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The Effect of Art Therapy on Depression

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ABSTRACT

This literature review of thirty-one articles is about depression and art therapy. These articles describe several art therapy assessment tools that are used to detect depression and art therapy interventions used to treat the symptoms of depression. No valid and reliable art therapy assessment tool sensitive enough to detect depression has been developed to date. Art therapy, however, has been shown to be an effective method to reduce the symptoms of depression. Though the quantifiable results are inconclusive, the qualitative results have shown that providing art therapy interventions reduces the symptoms of depression. Art therapy complements Adlerian therapy as both are holistic approaches to mental health therapy.

Introduction

Depression is a serious mental health issue in today's world. It occurs in all age groups and in all parts of society. It affects one fourth to one third of women and one sixth of men sometime in life. Every tenth patient seen in primary care has a depressive disorder, but the depression is not diagnosed by a physician in half of these cases, (Hamre, 2006). The American Art Therapy Association defines art therapy as the therapeutic use of art making, within a professional relationship, by people who experience illness, trauma, or challenges in living, and by people who seek personal development (Betts, 2009). Art therapy can be used to both detect and treat depression.

Major depression is described in the Diagnostic and Statistical Manual of Mental Disorders-IV-TR (DSM) as a depressed mood or loss of interest or pleasure in nearly all activities. In addition four symptoms, drawn from the following list, must be present: changes in appetite or weight, sleep, and psychomotor activity; feelings of worthlessness or guilt; difficulty thinking, concentrating or making decisions; recurrent thoughts of death or suicidal ideation, plans or attempts, (American Psychiatric Association, 2000; Swan-Foster, 2003). Depression can result from a chemical imbalance or a significant life event or the combined impact of both of these.

For generations, discussion about depression has been taboo. Recently, however, the general population has started talking about depression. Now many employer sponsored health insurance plans cover depression detection and treatment under their mental health plan. There are many methods to treat depression, including pharmacological and verbal therapy treatment, which attempt to reduce depressive

symptoms. Art therapy, which includes painting, drawing, and clay sculpture, has been shown to be an effective method to reduce symptoms of depression.

Art therapy, like classic psychotherapy, makes the unconscious conscious which leads to insight and change. Repressed psychic material becomes the stimulus to the art product and will surface through the creative process. The art work brings forth symbols that are loaded with personal significance. The art makers project inner feelings, needs and conflicts into their art work and produce ideas that open up exploration, understanding and analysis. Through the discovery and unveiling of feelings the clients better understand themselves and their problems, (Johns, 2004). Creative expression helps to modify an individual's emotions and derive benefit from such modification. It contributes to: positive mood, to a sense of confidence in personal efficacy; novel, effective and authentic expression, and to more complex cognition that contributes to problem solving through diverse interpretations of material (Field, 2008).

Art therapy has been used in the treatment of mentally ill persons for more than 100 years. During the 1940's, the field of art therapy was named and schools began training masters degree therapists in art therapy during the late 1960's. The field is relatively new but it is increasingly gaining recognition for treatment of mental health issues. As holistic approaches become more popular in the medical community, alternative treatments have begun to append or replace traditional medical treatments. Art therapy is especially well suited because it helps bring to consciousness thoughts and feelings that would otherwise remain unexpressed. Because of the universality of art expression, one does not need excellent communication skills to express complex thoughts. It is especially well suited to children and persons with communication

difficulties. The product of the art therapy is reviewed by professionals but the most important output is how clients choose to interpret, with form, action, and words, whatever they perceive the "message" to be (Pifalo, 2002). Art therapy facilitates a person's expression of feelings and self understanding which can lead to decreased depressive symptoms (Gussak, 2004).

Art therapy has also been used to detect the presence of emotional distress and depression. Art therapy can be used as an effective treatment for depressive symptoms in a variety of specific populations. There are periods in life in which depression is more prevalent such as: following childbirth, while someone is imprisoned, after experiences of trauma, during isolation—due to an illness, and as elderly persons (Doric-Henry, 1997; Gussak, 2004, 2006, 2009; Henderson, 2007; Perry, 2008; Pifalo, 2002, 2006; Ponteri, 2001; Wallace, 2004).Thirty articles about art therapy used in connection with depression have been read and the results have been compared. Seven of the studies used art therapy to detect depression and twenty-three of the studies used art therapy to treat depression. The populations tested varied from child and adolescent sex abuse victims to elderly nursing home residents. The measures used range from quantitative indexes to qualitative therapist observations of artist and drawing qualities.

A personality concept called Locus of Control (LOC) has been linked to depression. LOC is the term assigned to the degree of control that one feels he or she has over their environment. When someone believes that outside forces control their behavior, either by chance or through powerful others, it is referred to as external LOC. Persons having internal LOC believe that important outcomes are determined by their own efforts and abilities and they have a sense that one can control their own destiny. A

strong internal LOC indicates that a person accepts responsibility for their own behavior. The more internal LOC that one has, the less they are depressed (Field, 2008; Gussak, 2009; Salmon, 1999).

Working in a group setting can have many benefits. The pictures made by other clients often display experiences, feelings, and conflicts which are common but which the art maker may believe is unique to them. Shameful feelings are recognized without explanations and are thus made more accessible to exploration, understanding and acceptance. For some clients it is less threatening to draw these feelings than to talk about them. Some might be unwilling to talk about their own work but will show the group and welcome comments. The trust develops by the sharing of images and the affirmation and recognition of similar feelings and conflicts in each other's pictures. It is further increased by the shared activity of imagery making and special atmosphere that develops by sitting around the same table with art materials (Johns, 2004). Other reasons for using group work are: 1) Much social learning is done in groups, 2) Group members can learn from feedback and shared experience, 3) Group members try new roles, 4) Groups can be catalysts for developing latent resources and abilities, 5) There is time efficiency in assisting several people at the same time, 6) The group experience lessens the intensity of intimate private sessions (Field, 2008).

Women seem to have a greater frequency and intensity of depression than men. The factors associated with this is their tendency toward a lower social status, and learned helplessness generated by a lack of control over life (Field, 2008). Black women with HIV have subjective experiences of social isolation and stigmatization which manifests itself is symptoms of depression (Field, 2008). Female inmates struggle with

depression at a greater rate than male inmates due to their struggle to maintain intact families, the effort to sustain the parental role and care for children, and the need to deal with unsolved conflictual marriages or relationships all from the confines of prison (Gussak, 2009).

Identification and treatment of depression occurring during illness can have medical benefits. Depression can have a serious detrimental effect on the patient's quality of life. It can also lead to patients failing to comply with treatment for their disease and are associated with prolonged hospital stays (Bar-Sela, 2007). Depressed mothers can have a negative effect on their newborns. Children of depressed mothers are at a higher risk for major depressive disorders (Ponteri, 2001). Depression contributes to decreased quality of self-care, non-adherence to medication and high-risk behavior. Depression has also been found to lower immune functioning through decreased natural killer cell toxicity and lymphocyte reactions (Field, 2008). Effectively treating depression symptoms in cancer patients can facilitate patient adjustment, reduce symptoms, and may influence disease course (Puig, 2006). For Older adults, depression elevates the mortality risk by a factor of 5 (McCaffrey, 2007).

There are common themes of depression that are evident in drawings. Main themes of depressed clients include: hopelessness, isolation, little use of color, emptiness, lack of detail, and poor expenditure of effort, and height of figures compared to others (Wright, 1982). Art therapists would explore any indications of the above characteristics with their clients in a conversation about their art work.

Methodology

Depression measurement instruments will be discussed first followed by art therapy measurement instruments. The methodology used in the thirty-one articles will be divided into subheadings: art therapy for detection, and art therapy for treatment. The quantitative and qualitative findings will then be discussed separately. Finally, weaknesses in methodology overall will be identified.

Depression measurement instruments. These thirty-one articles used a variety of instruments to test for depression before and after the art intervention: Children's Depression Inventory (CDI) is an instrument that is used with children. The CDI has been designed to measure self-rated assessment of depressive symptoms for school aged children and adolescents. There are twenty-seven items quantifying symptoms such as depressed mood, hedonic capacity, vegetative functions, self–evaluation and interpersonal behaviors. It covers the consequences of depression as they relate to children and functioning in school and with peers (Ponteri, 2001).

An instrument used for hospital patients is the Hospital Anxiety and Depression Scale (HADS). HADS is a widely used instrument developed especially for populations suffering with physical illness. It is a questionnaire that has seven items reflecting depression and seven items reflecting anxiety. The patient answers each item with a score of 0 to 3. Possible scores for depression range from 0-21 for the depression portion. A score of 0-7 could be regarded as being in the normal range, a score of 8-10 indicating a mild to moderate problem, and a score of 11 or higher indicating a mood disorder problem and a score of 8-10 indicating a mild to moderate problem (Bar-Sela, 2007).

Populations of trauma victims can be administered the Briere Trauma Symptom Checklist (TSCC) or Posttraumatic Stress Diagnostic Scale (PDS). TSCC is a list of symptoms to identify anxiety, depression, posttraumatic stress, sexual preoccupation, dissociation, distress, and anger. This tool was administered as a pre-test and post-test in two studies. In the earlier study, the difference between the scores was not statistically significant, but in the follow-up study there was a statistical significance (Pifalo, 2002, 2006).

Cornell Scale for Depression in Dementia (CSDD), Multi Observational Scale for the Elderly (MOSES), Edmonton Symptom Assessment Scale (ESAS) are instruments used for the detection of depression in elderly populations. The CSDD is a nineteen item observational scale based on each participant's behavior in the week prior to completion. High scores are an indication of increased depressive symptomology (Rusted, 2002). The MOSES is a forty item scale based on behavior in the prior week. It score five separate factors: 1) self-care functioning (grooming, mobility etc); 2) disoriented behavior; 3) depressed/anxious mood; 4) irritable behavior; and 5) sociability and withdrawn behavior. Increased scores are an indication of decreased competence (Rusted, 2002). The ESAS is a 10-item patient-related symptom numeric scale developed for use in symptom assessment of palliative care. Patients rate the severity of each of the following nine symptoms on a 0-10 scale: pain, tiredness, nausea, depression, anxiety, drowsiness, lack of appetite, their well being, and shortness of breath. The global ESAS distress score is the sum of the clients' responses to these nine symptoms (Nainis, 2006).

For general adult populations the instruments used were the Beck Depression Inventory (BDI), Center for Epidemiologic Studies Depression Scale (CES-D), Symptoms Checklist Revised (SCL-90), and Hamilton Rating Scale of Depression (HRSD) and surveys specific to the population. The BDI is a standardized psychological assessment that consists of a questionnaire of 21 groups of statements used to ascertain the intensity of depression. The responses are weighted with a score between zero and three. The pre and post scores were used to ascertain change in level of depression (Doric-Henry, 1997; Gussak, 2006; Henderson, 2007). In a comparison of the BDI and the HADS, two self-report measures, the BDI-SF (Beck Depression Inventory-Short Form) performed better than the HADS-D (Hospital and Anxiety Scale-Depression only) in identifying cases of DSM-IV major and minor depression (Love, 2004). CES-D is one of the most common screening tests for helping an individual determine his or her depression quotient. It is a quick self-test that measures depressive feelings and behaviors during the past week. Symptoms Checklist Revised (SCL-90) is a ninety item inventory which assesses nine symptom dimensions and a summary score, the Global Severity Score (GSI) (Korlin, 2000; Thyme, 2007). The GSI is the best single indicator of the current level of distress. The nine symptoms are: somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism (Korlin, 2000; Monti, 2006). THE HRSD is an observer rating scale of depression identifying 21 items. A mean score of 50 could represent depression (Thyme, 2007).

Zung Self Rating Scale for Depression (SDS) is a widely used self-rating depression scale used during the 1980's (Wright, 1982). Profile of Mood States (POMS)

is a sixty-five item paper-pencil instrument to assess six dimensions of affect or mood: tension/anxiety, depression/dejection, anger/hostility, vigor/vitality, fatigue/inertia, and confusion/bewilderment. The items are a list of adjectives or phrases to which participants respond by indicating the extent to which the phrase describes how the participant has been feeling "during the past week including today". Responses are made on a 5-point scale ranging from 1 (not at all) to 5 (extremely) (Montgomery, 2004; Puig, 2006). Scores that form each of these scales can be combined to yield a total mood disturbance score. The POMS sub scores can be used as a measure of psychological well-being (Puig, 2006).

The Mother Questionnaire (MQ) is a self-administered 20-item survey developed to assess the mother's image of herself as a parent. The questionnaire posed four questions for each of five areas linked to maternal depression: competency, external support, guilt, self-image, and interaction with child (Ponteri, 2001).

Focus group interviews conducted upon completion of the study provided the qualitative assessment data for the study (McCaffrey, 2007). On the final day, the participants were gathered for two hours to discuss open-ended questions: What did you like about the program? What did you find most helpful in terms of improving mood and lifting sadness? What did you not like about this program? What would you like to see done differently when this program is offered again?

Art therapy measurements instruments. There are certain characteristics that are evident in the work of depressed artists: 1) less color, 2) more empty space, 3) more constricted, 4) more disorganized, 5) less investment of effort or less complete, 6) more meaningless, either 7) more depressive affect, or 8) less affect (Wadeson, 1971).

Faintly sketched drawings, or drawings that take up limited space on the page provided hints at the illustrator's fragile sense of self, or his or her experience of powerlessness or helplessness. Drawings that contain hollow spaces and shapes can illustrate a sense of emptiness. Loneliness and anxiety are sometimes indicated in stereotypical images (houses, trees, nature), bizarre coloring, harsh line quality, and isolated and inaccessible figures (Julliard, 2002). There are visual indicators in the human figure drawing that indicate symptoms of depression. Some of the indicators include: lack of details, smaller size or place, placement in corners, faintness of drawings, finding increased empty space, constriction, the use of one color to outline a form, lack of color or increased use of darker colors, unusual placement, and less investment or effort toward completion as possible (Swan-Foster, 2003).The art therapy measurements aim to standardize the assessment of the above characteristics in clients art work.

There are many measures that art therapists use to identify the presence of depression. Among them are: Diagnostic Drawing Series and the Tree Rating Scale (DDS), Human Figure Drawing (HFD) and the Koppitz System of assessment, Formal Elements of Art Therapy Scale (FEATS) using the Content Talley Sheet, Prenatal Art Therapy Intervention and Inventory (PATII), Draw A Person (DAP), and Kinetic Family Drawing-Revised (KFD-R) and the Family Drawing Depression Scale (FDDS). Each of the assessment tools look at different characteristics of the drawings. The DDS is a series of three drawings: 1) make a picture using these materials, 2) draw a picture of a tree, and 3) make a picture of how you are feeling using lines, shapes and colors. Included with this instrument is a tree rating scale which facilitates the review in the evaluation of the tree drawing.

A second tool to determine the presence of depression is HFD, which is used for children using the Koppitz rating system and is designed to determine developmental level of the artist as well as emotional indicators present in the drawing. Koppitz interpreted HFD's based on: 1) the child's approach towards life's problems, 2) attitudes towards significant events, and 3) attitude toward self. It contains 30 scoreable emotional indicators (EI's) that are divided into three sub categories: a) quality signs-nine signs that indicate drawing quality, b) special features-includes features such as under or oversized head, crossed eyes, presence of teeth, arm length, genitals, a monster-like quality of the figure, and number of figures, c) omissions-the absence of certain body parts including eyes, nose, mouth, body, arms, legs, feet, and neck. A drawing scored as having two or more EIs indicates emotional disturbance (Packman, 2003; Tielsch, 2005). The Koppitz system has been widely used to assess psychological stress in ill and bereaved children and it has a scoring system that is straightforward. The scoring system includes examples of what would or would not qualify for each of the 30 emotional indicators. The Koppitz system also has high inter-rater reliability (Packman, 2003).

The third diagnostic tool, FEATS, is composed of a 14 point scale focusing on such characteristics as: prominence of color and color fit; implied energy; space; integration; logic; realism; problem-solving; developmental level; details; line quality; person; rotation; and perseveration. This rating guide was designed primarily to assess the presence of: 1) Major depression; 2) bipolar disorder; 3) schizophrenia; and 4) delirium (Gussak, 2004, 2006, 2009). This assessment tool has found that graphic indicators of Alzheimer's' disease (AD) are recognizable using the FEATS rating scale.

These indicators include: regression; perseveration; simplification; fragmentation; disorganization; distortions; perceptual rotation; overlapping configurations; confused perspective; the presence of short scattered lines; small or cramped appearance; an overall impoverished appearance where essential details are omitted from the drawing; and apparent difficulty in comprehending or following directions (Stewart, 2004).

The KFD-R is a fourth assessment designed to give information about self-concept and interpersonal relationships. It is structured to assess feelings and attitudes (Packman, 2003). The art directive is, "Draw your family doing something together" (Packman, 2003; Wright, 1982).

A fifth and lesser used assessment tool is the Prenatal Art Therapy Intervention and Inventory (PATII). It is a structured art therapy intervention using four specific drawings to document the psychological and emotional prenatal experience that is not usually addressed through traditional medical care and advanced technology. This tool is used for pregnant women. This series of drawings contain a time-directed experience that supports and encourages the process of attending to emotions, integrating a new identity, and preparing for childbirth and postpartum. The drawing directives are: 1) "Draw yourself pregnant"; 2) "Draw a fear or conflict"; 3) "Give the fear or conflict what it needs"; and 4) "Draw a pregnancy circle". The questions directed to the artists after the drawings are completed are: a) "What do you see?", and b) "How do you feel?" (Swan-Foster, 2003).

In a sixth tool, Person Picking an Apple from a Tree (PPAT), the directive is "Draw a picture of a person picking an apple from a tree." The drawings were assessed using the FEATS rating scale to identify diagnoses. Reviewing how the person is able

to pick the apple is the identification of the artist's problem solving skills (Gussak, 2004, 2009; Stewart, 2004; Wallace, 2004).

The HTP Instrument is a seventh tool in which the participants were provided a number 2 pencil and paper and asked to draw a house, a tree, and a person. For the study conducted by Wallace, the participants were also provided with Mr. Sketch markers and instructed to draw your favorite kind of day (Wallace, 2004).

An eighth tool uses the KFD-R directive and the FDDS rates the drawings with a system that includes fifteen subscales: five are based on objective measurements- number of colors used, size of self, isolation objective (measured distance between self and others), and empty space; ten scales are measured subjectively-organization, isolation of self subjective, isolation of family, detail, sexual differentiation, energy of self, energy of family, interest of self, interest of family, and hopelessness (Wright, 1982).

Art therapy for detection. The studies that were attempting to detect depression in various populations started with persons who had already been diagnosed with depression or persons who were at risk for depression. One group studied tested the DDS with persons who had already been diagnosed with major depression. Using the tree rating scale for evaluation, the participants were directed to "draw a picture of a tree" (Morris, 1995). The second population studied was pregnant women who were in their second or third trimester. These women fell into one of three groups: low risk patient, high risk inpatient and high risk outpatient. They were asked to draw themselves pregnant (Swan-Foster, 2003). The third study consisted of donor and non-donor siblings of pediatric bone marrow transplant patients who were instructed to draw

a real person(Packman, 2003). The fourth study consisted of pediatric and young adult renal transplant recipients who were asked to draw: 1) favorite kind of day, 2) a house, a tree and a person, and 3) a picture of a person picking an apple from a tree (Wallace, 2004). A fifth study used the DDS to identify themes of stress that would lead to depression (Julliard, 2002).

A study using the HFD had self-selected or recruited participants and the low risk group was the quasi control group (Swan-Foster, 2003). The participants were provided a variety of art materials: 11" x 14" white paper, pencils, markers, oil crayons, pastels, watercolors that were limited to colors: red, pink, orange, blue, dark green, light green, purple, magenta, turquoise, brown, white and black. The art directives for the PATII are: 1) Draw yourself pregnant; 2) Draw a fear or conflict; 3) Give the fear or conflict what it needs; 4) Draw a pregnancy circle (Swan-Foster, 2003). From the total of 240 drawings collected using the PATII, thirty drawings were selected for HFD using the FEATS and the Content Tally Sheet for scoring. In a study of siblings of pediatric bone marrow patients the participants were provided a sheet of 8 ½" x 11" white paper, a number 2 pencil and an eraser. They were instructed to draw the whole person (Packman, 2003).

In a study that tested the Family Drawing Depression Scale (FDDS) clients were provided a sheet of 8 ½" x 11" white paper, seven pencils (orange, brown, green, blue, red, yellow, and black) and an eraser. The participants were instructed to "draw a picture of your family members doing something" (Wright, 1982).

There was not a control group in the forty-four siblings of bone marrow transplant patients study (Packman, 2003). A study that started with three groups of patients diagnosed with multiple personality disorder, major depression, and

schizophrenia had a control group that was also assessed with the tree rating scale of

the DDS (Morris, 1995). The purpose of the study of renal transplant patients was

undertaken to discover if there was depression among the pediatric and young adult

recipients who were in isolation (Wallace, 2004). The depression instruments used to

verify the diagnoses were: PATII (Swan-Foster, 2003), and the CDI (Packman, 2003;

Wallace, 2004). Those with the major depression diagnosis had already been evaluated

(Morris, 1995). The art therapy interventions in these four studies were simple drawing

directions: "Draw a picture of a tree", "Draw yourself pregnant", "Draw a whole person",

"Draw a house", and "Draw a picture of a person picking an apple from a tree". In a

detection study, participants were instructed to, "Draw a picture of a tree". In the

process of drawing the tree, the individual creates a self portrait which is a projection of

the self (Morris, 1995).

The authors used various art therapy instruments to rate the drawings: tree rating

scale from the DDS (Morris, 1995), FEATS (Swan-Foster, 2003; Wallace, 2004) and

HFD (Packman, 2003). These instruments are more standardized instruments and offer

some reliability of ratings.

Included in the art therapy for detection are two studies that used art directives

that are particular to their populations. In a study about stress the family practice

residents were given three pieces of white 18" x 24" drawing paper and asked to

express their feelings about 1) the last completed year of residency, 2) the stress

experienced during that year, 3) the sources of support and rejuvenation that helped

them to deal with that stress (Julliard, 2002). In a study about disappointment,

dependency and depression, air force personnel were provided three pieces of 8 ½ " x

11" white paper and eight fine tipped markers and asked to: 1) "Draw an aircraft in an environment that represents how you presently feel about your military career", 2) "Draw an aircraft in an environment that is representative of your expectations at the time of your enlistment", 3) "Draw an aircraft in an environment depicting how you foresee your future in the military" (Salmon, 1999).

Art therapy for treatment. The art interventions were quite varied when art therapy was used for treatment. Some of the art interventions were creating in a three dimensional media. In a study of elderly participants, there were eight one-on-one pottery making sessions. This study included the entire ceramic-making process: wedging, throwing, drying, trimming, bisque-firing, glazing, and glaze-firing (Doric-Henry, 1997). A study of sexually abused children and adolescents used clay to create shapes or symbols to represent the people who were significant in your life, either positively or negatively (Pifalo, 2002). In a study of prison inmates, model magic was used to create a self symbol (Gussak, 2009). In a study of HIV positive black women the media was doll making (Field, 2008). In a study of women with postnatal depression, mothers were instructed to create a greeting card and design a baby nursery (Perry, 2008).

An art intervention for depressed mothers whose aim was to draw out feelings involved the creation of a box. Inside the box they put sculpted clay symbols of events or people that made them want to scream (Ponteri, 2001). In two studies of sexually abused children and adolescents, a shoe box was decorated to create a holding environment for the many complex and conflicting feelings that result from having been sexually abused (Pifalo, 2002, 2006).

In a study of college students with post traumatic stress disorder, crayons and paper were provided for them to create a mandala and to write a description of the symbolic meaning of their mandalas. The art directive in mandala drawing is a process in which clients are each given a piece of paper with a circle on it and asked to express their thoughts and feelings. It is a basic tool for self awareness, self-expression, conflict resolution, and healing. It is an artistic task that lends itself particularly well to the symbolic expression and disclosure of a traumatic event. The mandala serves as a symbolic representation of emotionally laden and conflicting material, yet at the same time provides a sense of order and integration to this material (Henderson, 2007).

Mandalas can also be predesigned geometric forms that are given to a patient to color. The basis of color therapy is that when individuals color complex geometric forms, they are provided an opportunity to suspend their "inner dialogue" and to deeply engage in an art activity that removes them from the flow of negative thoughts and emotions that can sometimes dominate their lives. Coloring the symmetrical form of the mandala with its repeating patterns and complexity purportedly can draw individuals into a state similar to meditation (Curry, 2005).

Some of the art interventions were focused on self reflection. In a study of depressed mothers and their children, the mothers created a lifeline of their strengths and successes to the present time and articulating positive goals for the future (Ponteri, 2001). A study of women with cancer had the participants draw a complete picture of themselves and after a guided imagery meditation of healing places, they were asked to draw their own healing place. At another session the women were provided materials for collage-making (Monti, 2006).

In Pifalo's studies of sexually abused children and adolescents, additional art directives were: the creation of two hand puppets 1) an abused child and 2) a perpetrator; designing a safe place; and using beads of different colors and shapes, the creation of a bracelet with each bead representing "who or what helped me" survive this experience (Pifalo, 2002, 2006).

Two different populations were directed to drawings of roads. Sexually abused children and adolescents were instructed to draw a road map of your journey (Pifalo, 2002, 2006). Prison inmates who were at risk for suicide were provided a 2B pencil, eight crayons and a large thick cardboard and were instructed to draw a road (Hanes, 2008).

Developing safety in the group was emphasized in some of the art interventions. In studies of prison inmates, the participants were directed to 1) draw on a paper and pass it to the person next to you, and 2) As a group design your ideal environment (Gussak, 2004). For the sexually abused children and adolescents, the directive was to choose from pre-cut puzzle pieces and decorate it with 'things I am willing to share with the group' (Pifalo, 2002, 2006).

The scribble technique is used to overcome client's inhibitions regarding the art process. Upon completion of rhythmic air motions, the client is encouraged to draw a continuous and unpremeditated fluid line. During this process, the art media (marker, pastel etc.) continuously touches the paper. After completing the scribble, the individual is encouraged to observe the shapes and forms created from a distance and various views. The individual then adds lines or colors as desired (Hanes, 1995; Thyme, 2007).

A technique that addresses emotions arising from each side of the brain is bilateral art. Patients from a family therapy center were provided 14" x 17" paper and marking papers. The left side of the paper was used for expressions of the left hand and the right hand side of the paper for the expression of the right hand (McNamee, 2004, 2006).

There were some exploratory art interventions as well. Participants from a psychiatric clinic in the north of Sweden were instructed to draw without aim: principally horizontal lines, then principally vertical lines. A following session they were instructed to let lines cross each other (Thyme, 2007). A group of women with cancer were instructed to explore the moment with the art materials provided (Monti, 2006). In a study of bone marrow transplant patients, the directive was to identify the main feelings or situations that the patients would like to express (Gabriel, 2001). A study of depressed cancer patients on chemotherapy included visits from an art therapist each week but the directives were non-specific and included: the use of colors, subjects of drawing, and technical options (Bar-Sela, 2007).

Of the twenty-three studies for the treatment of depression, there were: 129 elderly persons (Doric-Henry, 1997; McCaffrey, 2007; Rusted, 2002; Stewart, 2004), 9 bone marrow transplant patients (Gabriel, 2001), 13 women suffering from post- partum depression (Perry, 2008; Ponteri, 2001), an unspecified number of sexually abused children and adolescents (Pifalo, 2002, 2006), 235 prison inmates (Gussak, 2004, 2006, 2009; Hanes, 2008), y patients diagnosed with depression from 42 medical practices (Hamre, 2006) and 36 undergraduate students age 18-23 (Henderson, 2007), 69 cancer patients (Bar-Sela, 2007; Nainis, 2006), 16 clients of a family therapy center (McNamee,

2006), 39 women diagnosed with depression (Thyme, 2007),18 black women diagnosed with HIV (Field, 2008), and 60 psychiatric patients, (Hanes, 1995; Korlin, 2000).

The participants in the studies were referred based on a variety of different methods: willingness to participate in activities (Doric-Henry, 1997; Field, 2008; Gussak, 2009; Julliard, 2002; Korlin, 2000; McCaffrey, 2007; Rusted, 2002; Swan-Foster, 2003; Thyme, 2007) referred by a health professional (Bar-Sela, 2007; Gussak, 2004, 2006; Hamre, 2006; Hanes, 1995, 2008; McNamee, 2006; Monti, 2006; Nainis, 2006; Perry, 2008; Pifalo, 2002, 2006; Ponteri, 2001; Puig, 2006; Salmon, 1999; Stewart, 2004; Wright, 1982) or prescreened for post traumatic stress disorder (Henderson, 2007). Upon referral the participants had the option to refuse to participate. Nine of the studies included assessment before and after the art intervention with BDI (Doric-Henry, 1997; Field, 2008; Gussak, 2006, 2009; Henderson, 2007; Thyme, 2007) with Symptoms Checklist-90 (Henderson, 2007; Korlin, 2000; Monti, 2006; Thyme, 2007) with HADS (Bar-Sela, 2007) with the CSDD (Rusted, 2002), with the POMS (Henderson, 2007; Puig, 2006) and with the ESAS (Nainis, 2006) Mother Questionnaire (Ponteri, 2001), Trauma Symptom Checklist (Pifalo, 2002, 2006), CES-D (Hamre, 2006), a specially designed survey completed by a mental health worker (Gussak, 2004), and the TSCC (Pifalo, 2002, 2006). Two studies made only qualitative observations of the patients and their drawings (Gabriel, 2001; Perry, 2008).

Seven other qualitative studies did not use assessment instruments and each used a unique technique to work with their clients. One used a manual and art material kit developed by Memorial Sloan-Kettering Cancer Center and called it "The Creative

Journey". It offered a special framework based on the concept of blending 'concept and chance' and avoided the free artistic expression that can be threatening for cancer patients (Gabriel, 2001).

Another qualitative study used a program called "Time for Me" which focused on providing a supportive, relaxed and creative environment for women experiencing post natal depression. The creative part included art, music, and writing activities that were not superficially described (Perry, 2008). Two studies described the scribble technique and road drawing and presented a total of four case studies (Hanes, 1995, 2008). One study described the art therapist's experiences using the bilateral art technique (McNamee, 2006).

One study for older adults offered three alternatives to the seniors: a solo garden walk; garden walk with guided imagery; and art therapy sessions. The participants met in focus groups immediately after the last day to answer open-ended questions (McCaffrey, 2007).

Five studies randomly assigned participants to the experimental group and control group. One study of thirty-six undergraduate college students with symptoms of PTSD used mandala drawing as the art (Henderson, 2007). Another study of thirty-nine women diagnosed with depression had a group of persons receiving art therapy and verbal therapy and a group receiving verbal therapy only (Thyme, 2007). A third study of women diagnosed with HIV had a group of nine women receiving the art therapy intervention of art making followed by a discussion and the other group watched three comedy films followed by a discussion of the films (Field, 2008). A fourth study of one hundred fifty-six male and female prison inmates randomly assigned participants into

the control group or the experimental group (Gussak, 2009). A fifth study of thirty-nine

breast cancer patients were randomly assigned individual creative art therapy

interventions or a control group of delayed treatment (Puig, 2006)

   Quantitative findings. The tree rating scale of the DDS identified those who

used an average coverage of the paper, two to three colors, used line only, had an

unusual placement, and depicted a floating tree image. These characteristics were

consistent with persons who have been diagnosed with major depression (Morris, 1995)

FEATS was effective in identifying the group with the most depressive symptoms to be

those in the high risk outpatient group of pregnant women (Swan-Foster, 2003). There

was no correlation in comparison of the art therapist's evaluation and the scores from

the FEATS scales when pediatric and young adult renal transplant recipients when

studied (Wallace, 2004) and no statistically significant relationship between the scores

of the HFD, EI, and the KFD-R scores (Packman, 2003).

   All of the studies had small sample sizes. Four of the studies had 4 participants

or less (Hanes, 1995, 2008; Ponteri, 2001; Stewart, 2004) and the largest studies had

111 (Monti, 2006) and 156 participants (Gussak, 2009) respectively. Seventeen studies

had no control group (Bar-Sela, 2007; Gussak, 2004, 2006; Hamre, 2006; Hanes, 1995,

2008; Julliard, 2002; Korlin, 2000; McNamee, 2006; Monti, 2006; Nainis, 2006; Pifalo,

2002, 2006; Ponteri, 2001; Rusted, 2002; Stewart, 2004; Wallace, 2004). Eight of the

studies were qualitative only (Gabriel, 2001; Hanes, 1995, 2008; Julliard, 2002;

McCaffrey, 2007; McNamee, 2006; Perry, 2008; Stewart, 2004). The nineteen treatment

studies used a pre-post study methodology conducting data collected prior to and

following the art therapy interventions (Bar-Sela, 2007; Doric-Henry, 1997; Field, 2008;

Gussak, 2004, 2006, 2009; Hamre, 2006; Henderson, 2007; Korlin, 2000; Monti, 2006; Nainis, 2006; Packman, 2003; Pifalo, 2002, 2006; Ponteri, 2001; Puig, 2006; Rusted, 2002; Thyme, 2007; Wallace, 2004), and six studies included qualitative findings as well as the quantitative findings (Doric-Henry, 1997; Gussak, 2004, 2006; Henderson, 2007; Packman, 2003; Ponteri, 2001). Although the study of mandala making showed no statistical significance, the participants reported they were helped by the study (Henderson, 2007).

Qualitative findings. Art therapy lends itself best to the qualitative information that was obtained from the observation of the participants during the art intervention and of the characteristics of the drawings. To review the drawings, it is beneficial to examine the art in terms of conveying intense affect, sadness, isolation, despair, and weak lines. In this way a sense of depressed self emerges (Morris, 1995; Packman, 2003). Images that are developmentally repressed can portray feelings of hopelessness and a lack of detail and no evidence of connection between family members can indicate feelings of isolation (Packman, 2003). Sometimes just talking with the participant, as seen with children, during the time they are drawing may be a way to discover a depressed mood (Wallace, 2004).

Observations of participant mood changes were significant: from a passive mood to an active mood, from a state of distress to a calm state of mind, from a feeling of fragmentation to a sense of unity and from psychological isolation to a relatedness to others (Gabriel, 2001) from a quiet mood to a more animated cooperative mood (Gussak, 2004) from a pessimistic mood to a more positive attitude and demeanor (Gussak, 2004), and from a "chip on the shoulder" mood to a more interactive group

participant (Gussak, 2006). Women in postpartum felt their self esteem and confidence was boosted but some felt that they returned to their previous low feelings after the "Time For Me" program was completed (Perry, 2008). Graphic indicators of Alzheimer's' disease include: regression, perseveration, simplification, fragmentation, disorganization, distortions, perceptual rotation, overlapping configurations, confused perspective, the presence of short scattered lines, small and cramped appearance, and an overall impoverished look (Stewart, 2004).

One of the studies compared the results of the HFD and the KFD-R and discovered parallels that indicated emotional stress. If a patient's HFD exhibited signs of loneliness, depression, and distress because of the small figures, light and sketchy line quality, missing body parts, low energy, few details, and sad expressions, then it was likely that the KFD-R drawing also indicated isolation (Packman, 2003).

Three of the studies discussed locus of control. Two of them used instruments that measure a change in locus of control. The Adult Norwicki-Strickland Locus of Control (ANS) uses a pencil and paper questionnaire to assess interpersonal and motivational areas (Gussak, 2009). Another study used the Multidimensional Health Locus of Control Scale (MHLCS) which assesses beliefs about three sources of control over health outcomes. These are: Internality-the degree to which individuals expect outcomes to be consistent with their own behavior; powerful others the degree to which individuals expect outcomes to be consistent with the actions of powerful others; and chance-the degree to which individuals expect outcomes to be consistent with chance/random events (Field, 2008).

Weaknesses in methodology. There are some weaknesses in the methodology of these studies that have a major effect on the validity and reliability of the findings. The number of subjects tested was small. These small studies are interesting but are not enough to make conclusions of statistical significance or generalizations to larger groups of people. There is a lack of control groups in twenty of the thirty studies. This would affect the reliability of the research because there could be a maturation effect where someone with similar depressive symptoms had improved naturally as time passes. There could be other factors affecting the participants that could have an effect on the clients that may reduce symptoms of depression.

Client self evaluations, case program notes, and journal notes are helpful to describe a subject but non-verifiable for study validity. Using mostly qualitative findings can insert subjectivity to the findings. It also removes the confidence in future retesting to repeat the same results.

The quantitative findings are limited. Art therapy does not yet seem to have reliable quantifiable testing instruments. Each of the instruments had disadvantages that compromised their reliability. The instruments used to detect depression seem to have more reliability. Using a variety of proven depression indicators to document the presence/absence of depression brings reliability to the studies.

Generally the participant selection process was unscientific. In some cases the participants were handpicked by a unit mental health counselor or a primary investigator (Doric-Henry, 1997; Field, 2008; Gussak, 2004, 2006; Hanes, 1995, 2008; Korlin, 2000; McNamee, 2006; Nainis, 2006; Puig, 2006; Rusted, 2002; Salmon, 1999; Stewart, 2004; Thyme, 2007; Wright, 1982). The lack of randomness in participant selection in

the studies seems to bias the results toward persons who enjoy art and crafts type of activities. It reduces the validity of the results found as the activities were not presented to a cross-section of people.

There was a lack of consistency of instruments used. A generalized hypothesis is difficult to validate when the instruments are so different with varying strengths and weaknesses to each one. Use of a self created art therapy intervention instrument called "The Creative Journey" made the study less reliable as the art tasks included were not clearly described. It has importance only for those who had access to "The Creative Journey" (Gabriel, 2001).

There was a lack of consistency between therapists and directives used. When there were different art therapists working with clients and administering different art directives the reliability of the study was compromised. The clients were not receiving the same instructions given in the same way. Different personal styles between the art therapists can result in different findings. This challenges the validity of the study because all participants are not receiving a identical consistent art directive (Gussak, 2004).

<div align="center">Clinical Implications</div>

Art therapy can be used effectively to reduce symptoms of depression in a broad range of populations as indicated by this research. Art therapy can benefit those with low self esteem and high levels of depression (Hamre, 2006; Hanes, 2008; Korlin, 2000; McNamee, 2006; Morris, 1995; Perry, 2008; Ponteri, 2001; Thyme, 2007; Wright, 1982) as well as cancer patients (Bar-Sela, 2007; Monti, 2006; Nainis, 2006; Puig, 2006), black women with HIV (Field, 2008) transplant patients (Gabriel, 2001; Packman, 2003;

Wallace, 2004), persons with cancer, and older adults (Doric-Henry, 1997; McCaffrey, 2007; Rusted, 2002; Stewart, 2004). The implications of art therapy used for detection will be reviewed separately from the implications of art therapy used in the treatment of depression.

Art therapy used for detection. The use of art therapy for detection of depression was successful with persons diagnosed with major depression in a pilot study conducted by Maureen Batza Morris. Using DDS and the Draw a Tree Drawing, an indication of the inner state of each individual in the intervention group and patterns of similar representations found in this study provided insight into the relationship between pictorial structure and psychiatric diagnosis. Three groups of individuals previously diagnosed with multiple personality disorder, major depression, and schizophrenia were found to have distinguishing characteristics in their drawings of trees (Morris, 1995). In another classic study by Jesse Wright and Mary McIntyre persons diagnosed with depression family drawings of depressed inpatients are markedly different from those of normal controls and that the Family drawing Depression Scale appears to be a sensitive indicator of depression (Wright, 1982).

One advantage of art therapy is that it offered an uncensored view of children's thoughts and feelings, a nonverbal method of communication for those whose language skills are elementary, and a non-threatening means of assessment. When used with pediatric bone marrow transplant patients, HFD indicated that patients experienced considerable emotional distress including posttraumatic stress reactions (Packman, 2003). Art therapy can be used in the identification of pediatric and young adult renal

transplant recipients who are suffering from depression but the FEATS analysis tool seems to lack the sensitivity to warrant its use for this population (Wallace, 2004).

The use of art therapy with specific groups of women has shown to be helpful in the detection and treatment of depression. The use of the art therapy intervention HFD and the FEATS scoring instrument on pregnant women investigated prenatal emotions or psychological distress and indicated that those in high risks groups consistently scored low, suggesting a tendency for depression. Those in a low risk group scored high indicating an absence of depressive symptoms. The differences between high risk and low risk groups were statistically significant in the areas of color, energy, space, details and person (Swan-Foster, 2003).

A 1982 study using the Family Drawing Depression Scale found that the drawings of depressed inpatients are markedly different than those of non-depressed persons (Wright, 1982). This early study spurred much of the more current research using art therapy to detect depression.

In a study to identify stress, three masters' trained art therapists identified themes of depression in the drawing of family practice residents. The study included men and women in American and international residency programs. The themes included: helplessness, isolation, loneliness, and overwhelming negative feelings (Julliard, 2002).

A study of Air force personnel found an inverse relationship between depression and dependency. As the indicators of depression became higher, the indicators of dependency turned lower (Salmon, 1999). The rating was completed by four second year students in an art therapy program who used rating scales that were user defined and therefore not tested for reliability and validity.

Art therapy used for treatment. Art therapy used in the treatment of depression has shown to be effective in several groups: specific populations of children and adolescents (Packman, 2003; Pifalo, 2002, 2006; Wallace, 2004), undergraduate students with PTSD (Henderson, 2007) cancer patients (Bar-Sela, 2007; Gabriel, 2001; Monti, 2006; Nainis, 2006; Puig, 2006), specific groups of adults including women (Field, 2008; Perry, 2008; Ponteri, 2001; Thyme, 2007), prison inmates (Gussak, 2004, 2006, 2009; Hanes, 2008), and senior citizens (Doric-Henry, 1997; McCaffrey, 2007; Rusted, 2002; Stewart, 2004).

Art therapy combined with verbal processing of relevant issues resulted in an overall reduction in symptoms of depression for childhood and adolescent victims of sexual abuse. Two studies conducted by Terry Pifalo quantifiably documented the effectiveness of art therapy along with cognitive behavior therapy in reducing symptoms of depression and PTSD (Pifalo, 2002, 2006).

Depression often is present with patients diagnosed with cancer. Both donor and non-donor siblings of pediatric BMT patients are experiencing considerable emotional distress including posttraumatic stress reactions. The use of art therapy interventions helped to reduce pain, stress, anxiety, and depression including feelings of isolation and helplessness (Packman, 2003). Results seem to indicate that creative arts therapy interventions were beneficial to breast cancer patients by reducing negative emotional states like depression (Puig, 2006).

For patients on oncology units, eight of nine symptoms including depression showed statistically significant reductions using the ESAS (Nainis, 2006). In a study of in and outpatients who came for oncology care (chemotherapy, radiotherapy, or follow-

up) there was a significant reduction in the depression score on the HADS (Bar-Sela, 2007).

Mandala drawing with 36 undergraduate students reported greater decreases in symptoms of depression, anxiety, and PTSD at the four week follow-up relative to those in a control group. This form of art therapy could supplement or be a substitute for verbal processing treatments for trauma victims. It is particularly well suited to those who due to personality features or cognitive factors are unable or unwilling to process traumatic experiences through verbal means (Henderson, 2007).

For women experiencing mild to moderate postnatal depression, a program called, "Time for Me", which integrated creative activities, group support and music, reduced the level of depressive symptoms. The use of creative arts can be used to complement conventional therapy (Perry, 2008). A study of high risk families who showed signs of substance abuse, mental illness, homelessness, domestic violence, a special needs infant and or the potential involvement of child protective services used group art therapy intervention to increase self esteem and self image for depressed mothers. Following treatment these women felt more competent as mothers. They explored their role as mothers, interacted with women in similar circumstances, and learned developmentally appropriate ways of interacting with their children (Ponteri, 2001).

Mindfulness-based art therapy (MBAT) used for women with cancer resulted in statistically significant decreases in symptoms of distress compared to the wait-list control group. Women cancer patients who received art therapy as part of a MBAT intervention demonstrated statistically significant decreases in symptoms of distress.

Changes in depression symptoms were more significant than the changes in anxiety symptoms. The MBAT intervention can help cancer patients improve the quality of their lives (Monti, 2006).

The use of art therapy in other adult populations in therapeutic care is also promising. The anthropomorphic (encompassing use of art, eurythmy, movement exercises or rhythmical massage) treatment of depression in a four year German study for adults with chronic depression resulted in improved depression scores by 50% compared with baseline CES-D scores. Through participation in the program, the frequency of experiencing depressive symptoms was reduced. This treatment is helpful for patients who are motivated for such therapies (Hamre, 2006).

In a study of psychiatric inpatient and outpatient facilities in Oslo, Sweden, more than half had a greater introspective ability and increased capacity of working with internal issues after participating in the creative arts groups. In all measures, female patients outperformed male patients (Korlin, 2000). A study comparing short-term psychodynamic art therapy with short term verbal therapy reported that participants had fewer depressive symptoms at termination of psychotherapy compared to the initial level and reported even fewer symptoms at the three month follow-up. The art psychotherapy and verbal therapy were comparable means for reducing depressive symptoms (Thyme, 2007).

Patients hospitalized for depressive episodes found that the scribble technique promoted self-awareness and confidence in their creativity. It also helped to express feelings and thoughts that otherwise would be denied or repressed (Hanes, 1995). Clients at a university family therapy center used the bilateral art technique to improve

positive elements rather than the distorted negative beliefs, which provided insight and increased client awareness (McNamee, 2006).

Art therapy with bone marrow transplant patients facilitated resolution of several emotional issues. It provided a vehicle for persons to communicate their unconscious feelings and to understand themselves better and to reach an inner peace. In addition, it provided them an opportunity to explore positive feelings, distressed moods, and existential/spiritual issues (Gabriel, 2001).

A study of black women diagnosed with HIV in which the experimental group engaged in doll making showed the levels of depression decreased significantly from pre-test to post-test using the BDI-II. Measures were taken immediately after and two weeks after the art psychotherapy intervention (Field, 2008).

Art therapy was effective in improving mood, socialization, problem-solving, behavior, and attitude. In addition it reduced depression in adult male prison inmates. After creating art, prison inmates became more willing to talk about personal information and were more in touch with their feelings. The results of the BDI-II support that art therapy was beneficial for the participants (Gussak, 2004, 2006). Results from a study of male and female prison inmates indicated that the each experimental group expressed significant decreases in depression (Gussak, 2009). Using "road drawings" with inmates, who were at risk for suicide, brought forth important information that might otherwise not be revealed. It is well suited to the diverse demographics of this population (Hanes, 2008).

 Creating pottery as an art therapy intervention resulted in reduced depression for an elderly population. Using the BDI post-test scores were significantly lower than at

pretest. Those most likely to benefit from a therapy intervention of making pottery were those with low self-esteem and high levels of depression and anxiety (Doric-Henry, 1997).

A multi-centre study provided clear evidence of positive and durable benefits to aspects of mental alertness, sociability, physical and social engagement in clients with moderate and severe dementia. The benefits extended to improved sociability in the wider day care setting (Rusted, 2002). However, upon further exploration, the date from the CSDD reported a significant increase in anxious/depressed mood for the art therapy group between baseline and the forty week assessment. This can be interpreted in more than one way: 1) it can be viewed as a response to the ending of the group as the incidence of increased depression coincided with the beginning of the discussions of the finishing of the group; 2) That clients were becoming more depressed simply through involvement in the group. This would contradict what the art therapists working with the client group observed. This brings up the question of therapist subjectivity (Rusted, 2002).

In a study of patients with advanced dementia, the patients were drawn in by the need for human companionship and by the colors and forms of various art media. They continued to express themselves as their cognitive skills decreased and their confusion increased (Stewart, 2004).

In a study of older adults with mild to moderate depression, all three groups experienced different benefits: exercise is therapeutic in the treatment of depression; a program of guided imagery garden walk joined the participants with others; and in the

art therapy group relationships began to build as the participants expressed themselves in their art (McCaffrey, 2007).

After using the bilateral art technique on clients with problems including relationship issues, depression, anxiety, and trauma, the behaviors following the intervention were more congruous with the positive elements than the negative beliefs holding their behaviors hostage prior to the intervention. The results were shown in reported scaling as well as client-reported and/or therapist-observed changes in behavior (McNamee, 2006).

<div align="center">Future Research</div>

The research in the use of art therapy for detection and treatment of depressive symptoms is limited. In order to make any significant generalizations there needs to be much more research. The studies of art therapy on any and all groups of participants must be increased in number of studies, populations studied and number of participants. At this time the use of art therapy as a detection device and a mode of psychotherapy is relatively limited compared to other modes of therapy. As it is used more frequently, the opportunities for more studies will increase.

Future research needs to utilize quantitative techniques. There is a need for more effective testing instruments that offer conclusive data. Art therapy is a relatively new therapeutic intervention and contains a high level of subjectivity. It is important to devise a more reliable testing instrument that can provide quantifiable data. The FEATS rating scale is a good instrument for two dimensional work and there needs to be considerably more usage and documentation in order to work towards a more fine-tuned refinement of the current testing instrument. Of the thirty-one studies review only

five used FEATS in reviewing the drawings (Gussak, 2004, 2006, 2009; Ponteri, 2001; Stewart, 2004). The quantitative problem becomes more complex as there is not at this time any way to quantify art as it relates to depression when the art making takes a three-dimensional form. There is not a rating tool that can quantify feelings that are derived from three dimensional works like sculpture.

Future studies should use a random selection of participants. Among the studies reviewed, there seems to be a practice of selecting participants by subjective methods. Some examples of the selection methods used are: one who is artistically inclined, one who shows an interest in art, one who is interested in participating; and one who has participated in a study before (Gussak, 2006). If the selection of participants was spread over a broader group of persons the studies would increase their validity. Of the thirty-one studies, only five randomly assigned participants into experimental and control groups (Gussak, 2009; Henderson, 2007; McCaffrey, 2007; Rusted, 2002; Thyme, 2007).

There is a need for future studies to have control groups so that the participants who receive the art interventions can be compared to participants in the same situation who are not receiving art interventions. Not all studies lend themselves to control groups but some do. Some of the studies are qualitative studies and don't have control groups or test a particular art therapy technique and merely describe a change in symptoms or behavior (Bar-Sela, 2007; Hanes, 1995; Julliard, 2002; Korlin, 2000; McNamee, 2006; Nainis, 2006; Puig, 2006; Salmon, 1999; Stewart, 2004). Having control groups would help to reduce the possibility of skewed data.

When future research is performed, it is of great importance for the participants to receive consistent art directives. The art therapy intervention should be given using the identical words for each group tested. There should be no opportunity for personalization by the art therapist. For an experiment to be valid all variables must be alike. When the consistency is taken away, the validity is also compromised.

There seems to be a need for more longitudinal studies. The post-tests were given immediately following the art therapy interventions. It would be worthwhile to test six months and twelve months following the art therapy intervention. In order to make a statement about art therapy's benefits, it would be necessary to get follow-up data from an extended period afterward. Only one study reevaluated the patients for a longer term (Hamre, 2006).

<div align="center">Discussion</div>

Some of the studies were more scientifically designed than others. When a study uses a self-designed rating instrument like the "Mother Questionnaire" and the "Creative Journey," although it serves a purpose, it makes it difficult to generalize the results across broader populations. There is a common link among these studies that the creation of art can be enjoyable and helpful in dealing with depressive symptoms.

Although the FEATS scale and the tally content sheet have been used most often, the results are inconclusive. In one study using FEATS, the sample of four mother-child pairs made the quantitative results insignificant (Ponteri, 2001). FEATS was used in two different prison populations and in both studies there was no change overall in the pre and post FEATS scoring (Gussak, 2004, 2006). There is reason to address the validity and the reliability of the FEATS as an evaluation instrument. FEATS

and KFD are tools that need to be refined as evaluation tools to make them more reliable for assessment purposes (Gussak, 2004, 2006, 2009; Packman, 2003; Ponteri, 2001; Stewart, 2004; Swan-Foster, 2003; Wallace, 2004; Wright, 1982).

The wide variety of evaluation instruments makes it difficult to compare results. There is a need to complete additional studies using the same art intervention, the same art directive, and the same depression measurement instrument. Using a variety of art interventions, art directives, and measurement tools can lead to a variety of results and reduce the validity of the research.

Sample size was a continuing challenge in these studies with only three mother-child pairs completing one study (Ponteri, 2001), and 156 participating in the largest study (Gussak, 2009). Six of the studies had fewer than 10 participants (Gabriel, 2001; Hanes, 1995, 2008; Perry, 2008; Ponteri, 2001; Stewart, 2004). Future research should include larger populations.

Because the participants had the opportunity to refuse the studies there could be a selection bias where only the participants interested in art activities would benefit from art therapy (Gussak, 2006). There is a need for more studies where persons are not given the option of participating to see if everyone can benefit from art therapy or only the persons that are artistically inclined. If individuals were randomly assigned to two groups (one control and one experimental), rather than given the option to participate in the study, the study would hold more validity.

Future research should include art therapy as the only therapeutic intervention used. When the art intervention is in a program that contains other therapeutic interventions, it clouds the effect of the art intervention. Five of the studies had an

intervention in which art was a component but also included cognitive behavior therapy (Pifalo, 2002, 2006), music and creative writing (Perry, 2008), Meditation (Monti, 2006), movement exercise and rhythmical massage (Hamre, 2006), music therapy with guided imagery (Korlin, 2000), body awareness group (Korlin, 2000; Puig, 2006), occupational therapy group (Korlin, 2000) verbal therapy group (Korlin, 2000). The Creative Journey used by Memorial Sloan-Kettering Cancer Center was not described enough to get an idea what it contained (Gabriel, 2001).

To validate art therapy's effectiveness there should be a long term follow-up of at least 12 months after the art intervention. Another dimension of this study is how long the art therapy would have an effect on a client. More longitudinal studies would help to make that determination.

There is a difficulty in doing studies with older adults. After beginning a study the opportunity for the adult to experience further declines in health during the study is very high. After age eighty the chances for the onset of dementia, heart and lung ailments and even death is quite high. This phenomenon makes it difficult to perform longitudinal studies and gain reliability with elder adults.

<center>Art Therapy and Adlerian Psychotherapy</center>

Art therapy is one of many holistic therapies. It is a therapy that treats the individual as a whole: mind, body and emotions. A major tenet of Adlerian therapy is the whole is greater than the sum of its parts (Oberst, 2003). Art therapy works in a holistic way. Through the creation of art, feelings are uncovered and clients express their thoughts visually. While reviewing the work with their therapist, clients are able to reveal emotions that otherwise would remain hidden.

Alfred Adler believed that everyone experiences feelings of inferiority due to dependence upon adults as a child (Oberst, 2003). It is when the feelings of inferiority become overwhelming that persons become discouraged and fall into depression. At this time, individuals fear defeat more than they desire success. As demonstrated by the studies reviewed herein, art therapy shows great potential benefit for detection and treatment of depression.

Art therapy helps individuals realize their uniqueness in their expression of art. An art therapist's goal is not to get their clients to create great works of art as much as it is to get their clients to express their thoughts and feelings. The art therapy directives are designed to help the therapist learn more about their clients and help the clients learn more about themselves. Through the creation of art, the art therapist helps the clients realize that they are unique and that their feelings are valid. Through a conversation in which the art is described by the client, the art therapist learns about the clients' lifestyle.

Lifestyle is a major tenet of Adlerian therapy and refers to the way in which clients perceive and react to their life and their environment. Doing a lifestyle analysis on clients is the way the therapist discovers how the clients understand themselves in their own life situation. Through art and the clients' description, the art therapist learns how they think about their life and their perception of problems. The therapist helps clients to understand their own behavior.

Encouragement is a major goal of Adlerian therapy. The art therapist's aim is to encourage the creation of art in whatever way it comes forth. In encouragement, a therapist acknowledges the effort made by the client (Oberst, 2003). More important

than what is created, is what it depicts for clients. Often at first, clients are so unsure of their artistic abilities that they want to create something tangible that is craft-like. As they become comfortable with creating art, they may move on to colored pencils. When they realize their effectiveness in expressing themselves, they get into pastel painting, watercolor painting, or the creation of sculpture. Upon becoming comfortable with their creations, the clients form a sense of pride in the telling of their story and their products.

The use of an art medium to reveal feelings can be less stressful than verbal therapy. Many times, thoughts and ideas come up in a piece of art that would never be discussed in verbal therapy. When the directive is to make a piece of art that represents a difficult time for you, the artist can add details that would not have been verbalized in talk therapy. The art process engages a part of the brain that is not involved in verbal communication. A mother and her adolescent son were each directed to draw a representation of their relationship. The mother afterwards admitted that she was not aware of how unhappy her son was with the relationship.

The simple creation of art is a therapeutic experience. Older adults found working in watercolors very gratifying. For some, it was the highlight of their week. Living with a body that is declining can be very distressing. The routine of the nursing home can lead to boredom. The passivity that can be present in a nursing home situation leads to further decline. Helping these elder adults discover an activity that they can do lifted their spirits tremendously. The intense concentration of elder painters is therapeutic and can reduce the rate of mental decline. Their excitement to come weekly to paint gave them great satisfaction and gratification.

On the pediatrics floor of a major medical institution, children with serious medical conditions come to the art room to get a relief from the hospital routine. An eleven year old girl who had a kidney transplant three day earlier came to create a sculpture of one of her "monsters" with play dough. She talked about her surgery and relaxed in the art setting. Leaving her hospital room to join us for an hour and talk about what had just happened to her was therapeutic. Another day an eight year old boy joined the group and after painting awhile he said, "My brother died today". He went on to explain what it was like for him and his parents right after the death of his brother who had been sick for a long time.

Adler felt that social interest was an innate potential that is part of everyone and should be developed (Oberst, 2003). An art therapy group brings people together with the common goal of creating art. In the process, conversations occur and relationships develop. The sharing between the members of the group help the clients grow in their own social interest.

Art therapy used at an autism day treatment program has helped the four and five year old preschoolers in the development of their social skills. The projects often had one and two step directions for the children to follow. Making sure that there is not enough supplies for each to have their own helped them practice sharing. They learned to enjoy the process of the work and spend time deliberately making decisions about their projects instead of just rushing through the activity.

Sometimes the art therapy session is a time for the client to just work on their art and forget their problems. At a shelter for victims of domestic abuse, the moms work with their children on their art projects. Because of their "crisis" situation, the goal is to

help them remove themselves emotionally from their struggles and spend some quality

time with their children. A favorite project is to decorate a cigar box with ribbons,

decorative papers and magazine cutouts and provide a place for them to place

keepsakes in this uncertain time of turmoil in their lives. The time they took to carefully

select their coverings for the boxes was thoughtful and peaceful.

Art therapy is compatible with Adlerian therapy and shares several of the same

tenets. It is holistic, seeks to discover clients' thoughts and feelings, helps to facilitate

understanding for the clients and provides relief from psychological problems through

the creative process. As its use becomes more pervasive, it will become a greater part

of the therapeutic community.

<div align="center">Conclusion</div>

The creation of art can enhance clients' understanding of themselves, improve

mood from passive to active and from a state of distress to state of calm, from feeling of

fragmentation to sense of unity (Gabriel, 2001), helps express feelings that may not be

conscious (Gussak, 2004), and reduces feelings of isolation when created in a group

setting (Gabriel, 2001; Gussak, 2004). The literature reviewed suggests the positive

effect that art therapy has on the treatment of persons with depressive symptoms in a

variety of specific populations. The populations studied are varied and ages range from

childhood, through adulthood and into retirement. Just as depression is suffered

throughout all age groups, art therapy can provide an effective method of treatment for

the symptoms of depression. Despite its apparent benefits, the use of art therapy in the

detection of depression has yet to be standardized. The positive effect of art therapy as

treatment has only begun to be acknowledged. As it is used more and more, art therapy

will be a quantifiable therapeutic intervention that will detect depression and yield

decreased depressive symptoms. More thorough and longitudinal testing of art therapy

in the future will provide the important information needed to use art therapy as a

reliable therapeutic intervention to detect and treat depression.

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