the child's current level of functionality. The use of creative intervention in Play Therapy differs from Art Therapy by recognizing the importance of the relationship between storytelling and body movement. When portraying a character or acting out a directive, the child becomes immersed in the story created, much as they might play at home or at school. It has been said that playing games like "house" or "tea party" allows children to socialize and portray roles that aid in forming their sense of identity later on in life (Childcare, 2019). Play Therapy utilizes those important qualities of playtime, and expands the therapeutic undertones by how he/she will carry out the protocol.

Role of the Play Therapist.

The Play Therapist is expected to provide safety measures in the same way as any other type of therapist. Children must feel accepted and welcomed while trying to express themselves in play. After a friendly rapport has been established, the client will be more inclined to lead the pace of the sessions. For children with anxiety, it may be difficult for them to take charge, so the therapist will assist with their hesitation, without taking away from their ability to initiate any changes (Kaduson, 2000). Additionally, Play Therapy has the natural tendency to drift from

reality, so it is important that the therapist controls that fantasy element and keeps is at a therapeutic level.

The key to reinforcing the goals made between therapist and the client is to create an encouraging environment. In order to develop this experimental safe space, the therapist has learned many techniques in Play Therapy that will create a space where effective coping skills are learned and carried out (Kaduson, 2000). For example, the success of reaching certain goals depends on the level of support that the child has in order to feel that they direct the space. The feeling of validation, can motivate children to describe their feelings, as long as the therapist shows engaged body language. If the child struggles with using their words, the Play Therapist will introduce vocabulary that will help them communicate their thoughts.

Treatment Interventions.

Systematic Desensitization.

This technique is beneficial to children with anxiety disorders because it helps transform their social skills from fearful to adaptable to new situations (Kaduson, 2000). Anxiety symptoms can be the result of conditioning; as children learn from their environment, especially if the environment contains many stressors, fear will be a common behavioral response. The goal of systematic desensitization is to eliminate the fear that is connected with the specific triggers that are present in the child's life. The solution to breaking this connection is to introduce relaxing protocols that stimulate positive emotions. Play Therapy sessions will often have relaxing prompts, like imagine calming places, or tranquil play activities (Kaduson, 2000). The key feature for a relaxing environment, is to keep details to the environment at a minimum. At

the point where relaxation has been achieved in the session, the stressful stimuli will be brought up. The relaxing atmosphere provides a safe outlet for imagining and discussing unpleasant thoughts and fears. Over time this practice will hopefully lesson the effects of stressful triggers for the child (Kaduson, 2000).

Emotive imagery.

Emotive imagery is normally paired with systematic desensitization, because it utilizes images of fantasy based heroes to play the roles of anxiety inhibitors when telling a story that contains stressful content (Kaduson, 2000). First, the story is described in a way that promotes positive feelings, but over time, stimuli that is responsible for the anxiety is included. The hero acts as a shield, and will overcome the anxiety, allowing the child to imagine defeating the negative thoughts in a similar fashion (Kaduson, 2000).

Positive Reinforcement.

Children with anxiety often feel a sense of inadequacy, so Play Therapists (as well as other types of therapists) will provide praise and support to counteract their negative self-perception (Kaduson, 2000). Positive reinforcement will be used when the child challenged their fears, or even if they admit they are feeling scared. The reinforcement can come verbally or through materials such as stickers. Depending on the moment, the reinforcement can either be direct, or subtle, where they praise the level of participation that the child is during play (Kaduson, 2000). The intention is that confidence will eventually increase as the child feels

supported in the space, resulting in increased self-esteem as they confront situations and interact with others outside of the space.

Modeling.

In order for children with GAD or any other forms of anxiety to manage their responses to fear inducing stimuli, Play Therapists will induce modeling activities so that they can view highly developed behavioral skills first hand (Kaduson, 2000). The goals made between therapist and the child are usually present in these models, the therapist picks the models that represent subjects that either the therapist or the child finds ways to cope with the stress inducer or find success with tackling the situation completely. Between the two possible models; however, the version where the model copes with the situation, or less than ideal response to fear, proves a more efficient model (Kaduson, 2000). This conclusion resides in the fact that although anxiety is very treatable, it is also very difficult to manage for children. It will require much time and effort for the mastery of fear response to be achieved.

Play Therapy protocols.

Some of the objectives for Play Therapy protocols are to develop a better self image, so that children become more accepting of themselves, increase self-reliance, gain a sense of control, and to be more accepting to coping in certain situations (Landreth, 2012). Each protocol is designed to achieve these objectives, although they may vary based on materials, theme, atmosphere,and complexity. The following are some examples of protocols that Play Therapists can choose to facilitate in sessions:

Ball toss protocol.

This protocol combines movement with communication, which is usually done in group Play Therapy. The therapist will have the children, toss a ball around the group while completing certain verbal tasks. There are endless questions that can be answered while tossing the ball around, the topics can range from 'things that make you happy' to 'your favorite subject in school.' The ball can either have phrases written on it or the child who throws the ball asks the question, followed by the catcher's response. The back and forth movement simulates the flow of conversation, and allows the children to focus in the session (Schaefer, 2016). This protocol is often used for children with anxiety is because the playful nature of ball play will ease the potential anxieties when sharing feelings. Some kids do get nervous when asked to participate in activities that involve hand eye coordination, which the therapist will address by reminding the group that they can participate if they feel comfortable (Schaefer, 2016). This hesitation might change over time, as rapport is better established amongst group members, and the fear of embarrassment decreases. Overall, this protocol is a useful option for an opening session or as a warm up activity for more complex protocols.

Empty chair protocol.

One of the many role play protocols that achieve an in depth exploration of feelings is called the empty chair activity. A chair is placed opposite to the child, this can be done in individual or group Play Therapy, which symbolizes a figurative person sitting in the chair (Schaefer, 2016). This person is chosen because in previous sessions it has been discovered that the child has unresolved thoughts which they wish they could share with that person. This space

provides the opportunity for them to say anything they want, and have a conversation as if the person is actually in the room with them. This activity can become an emotional experience, if the person is deceased, or has caused great harm to the child. By giving them this space, children with anxiety can share past events that have been burdening them, and take another step closer to feeling closure with this person (Schaefer, 2016). Sometimes, the client might sit in the chair and try to answer based on how they think the person might respond. The therapist will talk with the child about the experience afterwards, and ask questions to gain more context. This part of the protocol is essential as it reassures the child of their safety in the space, and allows them to process their accomplishment of sharing these thoughts. Protocols that involve role play, like the empty chair, can be enlightening and can unravel the sources of deep rooted anxieties.

Guided relaxation protocol.

Sometimes it is beneficial to break down the sensations that are experienced while trying to relax. The guided relaxation protocol brings the sensations of touch, smell, sight, and sound into full focus by guiding the client through a calming scene. The child will imagine the story being shared, and will feel a sense of calmness as they pretend that they are present in this safe place (Schaefer, 2016). The goal of this meditative technique is for children to find a way to control their mental processes, specifically feelings of anxiety related content, through mindful awareness (Hall, 2002). The child can either listen to a relaxing story, paired with deep breathing exercises, or they can describe their own safe place. It is important to ask them to describe what they see, hear, taste, and smell in this place, to increase the effectiveness of the meditation (Schaefer, 2016). Not only can children with generalized anxiety disorder benefit from this

activity but also children with obsessive compulsive disorder, post-traumatic stress disorder, and phobias, to name a few. One consideration when evaluating what children might not be suitable for this technique, is whether the child has issues with dissociation. Dissociation is when one separates themselves from others and past experiences. If dissociation is a common struggle with this child, it is best to refrain from this protocol (Schaefer, 2016).

Dollhouse play.

Playing with dolls in a dollhouse is a useful way for children to express their thoughts on their homelife through projecting rather than stating it verbally (Schaefer, 2016). Young children especially are unaware of the variations of parenting styles between families, so they might believe that what occurs in their house is completely normal, but that might not be accurate. If there are problems in the household, children will most likely express that when they act out the different family members while playing in the dollhouse (Schaefer, 2016). The Play Therapist might ask the child to play freely in the dollhouse, while taking mental notes of key observations. Another way that the dollhouse play might be facilitated, is to prompt the child to play typical events at home, namely mealtimes, bedtime, or even on a sad day (Schaefer, 2016). Dollhouse play is an effective way to showcase conflict at home, which can exist in various situations from divorced parents, neglect at home, or domestic violence. These conflicts are some of the environmental factors that can cause children to manifest their stress into forms of anxiety disorders.

Materials used in Play Therapy.

Play Therapy is very similar to Art Therapy in terms of the settings in which therapy is to be conducted. The major difference for Play Therapy is that the setting is utilized as a material, easily comparable to the canvas where art is created.

Playroom Settings.

The space in which play occurs must feel safe and secluded: if parents in the waiting room or any outsiders are too close to the room, the child will feel vulnerable and not comfortable when sharing their feelings (Landreth 2012). Many therapists consider soundproofing the room, some use acoustical tile on the ceiling, which absorbs sound. The more sound proof, the more privacy given to the children, which will prohibit parents from questioning noises they heard in the playroom. Much like Art Therapy, the room must feel open and welcoming, with the addition of toys and costumes presented in the room providing an inviting appearance for the children to engage with their surroundings (Landreth, 2012). When choosing a room size for individual Play Therapy sessions, the room must not be too large, or else the child might feel too intimidated to participate in play. If a room is too large, the therapist might need to constantly follow the child around, in order to be close to them (Landreth 2012). This defeats the purpose of allowing the child to initiate interaction with the therapist. A larger room might be necessary for Play Therapy groups, from three to five children. There will be moments

where children will be playing on their own, or need to take a break when overwhelmed with intense emotions. Having enough space for these moments is important, or else the group might stumble over each other (Landreth, 2012). The placement of toys should be organized and displayed so that nothing is hidden or messy, which is why shelves are a good idea for storage. The sturdier the furniture the better: children love to climb and hide when they explore so including durable and comfortable furniture is recommended (Landreth, 2012).

Toys.

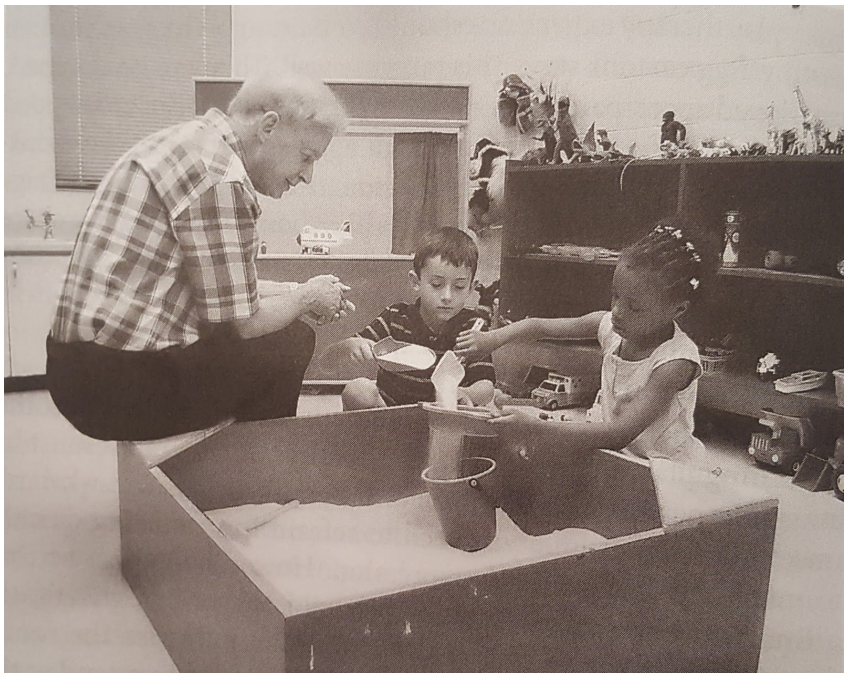

Figure 3. Children playing in the sandbox (Landreth, 2012).

Toys are a commonly used medium during sessions. Both the soft texture and the huggable nature of plush toys provides a calm experience for anxious children. When playing

with plush toys, children learn caretaking skills, which will be important as they grow up (Schaefer, 2016). The more realistic action-figures can be used for older children as they use the doll to reenact situations, possibly projecting aspects of themselves into the character (Landreth, 2012). When choosing toys to play with, children might select something that either makes them feel happy, reminds them of a toy they have at home, or even stimulate their curiosity. These emotions can increase enthusiasm for participating in the protocol and can formulate a bond between the therapist and the child (Landreth, 2012). Another type of toy commonly used in play therapy, are the ones used for creative expression and emotional release (Landreth, 2012). The two most commonly explored media for unstructured play are water and sand. Children play with sand at playground, beaches, and sandboxes while water is played with in bubble baths, the beach, sprinklers, play water in sinks, etc. Play Therapists sometimes shy away from these materials because of the concern to clean up afterwards; however, including sandpit or a bucket, with small amounts of sand and/or water will provide a perfect opportunity for creative exploration (Landreth, 2012). By including unstructured forms of play, a child who is shy and anxious is shown there are no wrong ways of creating shapes, which provides comfort to those who worry of failing a project.

Costumes.

Costumes are used often in Play Therapy as a form of communication between therapist and child. When acting out unresolved conflicts, the costume acts as a shield against the experience when reliving painful memories (Marcus, 2010). Children in therapy should be the only ones dressing up, as they, not the therapist, will be acting out their conflicts. Costumes can

help the transition from younger children playing with dolls or puppets, to older children who would rather play a game. If they dress up while playing a game, they might begin to transfer their feelings and thoughts into a character, providing an alternative method to using toys. Costumes are different because they add a level of comfort, in the form of a disguise, that children will use to share aspects of themselves without feeling so exposed (Marcus, 2010). As they act out their characters, the therapist can ask " What does this mean?" or "Why does your character feel this way?" to better assess the character's motivations, and essentially the child's as well. It is important to note that characters might be played for the sake of being silly, or they can be dramatized and overplayed beyond an accurate portrayal of the child's true feelings, and that is why communication is essential.

Conclusions

The different forms of anxiety can be categorized as excessive worrying that interferes with daily activities, and overall well being (DSM-V, 2019). Children with forms of anxiety often struggle with socializing, school performance, and their self perception. As children struggle in these areas, the excessive worrying often manifests into different physical and mental symptoms including nausea, restlessness, headaches, and panic attacks (Rapee, 2015). There is also the tendency to dwell on negative thoughts. Children might believe that they are worthless, or worry about not being able to perform at the same level as their peers. They will also feel alone, and might fear judgement from their family and friends. If the negative thoughts and symptoms of anxiety remain unchanged, the child might have an unhappy childhood that will increase their anxiety symptoms as they grow up.

There are many forms of treatment for children with anxiety disorders. Medications such as antidepressants and benzodiazepines help with a positive mood. Cognitive Behavioral Therapy can be useful for conditioning desired responses, while recognizing the impracticality of certain fears. Children might have difficulty expressing their fears verbally, due to their limited vocabulary but Art and Play Therapy can mend that language barrier, and also creative self expression at the same time (Malchiodi, 1998). The therapist will facilitate directives that aim to accomplish specific goals that are safe and realistic for the child. Both types of expressive therapies have protocols aim to improve self-esteem, social skills, self-control, and rapport with the therapist (Stepney, 2008). One of the most important aspects of therapy is to establish a healthy and open relationship between the child and therapist. A child with anxiety will not open up to someone that they do not trust. When good rapport is established, the sessions will become a safe space for the child to eventually share their ideas, when they feel comfortable. Play Therapy has the capability of harnessing the therapeutic aspects of play, by expanding on the idea that character creation can disguise personal aspects of oneself (Schaefer, 2016). As time progresses, children can learn how to express themselves in art or as a character, giving them control that will positively impact the insecurities that feed their anxiety.

Suggestions for Further Research

Over the years, there has been a tremendous growth in technological advancements. As there is an advancement in technology related to both the cause and treatment of anxiety and dependence increases, it is important to research the impact that technology has on the youth population. There have been studies on the impact of social media and television on youth,

continuing but not not resolving that argument as to whether activities such as violent video games can promote anxiety disorders (Anderson, 2003). Additionally, researchers are using advances in technology such as machines to detect anxiety symptoms; this adds to the positive values of using technology in mental health research. By continuing research on such sensory equipment as brain scanning and electronic response measurement machines, scientists and mental health professionals will become more accurate with detecting traits linked to anxiety.

Another area of research that requires examination is the symbolism behind the subject matter in artwork. The world is changing, and the environment that shapes the child's behavior is radically different than many years ago. It would be wise to examine the possible symbolism behind common schema drawn at various developmental stages. The way that the child accesses information is expanding, with changes in societal expectations to be considered as well (Little, 2016). These environmental factors influence children, so there will be subject matter that they might feel drawn to creating in a therapy session, that has different contextual meaning today it might be in a child from a previous generation. Both Art and Play Therapists should continue to research the causes and nuances of child anxiety to accommodate the important factors influencing children today.

References

AACAP. (2015). Video Games and Children: Playing with Violence. *Facts for Families*, *91*. Retrieved from https://www.aacap.org/aacap/families_and_youth/facts_for_families/fff-guide/Children-and-Video-Games-Playing-with-Violence-091.aspx.

Anderson, C. A. (2003, October). Violent Video Games: Myths, Facts, and Unanswered Questions. Retrieved from https://www.apa.org/science/about/psa/2003/10/anderson.

APA. (2019). *What is Cognitive Behavioral Therapy?* Retrieved from https://www.apa.org/ptsd-guideline/patients-and-families/cognitive-behavioral.

Arnett, M. C. (2013). *Understanding Children's Drawings in Medical Settings*. In C. A.

Bakkes, A. (2017). *Embracing Anxiety: Coming Back with Hope*. Randburg: KR Publishing. Retrieved from http://0-search.ebscohost.com.liucat.lib.liu.edu/login.aspx?direct=true&db=nlebk&AN=1516632&site=ehost-live&scope=site.

Bania, S. A. (2009). *The Development of a Grounded Theory of The Meanings Associated to the Bridge Drawing Assessment in a Normal Population*: A Pilot Study. Retrieved from file:///C:/Users/amess/Downloads/OBJ Datastream (1).pdf.

Bentley, L. (2016). *Investigating the Use of Creative Mask-Making as a Means to Explore Professional Identity of Doctoral Psychology Students.* Dissertations & Theses. 319. http://aura.antioch.edu/etds/319.

Boston Children's Hospital. (2005-2019). Generalized Anxiety Disorder (GAD): Boston Children's Hospital. Retrieved from http://www.childrenshospital.org/conditions-and-treatments/conditions/g/generalized-anxiety-disorder-gad.

Brook, C. A., & Schmidt, L. A. (2008). Social anxiety disorder: a review of environmental risk factors. *Neuropsychiatric disease and treatment*, *4*(1), 123-43.

Brooke, S. L. (1996). A therapist's guide to art therapy assessment: Tools of the trade. Springfield, IL: Charles C Thomas.

Burns, R. C. (1987). Kinetic house-tree-person drawings. New York: Brunner/Mazel.

Burris, J. L., Barry-Anwar, R. A., Sims, R. N., Hagerman, R. J., Tassone, F., & Rivera, S. M. (2017). Children With Fragile X Syndrome Display Threat-Specific Biases Toward Emotion. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging*, *2*(6), 487–492. doi: 10.1016/j.bpsc.2017.06.003

Case, C. (1992). *Working with Children in Art Therapy*. London: Routledge.

Chakraburtty, A. (2005). TV Violence -- a Cause of Child Anxiety and Aggressive Behavior? Retrieved from https://www.webmd.com/parenting/features/tv-violence-cause-child-anxiety-aggressive-behavior#1.

Childcare. (2019, August 15). *The Dramatic Play Center in Child Care.* Retrieved from https://childcare.extension.org/the-dramatic-play-center-in-child-care/.

Child Mind Institute. (2019). Selective Mutism (SM) Basics. Retrieved from https://childmind.org/guide/selective-mutism/.

Cioppa, D. (2019). *Fear of Vomiting: Shame and Secrecy Complicate a Phobia Common in Children.* Retrieved September 18, 2019, from https://childmind.org/article/fear-of-vomiting/amp/.

Crenshaw, D. A. (2004). *Engaging Resistant Children in Therapy: Protective Drawing and Storytelling Techniques.* Rhinebeck, NY: Rhinebeck Child and Family Center Publications.

Dabkowska, M., & Dabkowska-Mika, A. (2015). Risk Factors of Anxiety Disorders in Children. InTechOpen. Retrieved from https://www.intechopen.com/books/a-fresh-look-at-anxiety-disorders/risk-factors-of-anxiety-disorders-in-children.

Diagnostic and Statistical Manual of Mental Disorders (DSM-V). (2013). Washington, DC: American Psychiatric Publishing, division of American Psychiatric Association.

Ehmke, R. (2019). What Selfies Are Doing to Girls' Self-Esteem. *Child Mind Institute.* Retrieved from https://childmind.org/article/what-selfies-are-doing-to-girls-self-esteem/.

Elbrecht, C. (2019, July 28). The Importance of Art Materials. Retrieved from https://www.sensorimotorarttherapy.com/news/2019/7/24/the-importance-of-art-materials

Eluna. (n.d.). Art Therapy: Your Safe Place. Retrieved December 1, 2019, from https://elunanetwork.org/resources/art-activity-safe-place/.

Grills AE. Ollendick TH (2002). Peer victimization, global self-worth, and anxiety in middle school children. *Journal of Clinical Child & Adolescent Psychology,* 31:59-68. Hadwin JA, Garner M, Perez-Oli.

Hall, T. M., Kaduson, H. G., & Schaefer, C. E. (2002). Fifteen effective play therapy techniques. *Professional Psychology: Research and Practice*, *33*(6), 515–522. doi: 10.1037/0735-7028.33.6.515.

Hass-Cohen, N., & Carr, R. (2008). *Art Therapy and Clinical Neuroscience*. London/Philadelphia: Jessica Kingsley Publishers.

Kaduson, H. G., & Schaefer, C. E. (2000). *Short-Term Play Therapy for Children*. New York: Guilford Press.

Lawrence, P. J., Rooke, S. M., & Creswell, C. (2017). Review: Prevention of anxiety among at-risk children and adolescents - a systematic review and meta-analysis. *Child & Adolescent Mental Health*, *22*(3), 118–130. https://doi.org/10.1111/camh.12226.

Lebowitz, E. R., Marin, C., Martino, A., Shimshoni, Y., & Silverman, W. K. (2019). Parent-based treatment as efficacious as Cognitive Behavioral Therapy for childhood anxiety: A randomized noninferiority study of supportive parenting for anxious childhood emotions. *Journal of the American Academy of Child & Adolescent Psychiatry, 0*(0). doi:10.1016/j.jaac.2019.02.014.

Lee, C. S. (2017, July 2). Social Anxiety Disorder And Video Game Addiction. Retrieved from https://www.anxiety.org/social-anxiety-disorder-can-lead-to-addictive-online-gaming.

Little, W. (2016). Introduction to Sociology – 2nd Canadian Edition. Retrieved from https://opentextbc.ca/introductiontosociology2ndedition/chapter/chapter-4-society-and-modern-life/.

Malchiodi, C. A.E. (1998). *Understanding Children's Drawings*. London: Jessica Kingsley.

Malchiodi (2012) *Art Therapy and Health Care* (pp 33-47) New York, NY: Guilford Press.

Malchiodi, C. A. E. (2012). *Handbook of Art Therapy. Second Edition*. Guilford Press.

Marcus, I. M. (2010, January 4). *Costume Play Therapy: The Exploration of a Method for Stimulating Imaginative Play in Older Children*. Retrieved from https://www.sciencedirect.com/science/article/pii/S0002713809620926.

Mayo Clinic. (2019, September 17). *Selective Serotonin Reuptake Inhibitors (SSRIs).* Retrieved November 19, 2019, from https://www.mayoclinic.org/diseases-conditions/depression/in-depth/ssris/art-20044825.

McCann, E. M. (2001). The management of preoperative anxiety in children: An update. *Survey of Anesthesiology, 93*(1), 98-105. doi:10.1097/00132586-200204000-00033.

McEvoy, P. M., Erceg-Hurn, D. M., Barber, K. C., Dupasquier, J. R., & Moscovitch, D. A. (2018). Transportability of imagery-enhanced CBT for social anxiety disorder. *Behaviour Research & Therapy*, *106*, 86–94. https://doi.org/10.1016/j.brat.2018.05.007.

McGinnis, R. S., Mcginnis, E. W., Hruschak, J., Lopez-Duran, N. L., Fitzgerald, K., Rosenblum, K. L., & Muzik, M. (2018). Rapid Anxiety and Depression Diagnosis in Young Children Enabled by Wearable Sensors and Machine Learning. *2018 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC)*, *14*(1). doi: 10.1109/embc.2018.8513327.

Moore, B. E., & Fine, B. D. (1990). Psychoanalytic Terms and Concepts. New Haven: The American Psychoanalytic Association and Yale University Press.

Nilsson, S., Holstensson, J., Johansson, C., & Thunberg, G. (2018). Children's Perceptions of Pictures Intended to Measure Anxiety During Hospitalization. *Journal of Pediatric Nursing*, *44*, 63–73. doi: 10.1016/j.pedn.2018.10.015.

Norton, A. R., & Abbott, M. J. (2017). The role of environmental factors in the aetiology of social anxiety disorder: A review of the theoretical and empirical literature. *Behaviour Change*, *34*(2), 76–97. https://doi.org/10.1017/bec.217.7.

Pintelas, E. G., Kotsilieris, T., Livieris, I. E., & Pintelas, P. (2018). A Review of Machine Learning Prediction Methods for Anxiety Disorders. *Proceedings of the 8th International Conference on Software Development and Technologies for Enhancing Accessibility and Fighting Info-Exclusion - DSAI 2018*. doi: 10.1145/3218585.3218587.

Rappaport, L. (1998). *Focus and Art Therapy: Tools for Working Through Post-Traumatic Stress Disorder. Focusing Folio*, *17*, 1–6.

Rapee, R. M. (2015). Nature and psychological management of anxiety disorders in youth. *Journal of Paediatrics & Child Health*, *51*(3), 280–284. https://doi.org/10.1111/jpc.12856.

Reardon, T., Creswell, C., Lester, K. J., Arendt, K., Blatter-Meunier, J., Bögels, S. M., . . . Eley, T. C. (2019). The utility of the SCAS-C/P to detect specific anxiety disorders among

clinically anxious children. *Psychological Assessment, 31*(8), 1006-1018. http://dx.doi.org/10.1037/pas0000700.

Schaefer, C. E., & Cangelosi, D. M. (2016). *Essential Play Therapy Techniques: Time-Tested Approaches*. New York: The Guilford Press.

Schaefer, C. E. & Drewes, A. A. (2019). *The Therapeutic Powers of Play and Play Therapy.*

Sherwood, P. (2010). *The Healing Art of Clay Therapy*. Melbourne, Vic.: ACER Press.

Sholt, M., & Gavron, T. (2006). Therapeutic Qualities of Clay-work in Art Therapy and Psychotherapy: A Review. *Art Therapy: Journal of the American Art Therapy Association*, *3*(2), 66–72.

Schorr, M. (2011, January 20). House Tree Person. Retrieved from https://marneyschorr.webs.com/apps/photos/photo?photoid=113662696.

Spitzer, R. L., Kroenke, K., Williams, J. B., & Lowe, B. (2006). A brief measure for assessing generalized anxiety disorder. *Arch Inern Med*. 2006;166:1092-1097.

Stepney, S. A. (2017). *Art therapy with students at risk: fostering resilience and growth through self-expression*. Springfield, IL, Charles C. Thomas, Publisher, Ltd.

Thorne, K. J., Andrews, J. J. W., & Nordstokke, D. (2013). Relations among children's coping strategies and anxiety: The mediating role of coping efficacy. *Journal of General Psychology*, *140*(3), 204–223. https://doi.org/10.1080/00221309.2013.792235.

Tripp, T., Potash, J. S., & Brancheau, D. (2019). Safe Place collage protocol: Art making for managing traumatic stress. *Journal of Trauma & Dissociation*, *20*(5), 511–525. doi: 10.1080/15299732.2019.1597813

Walkup, J. T., New York-Presbyterian Hospital, & Weill Cornell Medical Center. (2019). *Best Anxiety Medications for Children.* Retrieved October 23, 2019, from https://childmind.org/article/best-medications-for-kids-anxiety/.

Wren, D. G., & Benson, J. (2004). Measuring test anxiety in children: scale development and internal construct validation. *Anxiety, Stress, and Coping, 17*(13), September, 227-240. Retrieved March 13, 2019, from https://www.andrews.edu/sed/gpc/faculty-research/montagano-research/measuring-test-anxie.pdf.