

A STUDY OF ART THERAPY WITH SED ADOLESCENTS SUFFERING FROM  
CHRONIC STRESS

by

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## INTRODUCTION/BACKGROUND

Among survivors of complex trauma, or multiple, repeated experience of child maltreatment, the typical clinical presentation includes problems with adolescent's self-concept, emotional and behavioral self-regulation, and academic and interpersonal functioning. These adaptations to chronic stress are not fully captured by the diagnosis of Post Traumatic Stress Disorder (PTSD) and include difficulty with regulation of the following: 1) Affect and impulses (upset or angered easily, trouble calming down, impulsivity, self-destructive behaviors), 2) Somatization and physical health (e.g., multiple, chronic physical complaints, autoimmune disorders, 3) Attention and information processing (dissociation), 4) Self perception (e.g. self as damaged, shameful, guilty), 5) Sense of meaning and purpose in life (hopeless and pessimistic about the future), and 6) Interpersonal relationships(e.g. problems with trust, assertiveness, multiple unstable relationships).

### *Post-Traumatic Stress Syndrome*

The origins of the concept of the Post Traumatic Stress Disorder (PTSD), which has received a great deal of attention from researchers over the last twenty years, can be traced back to the 1600's. Evidence of trauma-related symptomatology can be found in the writings of Shakespeare (Trimble, 1985). During the 1800's British surgeons used the term "nervous shock" to refer to the psychological trauma which affected individual after they had been involved in a serious train collision. In the early 1900's, Freud used the term "Psychoneurosis" to describe both the symptoms and the etiology of the disorder.

One important precursor of the PTSD concept was that of “shell shock,” a term coined by doctors to describe the traumatic experiences of World War I soldiers.

The legitimacy of the concept is attested to by the inclusion of the Post Traumatic Stress Disorder (PTSD) classification in DSM-IV (American Psychiatric Association, 1994). Although academic discussions of PTSD originated in studies of the traumatic experiences of Vietnam veterans, the last decade has seen an ever-broader application of the concept. PTSD has now been used to better understand the experiences of victims of natural disaster, violent crime, and childhood sexual abuse. The applicability of the concept is related to the criteria that precipitating stressor should lie outside the range of normal human experience.

The model of stress and coping implicit in the PTSD concept can be traced back to the pioneering work of Hans Selye (1956, 1974). Selye observed that exposure to stressful events was associated with certain physical and chemical changes in the body. According to Selye, each individual’s body has the ability to combat the wear and tear of exposure to stress; however, some individuals are more resistant to stress than others. If the psychological and emotional stressors are maintained over an extended period of time, the results may include both physical and psychological illness.

One of Selye’s major theoretical contributions was his theory of the General Adaptation Syndrome (GAS). The GAS model argues that the individual’s reaction to stressful life event proceeds through three stages.

1. Alarm and mobilization, during which the body mobilized its defensive forces against stressors, which might include nervous tensions, wounds, infections,

or poisons. Selye later generalized his theory to recognize that psychological stressors can have a similar detrimental effect on the body and mind.

2. Resistance, a period during which the body is able to sue its available resources to ward off the potential detrimental effects of stress. In this phase, the body's adaptation is biologically optimal in terms of effective utilization of bodily resources. During this phase the body demonstrates an increase in nervous system and endocrine activity as the body strives to return to a state of equilibrium.
3. Exhaustion, the phase during which the body's resources are no longer adequate to combat the wear and tear caused by the chronic exposure to stressors. The body's resources become depleted and the individual loses his or her ability to resist. Over an extended period of time, as the stressor remains present and the body continues to be challenged, a state of exhaustion may be reached.

There has been a great deal of empirical support in the scientific literature for the validity of Selye's theory. Arthur (1987), in a review of a broad range of research literature, reported that adrenocortical hormonal levels were clearly more elevated during periods of anticipation than during the confrontation itself. Numerous researchers, using both animal and human subjects, have found that cortisol levels actually decreased during times of confrontation as compared to the anticipatory stress periods leading up to the actual crisis event. The implication of these findings is that the build-up of hormones may function to prepare the organisms for confronting the stressful events. In humans,

this preparation may take the form of avoidance, escape, or some other mitigating behavior.

One of the primary symptoms of PTSD is the reoccurrence of intrusive imagery that continually re-traumatizes the individual; over a period of time a circular cause-and-effect pattern may develop. Mason (1990), in a study of the effects of intrusive imagery and chronic distress, points out that intrusive and uncontrollable images and thoughts may serve to maintain the stress response long after the original stressor has passed. Further, those unwelcome images and thoughts may also contribute to a number of associated biobehavioral changes, which have detrimental effects both physically and psychologically.

Numerous research studies have documented the presence of physiological responses to visual stimuli, whether those stimuli are external or internal. Among the physiological reactions that may occur are adrenal-cortical and sympathetic arousals, which occur as part of behavioral and psychological efforts to cope with stress (Mason, 1990). The individual who experiences PTSD in the classic sense (i.e., as a consequence of a particular traumatic event) may attempt to cope with intrusive thoughts of the event using denial, avoidance, and other dysfunctional coping mechanisms (Folkman & Lazarus, 1984).

#### *Empirical Research on Post Traumatic Stress Syndrome (PTSD)*

The last decade has witnessed a remarkable proliferation of research and clinical writing devoted to posttraumatic stress disorder (PTSD) in children and adolescents (Pfefferbaum, 1997). Much of this has been propelled by a growing recognition of the

alarming levels of crime, violence, and maltreatment to which millions of children are exposed each year (Foy, Madvig, Pynoos, & Camilleri, 1996). Excellent reviews on symptom manifestations of PTSD in children have been written (Lyons, 1987; Perrin, Smith, & Yule, 2000). In contrast, the literature on effective treatments for PTSD in children and adolescents is relatively sparse, and recommendations have closely followed the adult PTSD literature.

There are no randomized controlled studies on the treatment of PTSD in children and adolescents. Despite the lack of studies to guide practitioners, based on a recent survey (Cohen, 2001) reported that 95% of child psychiatrists have used pharmacotherapy to treat childhood and adolescent PTSD. The medications most frequently used were selective serotonin reuptake inhibitors and adrenergic agonists. The selective serotonin reuptake inhibitors were rated by the respondents as being most effective for treating overall PTSD symptoms including reexperiencing symptoms and avoidance numbing symptoms. Agonists were rated as most effective for hyperarousal symptoms.

#### *Art Therapy and Stress Research*

Children and adolescents respond differently to trauma-inducing stressors when compared to adults, particularly in how their behavior reflects their re-experience of the trauma, avoidance of trauma-producing situations, and hyper-arousal response. Perrin, Smith, and Yule (2000) observed that children manifest their symptoms in metaphoric modalities such as play, drawing, and story-telling, and in separation anxiety. Behavioral symptoms in both children and adolescents can include disruptiveness, impulsivity,

inattentiveness, poor socialization, and low academic achievement. For over 30 years, art therapists have observed that drawing and painting are useful in the assessment and treatment of traumatic disorders in children and adolescents (Gantt & Tinnin, 2007; Stember, 1977). Because verbal recollection of the trauma is often difficult or beyond a child's capacity, approaches that do not rely heavily on verbal access to trauma material, such as art therapy, are potentially important treatments. There are many case studies in the literature on the use of art therapy to reduce trauma symptoms and some proposals for art therapy treatment protocols for PTSD in children and adults (Cohen, Barnes, & Rankin, 1995; Collie, Backos, Malchiodi, & Spiegel, 2006; Rankin & Taucher, 2003; Raymer & McIntyre, 1987; Sweig, 2000). Far fewer reports describe treatment of PTSD symptoms in adolescents (Backos & Pagon, 1999; Hanes, 2000; Pifalo, 2002, 2006). Few empirical studies actually assessed whether art therapy reduces PTSD symptoms. Pifalo (2006) studied art therapy combined with cognitive behavioral therapy (CBT) used to treat sexually abused latency aged children (n = 41) in weekly 1-hour sessions over 8 weeks. Pre- and post-testing using the Trauma Symptom Checklist for Children (TSCC) (Briere, 1995, as cited in Pifalo, 2006) showed statistically significant reductions on 9 of the 10 clinical subscales. However, because the study design did not include a comparison group, results could have been due to generalized improvement or to increased treatment attention. The fact that art therapy was combined with CBT does not permit testing the effectiveness.

## RESEARCH DESIGN AND METHODOLOGY

### Statement of the Problem

The current study addressed the problem: What is the impact art therapy has on the relationship between PTSD and self-esteem in severely emotionally disturbed adolescents in response to chronic stress?

### Hypotheses

Severely emotionally disturbed adolescents who experienced PTSD or PTSD-like symptoms will exhibit higher levels of self-esteem, as measured by the Rosenberg Self-Esteem Scale, after engaging in a variety of art therapy directives.

### Research Design

#### *Kind of Research Method*

This empirical study involved the use of cross-sectional research design, with the objective of the statistical analysis being to explore the relationships between the independent and dependent variables. Initially, two study groups were defined based on whether they were residing in residential placement or residing in the community.

### Operational Definition of Variables

The independent variable, a grouping variable at the nominal level of measurement, was operationally defined using one alternative definition. The following dependent variable was incorporated into the study design.

1. Level of self-esteem, as measured by the Rosenberg Self-Esteem Scale.

#### *Levels of Measurement*

The dependent variable, measured with a published instrument, was an interval level scale. The independent variable (Art Therapy (SED) vs. non- Art Therapy (SED) group) was at the nominal level of measurement.

#### *Kinds of Measurement for All Variables*

The study involved the use of instruments that were reactive in nature; that is, completing the study instrument required subjective responses by participants. This mode of research required that the assumption be made that the instrument was reliable and valid.

#### *Design Validity*

The study design that is going to be used in this study will suffer from the inherent limitation of any causal comparative research study. There was no ability to manipulate the independent variable or to randomly assign subjects to intervention and control groups. This implies that generalizations based on study findings must be drawn with a great deal of caution.

#### *Materials*

The materials included:

1. Parent information consent form
2. Rosenberg Self-Esteem Scale

### *Procedures*

Participants for the study will consist of approximately 20 SED adolescents who are suffering from chronic stress. Participants were required to be attending a Non-Public School and or be living in a residential treatment facility.

Recruitment appeals were given to a local non-public school affiliated with a residential treatment facility. Therapists from the non-public school offered each participant a “free” dress day for participating.

Individuals at the non-public school and residents whose cottage chose to participate in receiving specific art therapy directives were given the ability to ask any questions that they might have and were explained the purpose of the study in general terms by the project director. After agreeing to participate, subjects were given a package containing informed consent and the published instruments.

Individuals then meet with the art therapist over the course of 12 weeks for 40 minutes a week. The initial session was to collect a background and receive the Rosenberg Self Esteem test before treatment began. Treatment then took the following format:

### *Problem Identification*

Individuals met with the therapist to discuss issues in their lives and events that have impacted them.

### *Art Directive*

Directives offered to the clients participating designed to address presenting problems and ways to encourage self-esteem. These included:

1. Personal Control Panel; Panels used to help identify their personal triggers and self regulatory systems.
2. Body Maps; Full body outlines used to help identify their perceptions of self and the space around them.
3. Anger Box/Feelings Box; A way for individuals to express their feelings around certain issues and have them placed in a container to provide a sense of externalization and safety.
4. Past/Present/Future Triptych; Organizing elements of time helping Adolescents understand where they have been, where they are now and where they want to be. Offers the client the opportunity to express their current levels of motivation and connectedness.
5. First Aid Kit; Offer Adolescents the opportunity to think about their “wounds” and identify needs
6. Self Symbol; Adolescents often use stereotypical imagery as a way to identify themselves and create association with something they believe in. A way to initiate the therapeutic connection.
7. What’s In Your Heart; Adolescents are offered an anatomical heart to express what currently resides in this space, how it might have been wounded and what they might want to reveal to the therapist that they have been keeping “inside.”

### *Selection of medium*

Individuals were offered various mediums and materials they felt best suited their needs in the process of creating. This varied from fine arts materials including, but not limited to markers, colored pencils, oil pastels, chalk pastels, various sizes and colors of paper.

### *Creation Process*

Individuals worked through the creative process in both verbal and non-verbal states witnessed by the therapist. Individuals were asked to consider the directive given and how that relates to their personal experience in symbolic form.

### *Contemplation/Interpretation*

Individuals made meaning of the creative process through the use of observation and inquiry by the person and therapist.

### *Continuity*

Art therapist helped the individual link themes and patterns from session to session and how they directly apply to the person's experience.

### **Participants**

As described above, the study sample consisted of approximately 20 SED adolescents (10 ART THERAY and 10 non-ART THERAPY) whom are either attending a non-public school and or living in a specific residential facility, Vista Del Mar Child and Family Services in West Los Angeles, California. The selection criteria for participating in the study included:

1. Participants had to be willing to participate in the study and to complete the study instrument.
2. Participants must have been categorized by a school psychologist as SED and qualified for special education services under this category.

## Instrumentation

### *Rosenberg Self-Esteem Scale*

The Rosenberg Self-Esteem Scale (RSE) is a well-known instrument that measures global self-esteem (Rosenberg, 1965); it consists of 10 items. The RSE has been employed in a variety of research settings and has been used with populations with differing cultural and demographic characteristics. According to Rosenberg (1979), the RSE is based on the following theoretical definition of self-esteem:

When we characterize a person as having high self-esteem, we mean that he has self respect, consider himself a person of worth. Appreciating his own merits, he nonetheless recognized his faults. The term “low self-esteem” means that the individual lacks respect of himself, considers himself unworthy, inadequate, or otherwise seriously deficient as a person. (p.54)

Initial scale development involved the creation of a large pool of potential items developed based on an extensive review of the literature and input from a professional panel. Each item was scaled on a 4-point scale ranging from “Strongly Agree” to “Strongly Disagree”. The original set of items was normed and validated on 5,024 New York State high school students.

In assessing the validity of the RSE, O'Brien (1985) used factor analysis to demonstrate the unidimensionality of the scale. High correlation ( $r = .82$ ) with the Janis-Field Feelings of Inadequacy Scale have also been reported in the literature (O'Brien, 1985).

#### Data Processing

Data will be entered into a PC computer for analysis using the Statistical Package for the Social Sciences (SPSS). Frequency distribution and descriptive statistics will be examined to develop a descriptive profile of the study sample. The hypothesis tests will be carried out using the independent group's t-test statistic (for comparing the two art therapy groups) and the Pearson correlation coefficient and other statistics as appropriate.

#### Assumptions and Limitations

This empirical study is subject to the inherent limitations of any causal comparative study. It may be difficult to assess the representativeness of the study sample, that is, the sample may or may not be representative of the broader population of individuals who have received art therapy. This implies that generalizations based on study findings must be drawn with caution. Further, the research design will employ does not allow issues of causality to be addressed in the study. However, results should be useful in identifying correlations among study variable and providing direction for future research.

## Ethical Assurances

Consent to participate signatures will be obtained from parents, administrators and participants of the residential group home facility used in this study. Each participant will be informed that his or her participation will be voluntary and that he or she has the right to withdraw from the study at any time. Psychometric data from adolescents will be used in this research. The data will be obtained from a series of psychological tests administered for diagnostic purposes. All of the information that is going to be acquired will be considered strictly confidential. The American Psychological Association's Ethical Principles in the Conduct of Research with Human Participants (1973) guidelines will be maintained including informed consent, protection of the welfare of participants, preservation of the subjects' freedom to participate, explanation of the nature of the study, and explanation and maintenance of confidentiality.

Guidelines of the facility where the information was gathered will also be followed. All data will be coded for anonymity by the author. Identifying data, excluding age, will be deleted and the data used will be inspected by a facility administrator before the information will be released for research purposes.

## RESULTS/FINDINGS

### *Comparison of the Pre-test and Post-test Scores of the Experimental and of the Control Group for the Rosenberg Self-Esteem Scale*

Table 1

	<u>Mean (SD)</u>	<u>Mean (SD)</u>
Treatment Group	15.90	18.50 (2.60)
Control Group	16.80	18.30 (1.50)

Table 1 shows that both the treatment group and the control group had lower levels of self esteem (15.90) and the control group (16.80) pre-test and showed an increase in self-esteem (18.50) and the control group (18.30) post-test.

## OUTCOMES/CONCLUSIONS

This study has conceptualized SED adolescents with PTSD as a distinctive population with specific developmental and treatment needs. This researcher suggested that the detrimental effects of suffering from chronic stress in the early adolescent years are substantial and that these difficulties affect levels self esteem. The implications of this study are that many of the problems experienced by SED adolescents with PTSD can lead to disruptions in their later life if they are not dealt with in the proper manner during adolescence.

The objective to identify ways of dealing with these problems, this study was focused on the broader research question: What is the impact art therapy has on the

relationship between PTSD and self-esteem in severely emotionally disturbed adolescents in response to chronic stress?

The findings of this study should be seen as exploratory in nature; further, the findings should be interpreted with caution given the inherent limitations in the study design and methodology.

Adolescents suffering from trauma and stress related symptomology appeared to respond positively to the use of art therapy enabling them to tap into their internal symbols, make visible/audible imagery to discuss in words and to discover a symbolic language coupled with verbal discussion to help the person reach a fuller understanding of self.

Adolescents with inadequately developed coping skills are at risk, in that they lack feelings of self-efficacy. To the degree that they lack cognitive and emotional coping skills, this may lead them to set lower goals for themselves, abandon those goals more easily when difficulties arise, and experience more depressive feelings (Bandura, 1989).

#### Recommendations

There is considerable evidence that an increasing proportion of today's adolescent experience difficulties such as substance abuse, risk-taking behavior, suicide and diagnosis of other psychological disorders (Green & Horton, 1982; Peterson & Hamburg, 1986). While the cause for these disturbing trends probably lie in broad societal factors, it is important to recognize the additional stress place on the adolescent in modern society. This stress is likely to be experienced as even more challenging by the SED adolescent. The struggle to achieve ego identity in adolescence has never been easy, but

it may be even more difficult for today's adolescent faced with single-parent homes, alienation from peer groups, and modern urban life.

Seriously emotionally disturbed adolescents are faced with a variety of adjustment problems, many of which are directly linked to developmental processes. The ability to cope effectively with those challenges varies considerably. While some of these adolescents may cope successfully, lead relatively normal lives, and effectively negotiate the course of adolescent development, other SED adolescents have a much more difficult time. They are unable to cope effectively, leading to probable negative psychosocial outcomes such as depression, anxiety, aggression and low self-esteem.

It is important for researcher and clinicians to always bear in mind that the adolescent's own self-perceptions are heavily influenced by their interactions with their parents (Seligman et al., 1984). This implies that parents need to be constantly aware of the important role that they play in nurturing of adolescent self-esteem.

An additional recommended approach would be to administer the RSES tests to the adolescents at various stages of their treatment. Such time could be at 4-week intervals. At each stage, the researcher could administer one or the complete battery of tests.

Several recommendations for specific treatment programs are implicit in the results of this study. Future treatment interventions should be designed to meet the needs of the adolescents, such as specifically choosing trauma related material that is interesting to the adolescent group. The therapists who run the trauma group need to create a group where the teens feel safe and the adolescent's schedules and high activity levels are considered. It may also be beneficial to combine the adolescent groups at the end of

treatment with an alumni graduated members in order to maintain the growth of new friendships and show adolescents that progress does unfold.

It is hoped that the findings of this study will prove useful for both clinicians and researchers as they seek to develop effective interventions addressing the emotional and psychological needs of SED adolescents. The development of appropriate interventions requires that accurate empirical research be conducted to evaluate the factors that predict adolescent depression, aggression, anxiety and low self-esteem. Future research should replicate the work in the current study, expanding the approach to include a larger and more representative sample. Such interventions are needed to address the unmet developmental needs of SED adolescents at risk for depression, anxiety, aggression and low self-esteem.

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