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The use of visualization in the treatment of substance abusing adolescents

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THE USE OF VISUALIZATION IN THE
TREATMENT OF SUBSTANCE ABUSING ADOLESCENTS

A Dissertation
Presented to
THE FACULTY OF THE SCHOOL OF EDUCATION
THE COLLEGE OF WILLIAM AND MARY IN VIRGINIA

In Partial Fulfillment
Of the Requirements for the Degree
Doctor of Education

by
Candice Cook
December 1996

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THE USE OF VISUALIZATION IN THE
TREATMENT OF SUBSTANCE ABUSING ADOLESCENTS

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The Use of Visualization in the Treatment of Substance Abusing Adolescents
Chapter 1

Introduction

Few people need to be convinced that substance abuse and addiction among adolescents represents a major social problem of our day. But it might be helpful to summarize some of the hard facts that support this statement.

Pardeck (1991) estimates that roughly 15% of the adolescent population in America has used marijuana. Almost 40% of children between the ages of 12 and 17 were current users of alcohol, and double that number had tried alcohol. Five percent of youths were daily users of one or both of these mood-altering chemicals. If these numbers seem high, one must consider the fact that they are probably underestimates because most of the more serious substance abusing adolescents probably weren't in school at the time these surveys were done. If estimates are correct, that between seven and ten percent of teens who use mood-altering chemicals will go on to become addicted to them, then we are talking conservatively about a minimum of one million future alcoholics, not to mention the hundreds of thousands who will become addicted to marijuana, cocaine or other drugs.
The cost to society implied in these statistics, in terms of both rehabilitation and lost productivity, is staggering (Nowinski, 1990).

Adolescents are quicker than adults to initiate and extend poly-substance abuse. The percentage of adolescent nonusers is small, with as few as 25% of teens as young as 8th grade reporting that they never used alcohol at all. Studies have shown that adolescents follow a common progression: non-use; non-problematic alcohol use; marijuana use; problematic alcohol use (abuse); use of hallucinogens, amphetamines, barbiturates; use of cocaine; use of heroin. As a youth moves through this progression, substances are added rather than substituted (Nowinski, 1990). Further, substance abuse begins at an earlier age now than a generation ago, in that the substance use progresses into poly-substance abuse more quickly in young people. Hard data now exists that indicates rising incidences of adolescent suicide, fatal car accidents and admissions to rehabilitation centers -- all of which point to social problems of major proportions (Lawson, 1992).
At one time not so long ago, the public viewed alcoholics and other addicts as if they were vagrants or criminals. The public attached a stigma to the addict. Addicts had few people, professional or otherwise, to turn to for help or understanding. Addicts were blamed for their own problems. People attributed their addiction to their poor character or lack of willpower. To a degree, we have become enlightened about adult addiction. We have found positive results in terms of acceptance and treatment. Yet, we have not done so well with our youths who abuse alcohol and other substances (Nowinski, 1990).

It's new to find programs designed specifically for the treatment of substance abuse and addiction in young people. These new treatments represent breakthroughs, not only in treatment, but also a breakdown of some of the barriers that have separated traditional mental health professions from the recovery movement that dates to the founding of Alcoholics Anonymous in 1935 (Eisen, Youngman, Grob and Dill, 1992).

Much research has demonstrated that twelve-step programs are effective (Nowinski, 1990; Whitfield, 1985;
Parker, 1992; Grof, 1987). Polcin (1992) has described how a 12-step program is beneficial for adolescents as well. There have been differences in philosophy, compounded no doubt by distrust based on ignorance, between the mental health professions and the recovery programs. But movement in recent years toward greater cooperation and understanding between the recovery movement and the mental health establishment has occurred. The mental health establishment has seen that 12-step programs are effective (Kennedy and Minami, 1993) and, on the other hand, those of the recovery movement have recognized that while a 12-step program may be the cornerstone of recovery, it does not address all of the personal and interpersonal issues recovering persons need to face, and that psychotherapy therefore has something legitimate to offer (Nowinski, 1990; Polcin, 1992).

Flores (1988) has noted that there has been professional input in the formation and encouragement of Alcoholics Anonymous. Bill Wilson, chief architect of AA, had read William James' (1890) classic text, *The Varieties of Religious Experience* extensively, and James' philosophical position of Pragmatism is a theme running
throughout the Alcoholics Anonymous program of recovery. Wilson also had extensive correspondence with Carl Jung, and Jung's influence is strongly reflected in the spiritual emphasis of the program. Kurtz (1982) also notes that there are parallels that exist between AA's insights and the theory of existential philosophy. Kurtz cites some of the parallels of AA to existential philosophy:

(1) The realization of man's limitation of being.

(2) The "hitting bottom" described by James (i.e., deflation at depth). These philosophers share the common opinion that an emotional upheaval is required before an individual will truly question the core of their existential predicament. Kierkegard, Heidiger, Sartre, Bouvier, James, Jasper and Camus all refer to this emotional upheaval as essential to further growth. (3) Both AA and the philosophy of existential thinkers see denial and self-deception as the root of human evil and the source of alienation.

(4) The parallel between the existential position of inauthenticity relates to the AA meetings and group psychotherapy which allows the breaking of the cycle of
interpersonal isolation essential to the establishment of shame. This establishment of shame occurs when the self breaks through the false self, the deceptive facade. It is the fear of exposure of the true self to others which causes dishonesty and self-deception, according to both AA and existential philosophy.

Group therapy is the most common method in the treatment of addiction. One reason is the factor of economy. Group psychotherapy is an effective way for a relatively small number of treatment personnel to handle a large number of addicted patients (Flores, 1988). There are far more important reasons for utilizing groups, however. These reasons have to do with the nature of the disease of addiction itself and the nature of the addicted patient entering treatment. Advantages for treating alcoholics and addicts in groups include peer support and peer pressure; the opportunity for the individual to learn that he or she is not alone and unique; the opportunity to learn about himself/herself and to identify with others by interacting interpersonally with them on a meaningful and emotional level. Flores further notes that group therapy works
effectively in these cases because the individual's inappropriate behavior and attitudes that give them the most difficulty will begin to emerge within the group.

Kanas (1982) cites clinical research, both anecdotal and empirical, which has generally been enthusiastic on the effectiveness of group psychotherapy with addicted patients.

The treatment of choice for addiction in most instances is group psychotherapy. In some cases, the estimation is that the recovery rate is two to three times higher than for patients who only receive individual psychotherapy (Kanas, 1982; Yalom, 1978). (Clearly, a need exists for training and educating potential group therapists who will be leading groups composed primarily of chemically dependent individuals.) Flores maintains that group psychotherapy should be used to enhance adherence to the principles of Alcoholics Anonymous, while allowing a closer examination of the difficulties of the recovering person with their interpersonal relationships.

Wallace (1985) feels strongly that the alcoholic recognizes intuitively the need for a stable and enduring belief system if he is to stay sober. Group psychotherapy
based on principles of AA gives him or her that belief system.

Flores further points out the professionals who have worked with alcoholics and addicts on a sustained basis have learned that more traditional orthodox methods of treatment have been insufficient.

Cooperation between the recovery movement and the mental health professions can be facilitated by increasing understanding of the differences that have separated them in the past. These differences are rooted in divergent philosophies, which are reflected in divergent approaches to treatment. The mental health professions, grounded in the "medical model", have traditionally seen substance abuse as a symptom of an underlying illness. In other words, the substance abuse itself was looked on as a symptom of a more primary problem, which the therapist focused on. Professionals had a hard time recognizing substance abuse as an illness in its own right. In contrast to the medical psychodynamic model, the recovery movement was founded on the notion that addiction is an illness in and of itself,
and that it must be treated directly and primarily (Nowinski, 1990; Whitfield, 1985).

The recovery movement differs from the traditional medical model psychodynamic approach not only in its view of addiction, but also in its approach to treatment. The traditional approach sees the therapist as the provider of treatment, providing the cure. The recovery movement sees things differently. It places responsibility for recovery on the addict. It identifies recovery as coming not from treatment by an expert, but from support by peers. It regards recovery as a lifelong process.

Further, there has been little room for spirituality in psychological or psychiatric approaches to diagnosis and treatment. Not so in the recovery movement, which is deeply spiritual, where honesty is valued above all else, and where recovery is thought to be dependent in part on faith in a "higher power". Mental health professionals who have had a hard time reconciling these concepts with their own views and approaches may continue to be alienated from the recovery movement.
This study is an attempt to combine the mental health approach with the approach of the recovery movement. It is to be hoped that this study will provide an important bridge between the traditional mental health approaches and those of the 12-step programs.

Current Trends in Alcohol Treatment.

The treatment of alcohol abuse has consisted of a wide variety of approaches focusing on the individual. These approaches have included individual psychotherapy, transactional analysis, diet control, pharmacological agents and detoxification (Sparks, 1987). Group approaches, such as Alcoholics Anonymous and inpatient group therapy, emphasize the individual and his or her realistic acceptance of an alcohol problem through the efforts of confrontation and support. Family therapy is one of the few exceptions where the family, rather than the alcohol abuser, is treated as the patient (Stanton and Todd, 1982).

More recently, new treatment approaches have arisen which emphasize behavior therapy: aversion therapy, assertiveness training, relaxation and biofeedback methods.
These behavioral methods continue to focus on the individual. They are founded on the principles of learning theory rather than on psychodynamic/biological theories (Lawson, 1992).

An important development within the field of alcoholism treatment has been the challenge to the traditional disease medical model of alcoholism. This model is based on the work of Jellinek (1960). Jellinek conceptualized alcoholism as a progressive disease, with abstinence being the only treatment. Jellinek believed that the onset of drinking by alcoholics could be viewed as a learned behavior.

Need for the Study

The use of alcohol and drugs by adolescents today represents one of the most alarming symptoms of our current psychological crisis. Alcoholism and drug abuse have disintegrating effects on the development of the adolescent. Glider (1989), as well as Jones and Hartman (1988), demonstrate that the psychosocial maturity of substance abusing teenagers is far below that of non-clinical groups. The intent of this study is to explore the use of visualization with adolescent substance abusers. The
overall treatment philosophy and goals of the program are
directed toward decreasing depression, improving
interpersonal relationships, and increasing ego development.

This study will utilize the group format based on the
suggestions of the clinical findings of such authors as
Lawson (1992), Flores (1988), Yalom (1978) and others.

The three most salient characteristics of the substance
abusing teenager appear to be depression (Myers, Burket and
Otto, 1993), which may include suicidal ideation and/or
behavior; acting out behavior (Stowell and Estroff, 1992);
and family dysfunction (Van-Hasselt, Ammerman, Glancy and
Bukstein, 1992).

Though more definitive research needs to be done, there
is a gathering body of evidence indicating that parental
substance abuse places children and adolescents at risks on
several levels (Nowinski, 1990). On the simplest level,
parental use of alcohol and drugs models the behavior that
is getting the adolescent into trouble. Studies of
adolescent substance abusers tend to report that one or both
parents are frequently involved in substance abuse of some
form (Deykin, Buka and Zeena, 1992). Further, the
connection between parental substance and child abuse is clear (Van-Hasselt et al., 1992; Hernandez, 1992). The link between child abuse and neglect and later substance abuse in children is supported by retrospective studies of adults in treatment, as well as by reports from adolescents in treatment. The majority of adults who are in treatment for substance abuse report having been victims of neglect or abuse as children (Deykin et al., 1992). Adolescents as well as adults in treatment for chemical dependency describe themselves as having been raised in rejecting, neglectful, hostile, abusive family environments (Piercy, Volk, Trepper and Sprenkle, 1991).

The family of the substance abusing adolescent tends to be disconnected and alienated (Sweet, 1990). The substance abusing adolescent also tends to have parents who are ineffective in their parental behavior, manifested in one of two extremes -- excessive rigidity and extra punitiveness versus permissiveness. Nowinski (1990) maintains that many substance abusing adolescents in treatment for addiction have gotten too little support and nurturance in their lives.
The data linking substance abuse with depression is overwhelming. Levy and Deykin (1989); Kosky, Silburn and Zubrick (1990); DeMilio (1989); Bukstein, Brent and Kaminer (1989); Berman (1987); Fowler, Rich and Young (1986); King, Beals, Manson and Trimble (1992); Myers et al. (1993); Mishne (1992); Hernandez, (1992); Stowell and Estroff (1992); Belfer (1993); Tarter, Laird, Bukstein and Kaminer (1992); and Rich, Kirkpatrick-Smith and Bonner (1992) all overwhelmingly demonstrate that depression and substance abuse are linked.

Fowler et al. (1986) examined the principle psychiatric disorders seen in 118 suicides in young cases. Over half of those cases had a principle diagnosis of substance abuse. The findings suggest that substance abuse disorders could be a major contributing factor in the rising suicide rate for this population. Berman (1987) establishes the linkages for suicidal behavior and the substance abusing adolescent. The characteristics of the substance abusing adolescent include conduct disorder (antisocial behavior) and depression (both withdrawn and angry).
Substance abuse, notes Berman (1987), is frequently noted co-morbid behavior that precedes and exacerbates suicidality. Klerman (1987) cites the risk factors for suicide deaths among adolescents as a family history of suicide and a depressive disorder, as well as substance abuse.

Pfeffer (1988) notes that risk factors for youth suicide identified in her empirical investigation include affective disorders, antisocial and borderline personality disorders, and substance abuse. The family factors involved are both genetic and environmental mechanisms. Pfeffer goes on to note that family interpersonal relations and exposure to suicidal individuals are also important risk factors.

Marzuk and Mann (1988) suggest that an understanding of the ways in which substance abuse enhance suicide risk is imperative if inroads are to be made in reducing suicidal behavior of young people. It is further clear that family patterns of interaction are disturbed among substance abusing adolescents.

Mitchell, McCauley, Burke, Calderon (1989) reviewed the histories of depressive disorders and other forms of
psychopathology in the parents of substance abusing adolescents. Major depression was the most commonly reported disorder in interviewed parents. Clearly then, the interactions among family members will be disturbed.

Levy and Deykin (1989) conclude that suicidal ideation in the presence of major depression and/or substance abuse should call forth great concern for lethality. Levy and Deykin (1989) assessed the occurrence of suicidal ideation, suicide attempts, major depression and substance abuse in 271 female and 153 male adolescents. Data were obtained using the diagnostic interview schedule. Major depression and substance abuse were independent and interactive risk factors for suicidal ideation and for suicide attempts.

Kosky et al. (1990) note that suicide attempts are associated with chronic family discord and substance abuse. They compared the clinical symptoms and social factors in 340 Australian young outpatients (mean age 12.9 years). Two hundred fifty-eight had exhibited suicidal ideation, and 82 had actually attempted suicide. Subjects with suicidal thoughts were not differentiated from subjects who attempted suicide on the basis of clinical symptoms alone. Both
groups had high levels of symptoms of depression, anxiety, sleep disorder and irritability. Suicide attempts were associated with chronic family discord and substance abuse. Wills, Vaccaro and McNamara (1992) examined the role of life events and family support in the adolescent who indulges in substance abuse. The authors maintain that negative life events and family situations where the parents were not experienced as being supportive were greatly related to high levels of substance use.

Hendren and Blumenthal (1989) state that conduct disorders and depression are the psychiatric disorders most highly associated with youth suicide. Their problems include antisocial behavior, substance abuse and family dysfunction, along with a history of abuse and neglect. Rich, Sherman and Fowler (1990) used information obtained from psychological autopsies to characterize 283 suicides in the San Diego suicide study. Fourteen of these cases were between the ages of 13 and 19 years. All these adolescents who committed suicide had a long history of disturbed behavior (i.e., depression and substance abuse). The authors conclude that adolescents who commit suicide have
experienced situational stressors involving feelings of rejection, humiliation, futility or anger.

Stowell (1991) argues that most adolescents who earn a diagnosis of substance abuse disorder also require a separate psychiatric diagnosis. Stowell notes that sufficient depressive symptoms qualify as a depressive disorder. The depressive symptoms may result from the prolonged alcohol abuse, but sometimes the depressive symptoms precede the alcohol abuse.

Acting out behavior is another aspect of the substance abusing adolescent. Kutcher, Marton and Korenblum (1989) assessed 96 psychiatrically ill adolescents (aged 13 to 19 years) admitted to an adolescent inpatient service. A conduct disorder diagnosis was significantly associated with substance abuse and attention deficit disorder with hyperactivity.

DeMilio (1989) found that the most prevalent diagnoses after the detoxification of 57 adolescents (ages 14 to 18 years) were conduct disorder, major depressive episode, attention deficit with hyperactivity and impulse disorder. Bukstein et al. (1989) also suggest a major role for
substance use in the etiology and prognosis of psychiatric disorders such as conduct disorder, antisocial personality disorder, attention deficit/hyperactivity disorder, and anxiety disorders.

Myers et al. (1993) investigated the differences between Diagnostic and Statistic Manual of Mental Disorders III (Revised) Axis 1 and Axis 2 Psychiatric Diagnoses in 17 female and 8 male hospitalized adolescents ages 14 through 17 years. Subjects were evaluated using the diagnostic interview for children and adolescents, adolescent version:

The schedule for affective disorders and schizophrenia for school-aged children, epidemiologic version; and the structured interview for DSM 3R personality disorders. Fifty-two percent met the criteria for conduct disorder, and the majority of these had co-morbid substance abuse, attention deficit/hyperactivity disorder, and major depression.

Stowell and Estroff (1992), in pilot study of 226 adolescents (aged 12.2 to 18.4 years) entering an inpatient treatment because of a primary substance use disorder, found that 82% met Diagnostic and Statistical Manual of Mental
Disorders III (Revised) criteria for Axis 1 psychiatric disorder. Mood disorders were found in 61%, conduct disorders in 54%, and anxiety disorders in 43%.

Using the Adolescent Attitude Survey, an instrument developed to assess the attitudes of adolescents toward adolescent suicide, substance abuse, pregnancy, runaway, and assaultive behavior, Stowell and Estroff (1992) found that the 70 junior high school students (ages 11 through 15 years) studied had significant relationships among the five self-destructive behaviors. The AAS and its internal scales are statistically reliable.

Eisen et al. (1992) investigated the type, frequency and chronicity of alcohol and drug use, and the impact of such use on functioning and behavioral problems among 48 adolescent psychiatric inpatients (ages 14 to 19 years). Self-report and clinical measures were used to assess substance abuse and other psychiatric symptoms and problems. Fifty percent of the subjects had problems with alcohol or drugs. Subjects with substance abuse problems reported more difficulty with interpersonal relationships, depression and
impulsivity than did subjects without substance abuse problems.

**Definition.**

Alcoholism or other chemical dependence can be defined as recurring problems associated with drinking alcohol or using other drugs. The areas of dysfunction include: relationships -- especially family, education, legal, health, job and financial (Whitfield and Shrederr, 1982). These areas can be measured by administering a diagnostic survey, such as the Michigan Alcoholism Screening Test (MAST) (Selzer, 1971). The MAST has been validated as a reliable diagnostic survey instrument, with people tending to answer it truthfully. The clinical interview, the blood alcohol level, the physical and laboratory examination, and any other available data are important to complete the intake (Whitfield, 1985).

Alcoholism is a disease sometimes hidden to the clinician, and the clinician should look for it with any client suffering from depression, trauma or sexual dysfunction. (The family members of the alcoholic also suffer. Their condition has been called "codependence,"
indicating living problems associated with living and working with a person who is an alcoholic (Kritsberg, 1983)).

Alcoholism is probably multifactorial in its etiology (Whitfield and Schrederr, 1982). Categories of possible contributing factors are:

1. parental history of problem drinking
2. heavy drinking or drug use
3. enabling
4. the "X factor" -- the biological phenomena common among alcoholics, such as loss of control, memory blackouts, a lack of hangovers early in alcoholism, more marked P and alpha brain wave response to alcohol, abnormal acetaldehyde metabolism, and less intoxication and body sway on drinking. Over half of alcoholics appear to manifest at least three of these involuntary phenomena.
5. ethnic background (for Irish Catholics, Italians and Orientals)
(6) high incidence careers (liquor industry workers and bartenders, physicians, writers)
(7) socioeconomic factors
(8) cultural factors (the media, which pushes alcohol)
(9) a lack of meaning or spirituality in the person's life
(10) unsolved inner conflicts
(11) trauma (Whitfield, 1985)

Treatment

Alcoholism is a treatable disease. Successful treatment may be defined as the abstinence from alcohol and other drugs with improved life functioning for the person and his or her family. When "success" has been maintained for a minimum of two years, 70 percent will recover from alcoholism. However, the "spontaneous" recovery from alcoholism is in the range of about five to eight percent (Small, 1982). Of alcoholics motivated to accept treatment, about 40 or 50 percent will recover. If a treatment plan is initiated with regular follow-up, about 70 percent will recover. Insight-oriented psychotherapy early in the treatment is contraindicated. On the other hand, general
supportive and directive psychotherapy, focusing on the
alcoholism as the primary illness, effectively helps the
alcoholic (Parker, 1992).

Alcoholics/CD people seem to recover best in group
therapy settings (Grof, 1987). Groups break down the denial
process through a combination of identification,
confrontation, feedback and support (Parker, 1992).

Plan of Presentation

The presentation of material gathered for this study
has been organized into five chapters. The first chapter
has been used to present information related to the problem
and treatment of substance abuse among adolescents. In
addition, it has served to establish the theoretical
framework of the study, to define terms, to discuss the
limitations, and to state the general research hypothesis.

Chapter 2 serves to present a review of related
research in three areas: psychosynthesis, visualization,
and group therapy with substance abusing adolescents.

Chapter 3 gives details about the methods and
procedures of research, which includes population, ethical
consideration, discussion of the instrument, and statistical analysis.

Chapter 4 provides an analysis of the data collected to test the research hypotheses.

Chapter 5 contains a summary of the study, as well as conclusions, discussion of the findings, implications of the findings, and recommendations for further research.

Summary of the Study

This study involved 63 adolescents, designated as substance abusers or at risk for substance abuse. Thirty of these subjects were controls. The other 33 were given four weeks of visualization designed to strengthen ego development and to heal relationships between them and their parents in an attempt to decrease acting out behavior.

Therapists filled out Child Behavior Checklist before the experiment began and at the termination of the study, in order to determine adolescent behavior from the professionals' point of view.

The experimental group received five relaxation inductions. The first session involved pretest measurement and a training of relaxation techniques along with
explanation of what visualization is all about. In the subsequent four weeks, experimental groups received visualizations given by their therapists who used scripts which they learned and that had been provided by the experimenter. All adolescents were given measurements designed to discover level of depression, acting out behavior, and ego development. Pretests determined baseline measurements and post-tests determined whether the visualizations improved ego development, behavior and mood.

**Theoretical Rationale**

The theory of psychosynthesis formulated by Roberto Assagioli served as the theoretical basis for this study. Psychosynthesis provides a theoretical framework that enables the clinician to formulate a model for understanding the role of addictions in the structure of personality, while at the same time viewing the human being as a whole.

Psychosynthesis is an attempt to cooperate consciously with the natural process of personal development. Psychosynthesis focuses on integrating various aspects of the whole individual (Rancour, 1991). Psychosynthesis begins with the importance of methodology: one must start
from within, beginning with the self of the individual, with his presence. Also important is the concept and experience of identity. Some ideas to keep in mind include the notion that (1) each individual constantly grows (i.e., the natural human drive toward self-fulfillment); (2) meaning is important to an individual's life; (3) choice and responsibility are important; (4) an awareness of motivations is important; (5) one must recognize the depth and seriousness of human life; (6) the concept of "will" is important -- This concept is little understood and little utilized in most theories (Firman and Vargiu, 1977).

Psychosynthesis aims at the integration into one functioning whole all of the qualities and functions of the individual. Psychosynthesis recognizes humans have a transpersonal essence and at the same time holds that a person's purpose in life is to manifest this essence or Self as fully as possible in the world of everyday personal and social existence (Miller, 1978).

The Superconscious is another concept important to psychosynthesis. The Superconscious is different from the opposed "lower unconscious", which is the source of
atavistic and biological drives. The Superconscious is the source of more evolved impulses: love and will, humanitarian actions, artistic, philosophic, scientific, and spiritual insight.

These evolved impulses relate to the "peak experiences" Maslow talks about (Maslow, 1968). The basic character of superconscious, transpersonal or peak experiences lies in their having little connection with the previous experience of the individual. They present themselves as essentially new, as discoveries or revelations. They are signposts pointing to the paths of the future. From the superconscious come the stimuli, impulses and energy that mold the evolution of the individual and of humanity in its totality. Many have had at some moment of their lives a superconscious experience of a mystical, moral or aesthetic nature. According to Maslow, the psychological life of great people is characterized by the frequency and the intensity of these experiences. The Muse evoked by the ancient poets is a personification of the superconscious, as is the Daemon of Socrates (Maslow, 1968). Scientists, although they do not personify their superconscious, do
manifest the phenomenon of inspiration. It can be the fountainhead of great discoveries: the "Eureka" of Archimedes and Newton's apple. A more recent example was Kekule's dream-inspired discovery of the benzene ring (Cirinei, 1970).

The repression of the sublime is just as crippling as repression of biological drives. One must realize and actualize content of the superconscious as well as integrate material from the lower conscious. Each person must establish the bridge with that part of the being where true wisdom is to be found (Crampton, 1977).

The Self is yet another concept of psychosynthesis. The Self, as mentioned before, is the center of awareness and purpose around which integration of the personality takes place, for example, the personal self. . . "I". The difference between personal Self and Transpersonal Self is that the Transpersonal Self is the focal point of the superconscious realm -- the deeper and all-inclusive center of identity and being where individual and universality blend. The personal Self includes: Consciousness -- an attitude of the detached "observer" (Consciousness is that
aspect of the individual that is clearly aware of what is going on around it without distortion or defenses.); Will; and Subpersonalities (Carter-Haar, 1975).

In each person is a diversity of semi-autonomous subpersonalities striving to express themselves. A basic way to facilitate one's growth is to get to know one's subpersonalities. Such knowledge enhances the sense of personal identity and unity. Each of us is "one" and "many," "unity" and "diversity" in our inner life. As Murray states: "A personality is a full congress of orators and pressure groups, of children, demagogues, Machiavillis. . . Caesars and Christs. . . ." One sees many similarities to Transactional Analysis (Parent, Adult, Child) Gestalt Therapy (Underdog and Top Dog) and Ego Therapy. A definition of a subpersonality is that it is a synthesis of habit patterns, traits, complexes and other psychological elements (Vargiu, 1977b).

Assagioli (1965) believed that the personality is made up of a core personal self, with a myriad of these subpersonalities revolving around the core Self, much like planets revolve around the sun. These subpersonalities
emerge during growth and development in the form of beliefs, psychological defenses and roles. If a person is operating from the true center or core personal self, she/he can choose to use these various aspects of Self to reach goals and achieve a higher purpose. However, when individuals overidentify with a subpersonality, they get stuck, become subject to crisis, or become more prone to disease (Rancour, 1991).

It is important to synthesize the different subpersonalities around a Center. This Center is an inner drive, or urge, which strives to be expressed, to be realized. It is this Center that attracted and synthesized various personality elements to create what can be considered as its own "body" -- its own means of expression (Vargiu, 1977b).

The individual can gradually recognize and harmonize the subpersonalities, and the subpersonalities become organized and synthesized around a higher order Center. This higher Center was referred to as the "I" mentioned above. It is the personal center of identity, of I-ness. (Assagioli, 1973)
A disease state may result when a person overidentifies with a component of Self that has grown too small. This state is seen in the man who overidentifies with his "competitive businessman subpersonality" and becomes a workaholic, or the woman who overidentifies with her angry child subpersonality and develops gastritis. When these overidentifications are corrected, expansion of the personality occurs, which subsequently leads to healing (Rancour, 1991). The girl who takes part in a beauty contest identifies herself with her body in its aesthetic aspect, and the same thing can be said of the girl who suffers from feelings of inferiority because of her plainness. Should an accident irreparably disfigure the former, she will feel destroyed. If the latter undergoes plastic surgery that makes her look attractive, she will get the strange feeling of having become someone else (Crampton, 1977).

Each person has a number of subpersonalities which are not always well harmonized. Typical is the instance of the general, harsh and authoritarian in the barracks, but who becomes a lamb in front of wife. Here, too,
subpersonalities coexist without mutual interference, and the result is merely comic. But in other cases, they can come to a head-on collision, and then the situation becomes dramatic. Saint Augustine, for example, has given a description of the conflict between the animal man and the spiritual man, both powerfully alive within him and how it was resolved. In other words, he has passed down to us in his Confession the story of his psychosynthesis. The self-consciousness of the normal person lacks consistency because he or she swings from being more or less identified with the "I" and therefore experiencing him or herself as being one and permanent, to being identified in alternation with the many changeable elements in the personality. This inconsistency, according to Cirinei, is also the characteristic of dreams, so that one might say that normal individuals live in a dream state, that they are more or less asleep. Some may long to shake off the lethargy and move toward the radiant world of light and energy toward which they are drawn. To all who feel that waking up spells a liberation, a joy and a promise, psychosynthesis offers a pathway, a model and a method. (Cirinei, 1970)
This higher order synthesis becomes the integrated personality -- the harmonious and effective means of expression of the self-actualized human being. As one becomes more integrated, one is increasingly able to choose, at any moment, which subpersonality he/she wants to express (Ferrucci, 1982). Until then, the person is controlled by whichever subpersonality he/she is identified with in the moment, and thus limited to its particular good and/or bad qualities. But with integration, every aspect becomes available to the individual. The person has great freedom of expression (Vargiu, 1977b).

Before this integration, one can be limited by the conflicts that often arise between two or more subpersonalities. In such a conflict, each subpersonality wants control. Energy is wasted and there is conflict and pain (Ferrucci, 1982). With integration comes harmony. The subpersonalities learn to cooperate with each other and with the "I". Every subpersonality becomes available to the "I" (Carter-Haar, 1975).

What causes the splits? Through early interactions with parents, certain subpersonalities are formed. If
parents are perceived and therefore introjected as critical, unapproving, unnurturing, then the individual spends his/her life in perpetual conflict with an enemy who, though it may or may not exist in the material world, certainly exists within the individual as a subpersonality. The enemy is now "within" (Vargiu, 1977b; Ferrucci, 1982).

Vargiu stresses the importance of understanding that no subpersonality is all bad. Subpersonalities we think of as "good" are merely the ones we have allowed ourselves to accept. SP's we see as "bad", that we usually reject, need to be examined. If the SP appears "bad", it means it is not sufficiently understood. When a SP develops and first tries to express itself, it tends to do so in a fairly direct way. But if it conflicts with other SP's or with a situation in the environment, the SP may not be allowed to express its needs in a direct and natural way. Then the SP tries to express itself indirectly. The SP may then look distorted, twisted or rigid because of all the obstacles it has to deal with. It is the distortions that we consider 'Bad". But if one traces the energy back to its source, one finds simple needs that are in themselves acceptable.
The synthesis around the center, the "objective observer", is important to the recovery process. This true observer, the center, is not critical. It is objective and wise and understands that the needs of our subpersonalities (though not necessarily their wants or the way they express those needs) are valid and legitimate (Vargiu, 1977b).

Vargiu (1977b) explains the process of integrating subpersonalities. The first phase is recognition: For most, subpersonalities correspond to inner experience; all one need do is look for them. Mental imagery techniques are especially effective. Assagioli (1965) reveals the healing powers of imagination and imagery. Chapter 2 will explore the literature concerning imagery.

After recognition comes acceptance of the subpersonality and its needs. Acceptance of a subpersonality and its coordination occur together. In coordination, positive aspects of a SP replace the negative ones, thus making the SP more acceptable. But one must first accept the negative aspects, that they do exist, in order to be able to change them. Acceptance and Coordination are complementary processes. Often, one fears
that to accept the SP means that the SP will remain forever as it is, negative. But the opposite is true. Once one discovers the SP, its real needs, one can see its useful qualities, its skills, its strengths. Vargiu (1977b) stresses the importance of avoiding crystallization: don't emphasize the existing state of things, rather the changes one wants to have happen.

It is also important to use "disidentification", for example, step away from the subpersonality, to be freed from its influence and thus able to take the attitude of an unbiased, objective observer. The Objective Observer can easily accept both the first subpersonality as well as the subpersonality that resists the others, then proceed to direct coordination, which is done by understanding their needs and their mode of interaction, and finding acceptable ways in which those needs can be satisfied, and the interaction harmonized and made more constructive.

The third step is coordination. When one goes deeply enough toward the core of an subpersonality, one finds some basic urge or need which is good. A basic purpose of the coordination phase is to discover this central urge or need,
to make it conscious, and to find acceptable ways in which it can be satisfied and fulfilled. Understanding makes love possible (Vargiu, 1977a).

The fourth step is integration. Coordination deals with the development and improvement within specific SPs, integration is concerned with the relationship of each SP with the other SP's, and with each one's place and activity within the personality as a whole. The process of integration leads from a general state of isolation, conflict, competition, and repression of the weaker elements by the stronger ones, to a state of harmonious cooperation in which the effectiveness of the personality is greatly enhanced (Ferrucci, 1982).

Cooperation involves understanding the reasons for the conflict and the needs of the SP's involved often shows that, through cooperation, both subpersonalities can achieve their goals (Ferrucci, 1982).

Absorption and fusion occur next: As two or more SP's become closer together, through coordination and cooperation, they are drawn more and more toward each other. Eventually, a merging of the two occurs.
The fifth and final step involves Synthesis: The culmination of growth. Synthesis facilitates the integration of the personality through the refinement and harmonization of the personality itself. Personality integration is intrapersonal, synthesis is essentially interpersonal and transpersonal -- the outcome of a growing interplay of the personality with the superconscious and the Transpersonal Self. The result is an individual whose interaction with others becomes increasingly characterized by a sense of responsibility, caring, harmonious cooperation, altruistic love and transpersonal objectives. It leads to harmonious integration of the human being with others, with mankind, and with the world.

Cirinei (1970) writes that the self-consciousness of the normal person lacks consistency because each person swings from being more or less identified with the "I" and therefore experiencing himself or herself as being one and permanent, to being identified in alternation with many changeable elements in the personality. Now this inconsistency is also the characteristic of dreams, so that, again, one might say that normal people live in a dream
state -- they are more or less asleep. The general program of a psychosynthesis can be outlined in brief:

(1) Realistic assessment of the psychophysical personality, including as far as possible the subconscious and superconscious aspects

(2) Discovery and realization of a center of self-identity. This implies some degree of awakening -- that is, the realization of the self as distinct from the psychic contents with which it habitually illusorily identifies itself.

(3) The forging of a personality harmoniously integrated about the awakening self. This calls for the use of the will and the imagination, and the strengthening of all the underdeveloped qualities. It also includes the integration of the individual with the family and social environment (interindividual and group psychosynthesis). (Cirinei, 1970)

This general program just outlined is so vast that its realization would require the whole of a lifetime. Cirinei (1970) goes on to explain that the lives of some great men could be described in terms of a process of psychosynthesis.
brought about in part by spontaneous maturation, but also in part as a result of deliberate intention implemented by the more or less conscious use of certain psychosynthetic techniques, a very important one of which is visualization. This means that one can well go on practicing psychosynthesis throughout life. On the other hand, according to Cirinei (1970), devoting a few minutes each day for even a few weeks or months to this work can produce such beneficial effects as to more than compensate for the required effort. Compared to most European approaches to visualization, Assagioli's (1973) psychosynthesis is more holistic and eclectic. Its goal is a thorough reconstruction of the total personality, exploration of the various levels of personality, and eventually the shift of personality to a new center through exploration of its fundamental core (Ferucci, 1982).

One of the most important techniques of psychosynthesis involves the use of visualization, which was utilized in this study. Ancient literature of many cultures abounds with accounts of spectacular cures resulting from the imaging process. These accounts are now being corroborated
by a growing body of clinical and experimental evidence (Sheikh, 1989). Guided imagery is being used in some alcoholism treatment programs (Sheikh, 1989). Imagination can be viewed as psychologically equivalent in many significant respects to the actual experience. Imagery and perception seem to be experientially and neurophysiologically similar processes (Sheikh and Jordan, 1983). Like music, imagery appears to be effective in bypassing defenses and resistances.

Sheikh (1989) cites some of the reasons for clinical effectiveness of imagery including:

(1) Experience and images are psychological equivalents.

(2) Verbal logic is linear. Images have a greater capacity for descriptive accuracy.

(3) Images give a richer experience and have a wider range of emotion.

(4) Images lead to a variety of physiological changes.

(5) Images bypass defenses and resistances.
Is imagery just a game? What good will it do in the world of real problems? Sheikh (1989) explains that symbols and images are a "language" of the unconscious. Using images, one can carry on a two-way communication with one's unconscious, shedding much light on one's real problems. Adults' games and children's play are recognized to be ways of dealing in a symbolic way with very real problems.

Nowinski (1990) questions whether treatment of substance abusing youngsters should be focused on traditional 12-step methods or should they be seen as adolescents using drugs/alcohol as a means of acting out? Nowinski maintains that to synthesize the 12-step program and the developmental process of the adolescent can bring about effective understanding and treatment for the substance abusing adolescent.

This study, by utilizing the visualization process that undergirds the treatment of psychosynthesis, sought to develop the goals of self-realization and ego strength, the areas needed for effective recovery for the substance abusing adolescent. It was hoped that the four weeks that the adolescents spent devoted to the goals of self-
realization would help stave off the very real threat of the disintegrating effects of alcoholism and drug abuse.

**Definition of Terms**

(1) "Depression" will be the diagnosis of an adolescent who receives a score of 9 or above on the Beck Depression Inventory.

(2) The term "Ego Development" that this study used is based on the works of a number of theorists including Sullivan (Sullivan, 1956), who included the notion of self-esteem in that of ego development. Sullivan (1953) calls the developmental sequence interpersonal integration. Kohlberg (1981) uses the term "moralization of judgment". All the conceptions of these theorists project an abstract continuum that is both a normal developmental sequence and a dimension of individual differences in any given age cohort. All represent holistic views of personality, and all see behavior in terms of meaning or purposes. All are concerned with impulse control and character development, with interpersonal relations and with cognitive preoccupations including self-concept.
This study used six stages of ego development as postulated by Loevinger (1979). The first is presocial, where the interpersonal style is autistic.

The second stage is impulsive, with little impulse control and a fear of retaliation. The interpersonal style is receiving, dependent and exploitative. The conscious preoccupations are with bodily feelings, and its cognitive style uses stereotypes. The third stage is self-protective, which includes a fear of being caught. The person does a great deal of externalizing and blaming. The person is opportunistic. The interpersonal style is manipulative and exploitative. The conscious preoccupations are with advantage, control and a concern for self-protection.

The fourth stage is conformist, with the character development of conformity to external rules, shame and guilt for breaking rules. The interpersonal style includes a desire to belong, to help and to be superficially nice. Conscious preoccupations are with appearance and social acceptability, and the cognitive style is simple, using stereotypes and cliches. The next stage is
conscientious, with the character development using self-evaluation. The person has guilt for consequences and has long-term goals and ideals. The interpersonal style is intensive, responsible, and has a concern for mutual communication. The conscious preoccupations are for self-respect, achievements and self-expression. The cognitive style is complex, using ideas of patterning. The fifth stage is autonomous, with a character development that includes the ability to cope with conflicting inner needs and toleration. The interpersonal style builds on the previous level, as well as including a respect for autonomy. Conscious preoccupations are for vividly conveyed feelings, and integration of physiological and psychological causation of behavior. The person is concerned with self-fulfillment and the self in terms of social context. The cognitive style includes increased ability to conceptualize ideas that are complex. There is an increased toleration for ambiguity and objectivity.

The last stage is integrated, which builds on the previous steps, as well as adding to them an ability to reconcile inner conflicts and to renounce the unattainable.
Concerning interpersonal style, the person is able to cherish individuality. The conscious preoccupations are the notion of identity.

This study used an unbiased rater formally trained to score the Sentence Completion Test.

(3) "Visualization" -- Synonymous with visualization is the term mental imagery. Visualization refers to all those quasi-sensory or quasi-perceptual experiences of which we are self-consciously aware and which exist for us in the absence of those stimulus conditions that are known to produce their genuine sensory or perceptual counterparts.

**General Research Hypotheses**

The purpose of this study was to investigate the effects of visualization on substance abusing adolescents, in the belief that treatment will decrease depression, decrease acting out behavior, and increase ego development.

Hypothesis 1--Subjects who complete the course of visualization will show significantly less depression than control subjects.
Hypothesis 2--Subjects who complete the visualization treatment will show significantly less acting out behavior than control subjects.

Hypothesis 3--Subjects who complete the course in visualization will show improved interpersonal relationships with their families of origin.

**Limitations**

The main limitations of this study:

(1) This study is a field experiment, and therefore all variables could not be adequately controlled.

(2) This study used preexisting groups.

(3) This study used self-report measurements, which are not always accurate.

(4) This study used no measure for visualization, so it was impossible to determine the extent to which subjects with greater ability to visualize were affected by the study and, conversely, the extent to which a subject was unable to visualize affects outcome.

**Ethical Considerations**

Research studies, especially experimental studies, always involve ethical considerations since they manipulate
subjects. The foremost rule of ethics is that subjects should not be harmed in any way, either physically or mentally. This study involved minimal risk to subjects. Both subjects and their parents were completely informed concerning the nature of the risk, and informed consent from the subjects as well as informed consent from the parents was required.

Parents received a letter that laid out the study for them. They were told the nature of the study, that there was minimal risk to their child, and that no deception or concealment was involved. Further, their child could withdraw from the study at any time, or they could choose to withdraw their child at any time. In addition, the subjects' privacy was always respected. Each subject was coded for anonymity. All information was strictly confidential. Scores will never be reported or made public. No information will be associated with a subject's name or any other identifying information. Access to the data was and will remain limited to the experimenter only.

Potential subjects were given a consent form describing the nature of the study, that there was minimal risk, that
they would not be deceived or mislead, that they could withdraw at any time, that the information was coded, and that they would remain anonymous.

This study was approved by the William and Mary Human Subjects Committee. Further, the study was approved by Group Home people.
Chapter 2
Review of the Literature

In the early days of the Mejii era, there lived a well-known wrestler named O-nami, Great Waves. [O-nami is immensely strong and near the art of wrestling.] In his private bouts, he defeated even his teacher, but in public he was so bashful that his own pupils threw him. O-nami felt he should go to a Zen master for help. Hakuju, a wandering teacher, was stopping in a little temple nearby, so O-nami went to see him and told him his trouble. "Great Waves is your name," the teacher advised, "so stay in this temple tonight. Imagine that you are those billows. You are no longer a wrestler who is afraid. You are those huge waves, sweeping everything before them. Do this and you will be the greatest wrestler in the land."

The teacher retired. O-nami sat in meditation, trying to imagine himself as the waves. He thought of many different things. Then gradually he turned more and more to the feeling of the waves. As the night advanced, the waves became larger and larger. They
swept away the flowers in their vases. Even the Buddha in the shrine was inundated. Before dawn, the temple was nothing but the ebb and flow of an immense sea. In the morning, the teacher found O-nami meditating, a faint smile on his face. He patted the wrestler's shoulder. "Now nothing can disturb you," he said. "You are those waves. You will sweep everything before you." The same day, O-nami entered the wrestling contest and won, and after that no one in Japan was able to defeat him (Reps, 1957).

This chapter contains a review of the major literature related to psychosynthesis, visualization, and group therapy with substance abusing teenagers. The first section of the chapter will concern the review of psychosynthesis.

**Psychosynthesis and Visualization**

Since psychosynthesis is so complex, research must of necessity look at specific techniques. The most common technique in the literature is guided imagery, the technique that will be used in the present research. Feinberg-Moss and Oatley (1990), in one of the few recent articles, reported on their study which looked at guided imagery in
brief psychodynamic therapy. The guided imagery was intended to facilitate identification of and communication among the clients' subpersonalities in order to increase the effectiveness of the therapy.

Three conditions were established: an imagery condition and a non-imagery condition, in both of which subjects received ten to twelve weekly sessions and then a minimal contact condition, which contained five sessions, three of which consisted of assessment procedures only.

Subjects were matched by threes, by sex, age, occupation and previous therapy experience, and assigned by order of interview to one of the three conditions. There were 23 who began, with 21 completing.

In the imagery condition (N=8), the first two sessions were devoted to discussing and clarifying three to five symptoms as to intensity and frequency. These were defined as "target aims". Part of the second session was devoted to an imagery experience lasting 30 to 45 minutes. During this period, subjects were guided through a relaxation process, then a fantasy:
The guided fantasy started off in a sunny meadow. The client was asked to imagine reaching a cottage and to invite four or five people out, one at a time, greeting each person as she or he emerged, and exchanging whatever words occurred. In discussion after the daydream, these people were explained as possible aspects of the client's own personality. Some were real people in the person's life, past or present, and some were imaginary.

Subjects were given at least three sessions where guided imagery was used. The remaining sessions used psychosynthesis treatment to work with the factors elicited in the first two sessions.

For the non-imagery condition (N=6), instead of imagery, clients were asked to take aspects of themselves and give them a name and voice as a way of eliciting subpersonalities. The rest of the treatment was the same as the imagery condition.

In the minimal contact condition (N=7), clients had two sessions similar to the first two of the imagery condition.
No further dynamic work was done with them except for discussion of the assessment procedures.

All the therapy was done by the first author, who was experienced in psychosynthesis and guided imagery. As a control for differential treatment of clients, at the time of follow-up, all subjects completed Likert-type scales on empathy, positive regard, genuineness and perceived therapists' "accurate clarification". Results indicated significant differences on the empathy and clarification dimensions, with minimal contact condition subjects reporting fewer of these as therapist characteristics than the other groups.

Subjects were assessed four times. In the second session (baseline), two months after the second session (midpoint), four months after baseline (outcome), and eight to nine months after baseline (follow-up). Subjects were given a general health questionnaire (GHQ), which was standardized in the U.K. at these times. Once target aims had been identified in Session 2, target aim scales were set up and the subjects marked the scales at the beginning of
each session. Means were calculated at the assessment times.

Subjects also completed Repertory grids, which are complex grids with 16 elements x 16 constructs. (These grids were also used as part of the therapeutic work.) Sample elements include "yourself now", "father", "mother", "ideal self", "inner child", "wise self", etc. Sample constructs include "likable", "acceptable", "inadequate", etc. Self-acceptance scores were obtained from this. Also, judges blind to the conditions saw the baseline and follow-up grids (in random order), along with a list of the clients' target aims, and placed the two grids in order of worse to better. Clients were scored as improved if the grids had been placed in the correct time order.

Results showed that subjects in the two treatment groups showed more improvement during therapy than did the minimal contact group, and maintained that improvement afterwards. There was no significant difference between the two therapy groups, indicating that either guided imagery may not be a useful tool, or that there was not enough difference between the treatment conditions to truly test
the hypothesis that guided imagery would be more effective in this type of therapy. Results do not contraindicate its use.

The authors acknowledge the limited generalized ability of the study due to the small N, and the use of volunteers rather than patients. They attempted to control for therapists' bias in the study by assessing client perception of the therapists. They did find significant differences in two of the four dimensions: empathy and clarification. In this investigator's opinion, this does present a confounding variable which makes the results of the study questionable.

The same method, using another therapist or other therapists and a larger N, would seem to be promising.

In the report, the authors included a detailed description of the repertory grid and a case study of one of the imagery condition clients, showing baseline and outcome grids. Space does not allow for a complete discussion of the grid in this paper, but it appears to have promise as both a therapeutic tool and as a tool for assessing progress on a client by client basis.
The second study was by Van Krevelan in 1983. The study was a descriptive one of the use of guided fantasy with children aged 9 to 11. According to psychosynthesis, people should be able to use imagery and imagination to answer questions from within, so this study was devised to see whether the theory would be useful for children.

Thirty-five children from a school for the gifted each received two guided imagery sessions of about ten minutes, one week apart. The children were in groups of five to seven, according to age. In each session, they were given a scenario where they encountered a wise person of whom they could ask a question and receive an answer. They also received a gift from the wise person. In the first session, the wise person came to their classroom, and in the second session the wise person was on top of a mountain.

The hypotheses were that the responses would vary according to age of the child and location of the story. Judges sorted the questions into the categories of religion, social philosophy, science and personal prediction. They found differences between ages in the subject asked about, with 9-year-olds asking religious questions, 10-year-olds
asking about science and personal prediction, and 11-year-olds equally divided between personal prediction and social philosophical questions. The answers to the questions became more complex with increasing age. Out of 70 answers, only four were "don't know", which indicates that children were able to tap their inner resources.

This study would have been more useful if some idea of the questions and answers were given. The results indicate that children are well able to formulate abstract questions and answer them, but how well they do so is not addressed at all. In contrast to the first study, this study was quite simple, but could pave the way for further research on the subject.

During the last two decades, imagery has become a popular topic in both clinical and experimental cognitive psychology. Psychologists have produced a considerable body of literature documenting that images are indeed a powerful force.

Lang's (1979) seminal work presents the view that affective behavior change depends, not on simple exposure to fear stimuli, but on the generation of relevant affective
cognitive structure, the prototype for overt behavior, which is subsequently modified into a more functional form. Lang (1979) presents the notion that imagery therapies fail most often because the therapist has not achieved the first requirement, the primary processing of the affective program. In other words, if a subject only processes the verbal response propositions of the image structure, the subject will be unresponsive to the therapy, whereas subjects who process motor and visceral response propositions show significant post-therapy reduction in phobic behavior. These latter subjects will alter their response set to objective stimuli through a modification of a conceptual structure in the brain, the prototype for the behavior (Lang, 1979).

The results of controlled research corroborate the clinical evidence that imagery has a curative effect and refute the misguided "scientific assumption" that mental imagery cannot have any effect on the physical body. This misguided assumption nevertheless is historically important in the development of modern research on healing imagery.
Studies show (Sheikh, 1989) that both Pavlovian conditioning and biofeedback are mediated by mental imagery. Scientific studies on the effects of imagery on the body were conducted to discover the many health-related effects (Sheikh, 1989). The following recent research on imagery indicates that the claims that imagery holds an enormous potential for healing are justified claims. However, direct systematic research on the therapeutic outcome of imagery approaches with clients is needed.

The connection between imagery and somatic response (Ahsen, 1981) is supported by clinical case studies and experimental research. Lang (1979) reviewed studies in which various physiological responses were seen during the practice of imagery. Galvanic skin response and other physiological measures are also known to react to mental imagery, especially to imagined fearful scenes (Lang, Melamed and Hart, 1970).

In the studies by Winer (1971), Ikemi and Nakagawa (1962) and by Shea (1985), hypnotic images produced significant changes in bodily responses and wakeful images produced equivalent or greater changes. Apparently, all
such changes are attributable to imagery, not to hypnosis, and are further reason for examining the health-related effects of imagery per se.

Mental images of particular events without biofeedback and without hypnosis have been shown to affect vasomotor responses in general -- sexual responses, heart rate, blood pressure, EMG, salivary responses and immune responses. Moreover, in subjects who are vivid imagers, mental images have been shown to affect these bodily responses more strongly (Sheikh, 1989; Samuels and Samuels, 1975).

Cohen and Twemlow (1981) used guided imagery, in combination with deep, voluntary muscle relaxation, with the suggestion of images, to study the effects such training might have on selected aspects of perceptual, affective and cognitive functioning. The therapists used relatively little verbal instruction. The subjects were simply invited to "let whatever happens occur and know that he or she may terminate the imagery experience by simply opening the eyes". The experimental (Guided Imagery) and control groups (CG) each consisted of 20 undergraduate college students. Out of 140 volunteers, 40 participants were matched for sex.
and mean Personal Orientation Inventory scores, and then randomly assigned to one of the two groups. The 140 participants had volunteered to be in a four-week, eight-session experiment on personality. There were no significant differences in age, education, amount of counseling or therapy experience, or psychodelic drug experiences between the two groups. The experimental and control group subjects were individually administered the following tests two days before and two days after the eight-session experiment: the Personal Orientation Inventory; Witkins Embedded Figures Test; the State Trait Anxiety Inventory; and the Barron-Welsh Art Scale. Earliest memories were gathered. The participants completed self rating questionnaire of their session experience at the end of the experiment. Four months after the study, all participants again completed the Personal Orientation Inventory.

When comparing the pre/post ANOVA change scores of the experimental and control group, the guided imagery group became significantly more inner directed, as measured by the POI. There was a trend in the direction of the guided

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imagery group showing an increase in self-acceptance. The guided imagery group became significantly more field independent, as measured by the Embedded Figures Test. The guided imagery group experienced a significantly higher amount of awareness of fantasy, visual imagery, sensations of physical jumping or falling, and grieving. In the follow-up analysis of the guided imagery four months later, a two-way analysis of variance indicated the guided imagery group scored significantly higher than the control group on the POI scales of inner directedness, self-regard, self-acceptance, nature of man, and acceptance of aggression.

The results of the study support the notion that guided imagery facilitates increased awareness of imagery, fantasy and grieving during the experience itself. Furthermore, the experience of guided imagery tends to result in an increase in psychological well-being, independence, and the capacity to be self-supportive. Guided imagery also increased field independence of a person's capacity to disembed or differentiate the figure from the ground. Guided imagery did not show a pre-, post- or between group effect on anxiety or creativity.
The study demonstrated that guided imagery trains people to focus attention internally in a non-judgmental fashion, resulting in an increased feeling of independence and the capacity to be self-supportive. The follow-up assessment of values and attitudes suggests that guided imagery results in a significant change in how subjects see themselves and others. Participants' view of others were altered as reflected in increased POI subscale scores on the nature of man scale, which the authors believe supports Leuner's (1978) contention that guided affective imagery therapy does not treat individual symptoms, but rather exerts influence over a broad psychodynamic base in the affected person by working with sometimes pressing preconscious and unconscious material.

As the authors point out, there are a number of significant limitations in the present study that must be taken into account in assessing the findings. For example, the guided imagery group clearly changed on a number of dimensions, but it is unclear what components in the guided imagery group's experience may have stimulated these alterations.
An important problem seems to be the fact that only one experimenter worked with both groups. Perhaps more than one experimenter could be used to more adequately control for potential experimental effects. The focus of Hart and Means' (1990) study was the reduction of unpleasant mood states through imagery. One of the principle hypotheses in the study was that imaginal techniques are especially advantageous as therapeutic tools in the treatment of affective disorders because they deal more directly with affect rather than requiring a mediating cognitive process. A comparison of the efficacy of a cognitive versus an imaginal technique in the treatment of an affective disorder would offer some evidence to support or disconfirm this hypothesis.

With the exception of Hart and Means' (1990) work, very few such comparative studies have been done. Guthrie (1984) induced dysphoric mood through the use of hypnotic reminiscence of unpleasant past events in the subjects' lives. Following the induction of hypnosis and dysphoric mood, subjects were given instructions either to give themselves positive self statements or to use images that

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would counter their feelings of dysphoria. After 1-1/2 minutes, a mood measure was taken. All subjects showed significant elevations in mood following both cognitive and imaginal instructions, with a significant though small "clinical increment" mean difference in favor of imaginal instructions (Guthrie, 1984).

Hart and Means' (1990) study attempted to integrate theory with technique for reducing dysphoria -- that is, emphasizing the consideration of the etiology of dysphoric mood before prescribing a treatment. They proposed that the effectiveness of imaginal versus cognitive methods for reducing dysphoria may depend on whether the dysphoria is cognitively or imaginatively induced. Cognitive therapists believe that much of the dysphoria involved in depression is induced and/or maintained by the negative statement depressives tell themselves about themselves, their worlds and their future (Beck, Rush, Shaw and Emery, 1979). Cognitive therapy involves explaining to the depressive how he or she is harboring these negative beliefs, that they are irrational, and how he or she can replace these statements

Guthrie's (1984) dysphoric mood induction included both imaginal suggestions ("What's happening?" "Look around you.") and cognitive directions ("What is being said to you?" "Maybe you are thinking some things. What are they?"). If the hypothesis is correct that therapy for dysphoria is most effective if it is matched to etiology, then one would expect both cognitive and imaginal treatments to be effective in reducing the dysphoria of Guthrie's subjects. This was in fact what occurred in her studies, with a slight superiority for the imaginal treatment.

In Hart and Means' (1990) study, 56 male and female introductory psychology students at the University of Montana who passed four screening criteria were used. The screening criteria included (1) Harvard Group Scale of Hypnotic Susceptibility - Form A (Shor and Orne, 1962); (2) Beck's Depression Inventory (Beck, Ward, Mendelson, Mock and Erbaugh, 1961); (3) Beck's Questionnaire Upon Mental Imagery -- Shortened Form (Sheehan, 1957); and (4) a three-question mental health questionnaire used to eliminate subjects
currently under psychiatric medication or psychological care or who had been hospitalized for a psychiatric disorder. The Depression Adjective Checklist (Lubin, 1965) was used as a manipulation check of dysphoric mood induction and as a dependent measure of the effectiveness of cognitive and imaginal procedures for reducing dysphoria. Taped inductions were utilized to induce mood. Cassettes were identical in appearance except for the markings "A" or "B". An experimental assistant labeled the tapes, and the experimenter did not learn which letter corresponded with which induction procedure until the data had been completely gathered.

There was, of course, no assurance that subjects who received the cognitive induction were not using some imaginative processes and vice versa. The inductions were designed to produce an emphasis on either cognitive or imaginal processes, recognizing the fact that there would probably be some intrusions of imagery into cognitive dysphoria and of cognitions into imaginal dysphoria.

Sixty subjects who passed the hypnotic screening were randomly assigned to four induction/treatment combinations:
cognitive mood induction/cognitive treatment; cognitive mood induction/imaginal treatment; imaginal mood induction/cognitive treatment; and imaginal mood induction/imaginal treatment. Subjects were contacted by telephone to set up individual appointments for the experiment. Each subject was individually given an informed consent form explaining the procedure and risks involved. All subjects consented to participate. One subject, however, did not keep the appointment, which necessitated the random elimination of one subject from each of the other three groups to keep the sample sizes equal. Data from a total of 56 subjects were considered for analysis.

Each subject was run through the remainder of the experimental procedure individually. After hypnosis was induced, mood was assessed while the subject was hypnotized. To ensure that the mood inductions were in fact producing the dysphoric mood later in the experiment, mood was assessed under hypnosis prior to the mood induction for comparison to post-mood induction measures. Mood was assessed by having subjects count from one to ten, and by having subjects complete the Depression Adjective Checklist.
Performance on the counting task has been shown to be an indicator of mood, dysphoric subjects taking more time with phonation and pauses.

Subjects were then told to rest for two minutes and then they were instructed to recall a sad or depressing event from their past. After they indicated to the experimenter that they had recalled such an event, one of the two mood induction tapes (cognitive emphasis or imaginal emphasis) was started. The experimenter left the room while the tape played to ensure his blindness to the induction condition. The inductions included such statements as "Begin to visualize your scene now and what's happening to you" in the imaginal induction, and statements such as "Begin to think about your scene now" and "Those thoughts going through your mind, bring them all back now" in the cognitive induction. The experimenter reentered the room approximately four minutes and forty seconds later. Mood was reassessed by having them count to ten, which was timed, and to fill out the second form of the Depression Adjective Checklist. Checklists were counterbalanced, so that five different orders of forms "B", "C" and "D" were used within
each cell. Since the forms are equivalent, there were not expected to be any ordering effects.

The subjects were then given one of two instructional sets designed to reduce their sadness -- the imaginal set, where the subject was told in his/her imagination to face what needs to be faced, feel what needs to be felt, and go forward in your experience in ways that will be restoring to you. The cognitive set were given instructions, and told to use these instructions to help raise the mood. They were told to think about your situation, to remember how it happened. They were told to reflect on what the people involved are like, and told to speculate on why they do what they do and say what they say. They were to focus all their attention on the issues, on what happened and why. They were told to think through and integrate their knowledge in ways that were best for them. They were told to think things through so that their conclusions matched what was best for them. Mood was again assessed by counting and the third form of the Depression Adjective Checklist. An elation procedure was then administered, consisting of having subjects imagine a pleasant scene. The experimenter
then brought the subjects out of the hypnotic trance and administered a post-experimental questionnaire which included questions about the mood inductions and instructional sets.

Subjects' level of dysphoria was low immediately following hypnotic induction, increased significantly following dysphoric mood induction, then decreased significantly (except in the imaginal induction/cognitive treatment condition) following treatment.

The specificity of effect hypothesis is partially supported by the data. The cognitive treatment was effective only when the sad mood had been cognitively induced, but not when the sad mood had been induced imaginally. Imaginal treatment was effective for both imaginally and cognitively induced dysphoria. Imaginally induced dysphoria was not improved by cognitive treatment. As a tool for immediate reduction of dysphoria, the imaginal instructional set appears to generalize to more types of dysphoria than does the cognitive set. It may be that the cognitive induction gave subjects a mind set to respond to the cognitive treatment, and that this mind set is required
in order for cognitive treatment to have any effect. The procedure for beginning cognitive therapy is consistent with this viewpoint Beck et al. (1979) begins therapy with a depressed patient by explaining to the patient the cognitive components of depression, thus creating a cognitive mind set. It appears from the results of the present study that such a cognitive bridge is not necessary for the imaginal treatment, supporting the hypothesis that imagery and affect are more closely related processes than cognition and affect. This seems to hold true even when cognitive aspects of dysphoria are emphasized. That is, imaginal treatment works at least as well as cognitive treatment under this condition.

This study dealt with short-term dysphoria and treatment, and therefore it is not known whether imagery plays a role comparable to cognition in the maintenance of dysphoria or depression. It is quite possible, the authors point out, that an imaginally caused depression could be maintained by negative cognitions. In such cases, cognitive therapy would be a treatment of choice, possibly in combination with imaginal techniques. The authors further
emphasize that the dysphoria induced in this study is not an analog to depression. Dysphoric mood is only one component of the depressive syndrome, and therefore this study does not maintain that imagery is the only treatment strategy that would produce a complete and lasting recovery in depression, which is so often a complex disorder.

As Sheikh (1989) points out, hypnosis is not necessary to produce the same effects as visualization procedures. And since hypnosis is not always possible or practical, Hart and Means' (1990) study should be replicated without the use of hypnosis, since Sheikh (1989) has shown that non-hypnotic modes are as effective as hypnotic modes. It would be interesting to see this study conducted with actual depressed patients in a clinical setting, in order to lend more external validity to the findings of Hart and Means.

Feinberg-Moss and Oatley (1990) presented a study of guided imagery in psychodynamic therapy based on the outcome of three therapy conditions. Interestingly, they also included a method of relating information derived from imagery to that of a person's ordinary life. The theme of the therapy was the integration of parts of the personality.
based on Assagioli's concept of subpersonalities. As has been described, psychosynthesis involves the development of an inner sense of self, partly through exploring aspects of the personality known as subpersonalities, evoked as visual images to facilitate their gradual recognition, acceptance, coordination, integration and synthesis.

Meaningful connections between primary process images of subpersonalities and real people in subjects' lives was made using repertory grids (Ryle, 1975, 1979). With this method, subpersonality images and real people can be related to one another in the same conceptual space, further assisting the identification and integration of unconscious ideas. Moreover, maps derived from the grids can be shown to clients as part of therapy, as Feinberg-Moss and Oatley (1990) demonstrate. The three conditions included: (1) a guided visual imagery; (2) a second condition equivalent except that the therapist refrained from inducing images; and (3) a minimal contact condition. The hypothesis was that if therapy works by making the unconscious conscious, then inducing imagery should have a measurable effect as
compared with treatment which does not actively explore this cognitive content.

The subjects included volunteers from two universities. Subjects were chosen who had some distress but no serious long-standing problems or psychiatric history. Clients were matched by sex, age and occupation, taking account of previous therapeutic experience. They were matched in triads. Subjects were assigned by the authors to the imagery, non-imagery and minimal contact conditions in rotating order of interview within sex, while monitoring matching criteria to close each triad when it was filled. Of the 23 who began, 21 completed, with one female non-imagery and one minimal contact client dropping out.

Clients in imagery and non-imagery groups received ten to twelve individual weekly sessions of 1.25 hours over four months. Assessments occurred at four points -- at session two (called baseline), at midpoint (two months after baseline), at outcome (four months after baseline), and at follow-up (eight to nine months after baseline). Minimal contact clients had five sessions of the same length.
Therapy and control conditions: In the imagery condition (N=8), the first two sessions consisted of discussing symptoms, known as the target aims. Their resolution became the focus of therapy. In the second sessions, clients undertook a guided fantasy with eyes closed. After relaxation instructions, they were guided through a scenario used in psychosynthesis to elicit subpersonalities, which were explored with the subjects focusing on feelings and meanings related to the target aims. This condition included at least two further guided fantasy sessions, each appropriate to the work the client had reached in her or his therapy.

Non-imagery condition (N=6): This condition was treated with similar multi-component psychosynthesis treatment as imagery condition, but without guided fantasies or work with imagery. Instead, subpersonalities were elicited by asking clients to give a name and a voice to aspects of themselves associated with each target aim. These subpersonalities were then explored verbally, along lines similar to those for the imagery clients.
Minimal contact (N=7): Here there were five sessions, the first two similar to those of the imagery group, including elaboration of target aims and elicitation of subpersonalities and a guided fantasy. At subsequent sessions, minimal contact clients completed all assessment procedures for midpoint, outcome and follow-up. Apart from discussion of subpersonalities, repertory grids and target aims, no dynamic work was done.

Assessment methods: Target aim scales were used to track specific symptoms made explicit by the client. They also helped to maintain focus in brief therapy. Each target aim was discussed until it could be described distinctly in terms of current status, what it would be like if it were better, and what it would be like if it were much worse. These descriptions were then entered onto a 4CM scale to act as anchor points respectively for the zero point and for +4 and -4 on the scale. The data are means of all aims of each group at each assessment point. Each subject had approximately four target aims. Subjects provided elements and constructs for repertory grids by completing a standardized set of instructions for repertory grids (Ryle,
1975). They identified important people in the subject's life and described those elements that the subject found significant. For each assessment point, each subject rated each element on each construct on a five-point scale. Grids were analyzed using Slater's (1976-1977) Grid Program. These grid maps were also rated by a clinician experienced in their use and blind to the therapy condition. He was handed two grid maps, labelled "X" and "Y", which were the baseline and outcome grids for each client, labelled randomly by coin tossing.

Clients were judged improved if their grids were placed in correct order and their outcome grid was judged to have undergone noticeable reconstruction according to stated target aims. Subjects also completed the General Health Questionnaire (GHQ). Subjects kept written diaries of their experiences in therapy, and these were discussed during sessions. All sessions were audio recorded. After the follow-up session, clients completed a questionnaire rating satisfaction with treatment and the research aspect on 7-point Likert-type scales. To test whether the therapist offered comparable relationships to clients in all three
treatment conditions, four 7-point Likert-type scales of therapists' characteristics were completed after the follow-up meeting, not in the presence of the therapist. There were scales of empathy, positive regard and genuineness (Rogers, 1951), together with a fourth scale of perceived therapist "accurate clarification".

Results: The imagery and non-imagery groups improved more than the minimal contact group, thus confirming the hypothesis that the imagery group would do better than the minimal contact group. However, there was no difference between imagery and non-imagery groups. Clients' ratings of therapist characteristics were high and similar in all groups.

The authors included an individual case study discussing the grid map of "Bill". The repertory grid map of Bill presented both at baseline and at outcome demonstrated the changes in the subpersonalities, showing not only changes from negative to positive feelings about the self and the subpersonalities, but also reconstruction, with some integration among the subpersonalities. The authors felt that exploring imagery allowed Bill a
psychodynamically deep experience. The grids offered an empirical window that gave him feedback and allowed his individual psychodynamic material to be related to statistical analyses. Bill's therapy was typical of a moderately successful short-term therapy. Scores on target aims and self-acceptance were close to means for his group.

Some of the problems with this study involve the use of volunteers rather than on people in such psychological distress that they had spontaneously sought therapy. This and the small N may limit the study's generalizability. The fact that the imagery condition produced similar results to the non-imagery condition may have been due to the insufficient contrast between the two multi-component treatments.

Group Therapy With Substance-Abusing Teenagers

No program concerning adolescents being treated for substance abuse has been evaluated by experimental studies. However, Birmingham (1986) describes an outpatient treatment program for adolescent substance abusers. Birmingham's program is based on the model of Development Habilitation. The practical operation of the program
involves: individual counseling, socialization group, recreational activities, group therapy, parent support group, and family counseling. Birmingham maintains that the substance abusing adolescent has not gained experiential learning, resulting in a developmental deficit for the adolescent. Therefore, expectations of clients' progress and achievements need to be realistic and related to functional age rather than chronological age. This fits in with this writer's opinion that ego development is delayed in the substance abusing adolescent and intention to examine this theory empirically in the present study.

The philosophy of "Habilitation" (Birmingham and Sheehy, 1984) has as its major component that any program that is to be helpful must allow and enhance the natural development into adulthood. Again, the theoretical rationale of psychosynthesis fits in with this philosophy. Birmingham's adolescent treatment program is based on the concept of total health (physical, psychological, social and spiritual well-being of the individual). She includes a problem-solving aspect of the program as well as a sociological component for the understanding of
environmental factors. The physical health component includes hygiene, physical education, grooming, citizenship education and intellectual stimulation in terms of debates, reading and providing motivation for educational advancement.

The formation of a self-identity is a crucial part of adolescent development. The program facilitates value clarification, morality, sexuality, decision-making, responsibility, relationship formation and maintenance. The program hopes to provide a "spirit" of individualism for the client by not demanding conformity to all aspects of society, but rather the spirit is enhanced and energy directed in more positive ways to allow the adolescent rebellion to be more constructive and acceptable both to himself/herself and to society at large (Birmingham and Sheehy, 1984).

Nowinski (1990) also works with substance abusing adolescents in group settings. Again, none of this work has been empirically studied, but Nowinski has some interesting comments on the group process for adolescents.
Baab (1992) describes an intervention with substance abusing adolescents that approaches the intervention described in this study. Baab's intervention, too, has not been formally studied, and so the purpose of the present study is an intent to validate some of Baab's theoretical formulations. Baab explains that what occurs in one state of mind or body may or may not be consciously retrievable in the "natural state".

A procedure for communicating with a person who moves in and out of one or more states into another has been one of the hallmarks of the work of Erickson (1982). Baab relates this to communicating with a substance abusing adolescent. An adolescent who gets high is making the statements, "I don't like things the way they are so I'll alter them by whatever means are at my disposal" and "I'll do this independent of you." Hypnosis, in the appropriate context, can alter experience from one way of being and doing to another way of being and doing. Hypnosis may be auto-suggestive or suggested by a therapist. It is beneficial, maintains Baab, for adolescents to learn methods
of altering their way of being and doing other than through the use of substances.

Baab (1992) describes the dynamics within the personality of the substance abusing adolescent. The healthy part or parts of the personality exist at one level of conscious awareness (i.e., one state of physiological arousal), the unhealthy parts of the personality at another level of arousal. In some cases, the suppressed or repressed material may resurface periodically for the client. This is the "unfinished business" or family of origin material that may be the adolescent's explanation for the use of substances.

The counselor's first step, according to Baab, in the treatment of a substance abusing adolescent, is to distinguish between the self-destructive part of the adolescent and the constructive, self-nurturing part. In some treatment programs, the destructive part is called the large addicted self, and the self-nurturing part is called the small whole self. To explain to clients the process of changing from addictive behavior to healthy behavior, many counselors use the acronym HOW: Honesty about self in
relation to substance abuse, its consequences and others; Openness in communicating with others by sharing personal thoughts, feelings and behaviors; and Willingness to listen to others, to try new behaviors and to choose new feeling responses. These are the hallmarks of the healthy whole self.

Baab (1992) suggests that the counselor observe the distinctions between the whole self and the addictive self, and thus provide the adolescent with accurate and effective feedback about his or her state. The model proposed by Baab is individually based psychotherapeutic counseling. The counselor decides how to respond to the anger, fear, guilt and discouragement of the substance abusing adolescent in order to help the adolescent solve problems in his relationships with others and to cope with the consequences of his or her substance abuse.

When these decisions have been made, the counselor can focus on the adolescent; identifying the roles, thoughts, feelings, behavior and minimal cues that are associated with either the addictive self or the whole self, and concentrating on the goals and objectives of the
intervention or treatment. The counselor must be able to gain access to the parts within the adolescent. In this process, the roles, thoughts, feelings and behaviors are anchored to a stimulus deliberately paired with them (Bandler and Grinder, 1982). The counselor originated stimuli are usually associated with the indicators of the adolescents' states or parts beyond the conscious awareness of the client. The counselor may use a particular voice tone, posture or label for a given part, in addition to a touch to make an association (Baab, 1992).

For example, if the adolescent sits down, looks at the counselor with moist, wide eyes and says, "Will you help me?" while maintaining eye contact, he/she is demonstrating healthy behavior. Since the adolescent is directly asking for help, the counselor may respond with a warm, empathetic voice, which would thereby "anchor" or "pair" the empathy with the assertive behavior of the adolescent. In all subsequent discourse, the adolescent will pair his or her nonmanipulative request to empathetic warmth of the counselor. Eventually, empathic warmth from the counselor may elicit nonmanipulative behavior from the adolescent.
Empathetic warmth, then, may be used as a cue to elicit the emotional state in the adolescent that was present when the adolescent requested the help. (Baab, 1992) Again, Baab's approach is extremely interesting, but does not have the merit of having been borne out by statistical research.

It was the hope that the present study would provide empirical validation for the use of visualization with the substance abusing adolescent, working to strengthen ego development while enabling the adolescent to complete "unfinished business" from the family of origin, on the one hand, while strengthening the constructive aspect of the personality. The present study was designed to demonstrate a correlation between these developments and the adolescent's affect and behavior.
Chapter 3

Methodology

The specific purpose of this investigation was to determine the effects of visualization on the acting out behaviors of adolescents as well as on their level of depression and ego development.

Chapter 3 includes procedures and methods of research. Description of the following are presented herein: (a) populations, (b) measurements, (c) procedures, (d) ethical considerations, (e) research design, (f) statistical analysis, (g) specific hypotheses, and (h) summary.

Sample

Subjects consisted of preexisting groups from the Regional Group Homes of Virginia Beach and Chesapeake. The Regional Groups Homes are affiliated with the juvenile courts of those cities. These adolescents have been sent by the courts to the group homes for their acting out behavior as well as their drug abuse. The adolescents receive therapy in group settings. Cluster sampling was used. Regional Group Homes consists of five group homes with twelve to fourteen teens in each home. Each group home has
the teens divided into two groups. The first group, chosen randomly, was given the series of four visualizations. The second group was held for control. When the first group in each home completed the four visualizations, the control groups were given the series of visualizations.

All subjects ranged in age from 13 to 17. The total subject pool consisted of all of the subjects in the group home and all subjects did take part in the experiment. Six subjects were lost from the experiment, having been released from the group home since they had finished their requisite time there. The treatment program at the Regional Group Homes lasts from two to six months and the adolescents received a comprehensive program which included (1) behavioral modification for acting out behavior, (2) group therapy, (3) family therapy, (4) general group meetings regarding group home affairs (procedures in group living problems arising between or among inmates).

The overall philosophy and treatment orientation is in the direction of the patient's realistic acceptance of his/her substance abuse problems and on taking responsibility for his/her behavior and life.
Measurements

The Beck Depression Inventory (Beck, Steer and Garbin, 1988) is a self-administered test that may be orally administered. Its purpose is to detect possible depression and to assess the severity of depression. It is appropriate for ages 13 through 80. The BDI can be administered in a group, and the testing time is from five to 15 minutes (Buros, in Kramer and Conoley (Eds.), 1992). The BDI is probably the most widely used clinical self report test of depression. It consists of 21 items or sets of statements, answered on a zero to three scale of severity of depressive problems. Items and item weights were derived judgmentally, not empirically. The answer sheet is entitled "BDI", but the word "depression" is not mentioned, but most subjects would know the intent of the test. Instructions tell the subject to consider feelings in the last week. Each of the 21 items has four sentences ranging from "no complaint" to "severe complaint". Example: "0 = I do not feel sad" to "3 = I am so sad or unhappy that I can't stand it." The first 13 items cover the cognitive-affective subscale (concerning such topics as pessimism, guilt, self-accusations, crying
and indecisiveness). The next eight items form the somatic-performance subscale. (These topics include body image, work, sleep difficulties and loss of interest in sex.) The reading level of the BDI is about the fifth grade level (Kramer and Conoley (Eds.), 1992). The BDI has been used for over 25 years. The original version was developed in 1961 and a revision made in 1971, and the manual was published in 1987 (Sundberg, 1977). Beck et al. (1988) have published a review and meta-analysis of the reliability and validity literature for the BDI. The manual and review article in combination provide much information (Kramer and Conoley (Eds.), 1992).

Typically, only the total score is used (Beck et al., 1988). Beck, Steer and Garbin suggest that zero to nine are within the normal range; 10 to 18, mild to moderate depression; 19 to 29, moderate to severe depression; and 30 and above, extremely severe depression. These suggestions are based on clinical ratings of patients. With normals, scores greater than 15 may suggest depression (Beck et al., 1988). The manual and review (Beck et al., 1988) report studies of concurrent and construct validity. Meta-analyses
have reported high mean correlations between the BDI and clinical ratings of depression, both in psychiatric samples (.72) and normals (.60). BDI correlations with MMPI-D, Long Self-Rating Depression Scale, Hopelessness Scale, and Hamilton Scale range from .60 to .76 (Beck et al., 1988). The internal consistency rated by Cronbach's coefficient alpha (Beck et al., 1988) for 25 studies ranged from .73 to .95. The mean coefficient alphas from the nine psychiatric populations was .86. The mean coefficient alphas for the 15 non-psychiatric populations was .81. The test/retest stability correlations for depression, using Pearson correlations for the non-psychiatric samples, ranged from .60 to .83. The psychiatric samples had correlations from .48 to .86. Test/retest stability correlations for depression are difficult because of the fact that a person's experience of depression will vary (Kramer and Conoley (Eds.), 1992). This means that the BDI is relatively state oriented because answers are based on the past week; results may not reflect earlier depressive episodes and may change over time (Sundberg, 1977).
Over 1900 articles in the psychological literature have used the BDI. The BDI has been translated into Chinese, Spanish, French, German, Dutch, Arabic and Persian.

In summary, the BDI is a well researched assessment tool with substantial support for its reliability and validity. The BDI does have a high fakability component because it's very clear what the test is seeking to assess. However, the instrument will be important in assessing the level of depression for adolescents since alcoholism and depression are clearly linked (Whitfield, 1985). Relative to age, adolescents score higher than adults (Levine, 1982; Teri, 1982).

The Child Behavior Checklist (CBC), published in 1980-1988, assesses the competencies and problems of children and adolescents through the use of ratings and reports by different informants (Achenbach and Edelbrock, 1979). The CBC takes about 15 minutes for a teacher or a parent to fill out. The Child Behavior Checklist gives scores on such behavior problems as Anxious, Social Withdrawal, Unpopular, Self-Destructive, Obsessive-Compulsive, Inattentive, Nervous Overactive.
The Child Behavior Checklist, was derived to compare a child with normative samples of agemates. The profile types include Schizoid, Uncommunicative, Immature-Aggressive, Hyperactive, Uncommunicative-Delinquent, Delinquent and Unclassified. The CBC provides descriptive information comparing children with other children of the same age and sex. Mooney (1984) maintains that the CBC is of particular value in differentiating clinical from nonclinical populations, as well as distinguishing among clinical populations. Racial or socioeconomic bias appears minimal, and the test is appropriate for evaluations in child mental health programs and for clinicians who would like a broad-based measure of treatment outcome.

Further, the CBC has a wide problem coverage, sound normative information, and is considered a standard instrument for use in child evaluations (Mooney, 1984). The total problem behavior index has been found a useful discriminator of disturbed and non-disturbed children (Mooney, 1984). The CBC has a Teacher Rating Scale as well as a Parents' Rating Scale. The total behavioral problem score has impressive construct validity: Weissman,
Orvaschel, and Padian (1980, as cited in Mooney, 1984) found that total scores from reports on the Conner's Parent Questionnaire and the Child Behavior Checklist problems correlated very highly (R=.91). The Conner's Revised Teacher Rating Scale correlated very highly. The total behavioral problem score was rated to the total pathology score of the child assessment schedule (Hodges, McKnew, Cytryn, Stern and Kline, 1982). The Child Behavior Checklist can be filled out by teachers using the Teacher Rating Form or by parents using the Parents' Rating Form. This study will utilize the Teacher's Rating Form (TRF).

The development of norms, based on empirical evidence for both checklists, is a major strength (Christenson, 1992). The CBC is reliable and valid. Test-retest reliability for a two-week period is R=.89, for two months, R=.74, for four months, R=.68. Inter-rater reliability on the Teacher Rating Form is .57. The authors of the TRF, using multiple regression methods, found significant criterion-related validity. The authors found for all ages and both sexes that referral status consistently accounted for the largest percent of the variance in ratings on the
TRF. This is a desirable result, considering the purpose of the TRF (Elliott and Busse, 1992). The authors also conducted discriminate analysis to test the classification accuracy of the TRF for known referred and non-referred samples. Overall, using just TRF scores, they misclassified approximately 28% of the sample, with false positives and false negatives being observed almost equally. This level of classification accuracy is considered adequate, given that it was the only measure used and the stated purpose of the TRF is for description, not classification.

Washington University Sentence Completion Test assumes that each person has a characteristic level of ego functioning. The test assigns an ego level to a person based on the distribution of ratings of his or her responses to 36 incomplete sentence stems. For the purpose of this research, a short form of 12 incomplete sentence stems was used (Loevinger and Wessler, 1970). The data for the short form is commensurate with the long form (Loevinger, Wessler and Redmore, 1970). The major stages are called: Impulsive, Self-Protective, Conformist, Conscientious, Autonomous, and Integrated (see Table 1). Half-step
discriminations are made between all but the last two stages. The item ratings can be converted to a 9-point ordinal scale and summed to give a single numerical score, called the Item Sum Score (Loevinger and Wessler, 1970). Loevinger's instrument is useful for measuring a person's level of what Loevinger refers to as "ego development" (Loevinger and Wessler, 1970).

Inter-rater reliability is good. Two judges for each item showed absolute agreement on 60% of the responses, and agreement within one half-step on 88% of the responses, averaging over judges and items. The total protocol rating (TPR) correlation and item sum is .85. Loevinger (1979) maintains that the high inter-rater reliability, in addition to the psychometric importance, testifies to the communicability, and hence the coherence, of the underlying construct.

Robert Holt explains that, since ego development is a complex conception for which no face validity criterion measure exists, no simple statement about the validity of the WU-SCT is possible (Holt, 1980). The rationale for the WU-SCT is that ego development is or reflects the person's
frame of reference. Therefore, an unstructured test permits the respondent to supply his or her own frame of reference (Loevinger and Wessler, 1970).

Evidence for the structural component of validity is homogeneity or internal consistency (Loevinger, 1979). For the Sealed Sample, using the ratings of the "composite trained rater", coefficient alpha for the 36-item test was .91. Redmore and Loevinger (1979) report longitudinal results that show a mean rise in ego level for six of the eight samples. The mean gain ranged from almost a stage and a half between grades 6 and 12 for an inner city sample, to about a sixth of a stage between grade 11 and the freshman year of college. These results indicate evidence for sequentiality, an important concept: For a variable or dimension to qualify as developmental, the stages must develop in sequence. All of the samples cited in Redmore and Loevinger (1979) showed a positive correlation between test and retest. Of the 14 correlations, ten were significantly different from zero. Average retest correlations were .5. Loevinger summarizes the construct validity of the sentence completion test of ego development,
calling it adequately validated for research, but not so valid or reliable that it can be used as a clinical instrument without confirming data.

Since the attention span of acting-out adolescents can be attenuated, it was decided to use only those stems that were of interest to the experimenter in regards to what the visualizations sought to change (i.e., attitudes towards parents and self). Therefore, twelve stems were chosen and 38 of the 61 subjects took the long form of the Sentence Completion Test as well as the short form (n = 20 for controls and n = 18 for experimentals). An ANOVA was run to confirm the validity between the shortened form of the Sentence Completion Test as compared to the long form. The short form correlated highly with the long form, showing a multiple r of .696. The $r^2$ of .48 very nearly approached that of Loevinger et al. (1970), whose correlation approached .5. Therefore it was thought that this shortened form could be safely used in the experiment in order to determine whether ego development changed as a result of visualization (see Appendix A).
**Procedures**

Before the experiment began, letters of consent (Appendix B) were sent out to the parents to completely inform them concerning the nature of the study and the nature of any possible risk, which was assured to be minimal. The letter described the study for them. They were told the nature of the study, that there was minimal risk to their child, and that no deception or concealment was involved. Further, their child could withdraw from the study at any time, or they could choose to withdraw their child from the study at any time. In addition, both they and the subjects were assured that their privacy would always be respected. Each subject would be coded for anonymity and all information was strictly confidential. Scores would never be reported or made public, no information would be associated with the subject's name or any other identifying information. Access to the data would remain limited to the experimenter alone. Subjects were given a consent letter as well (see Appendix C).

All subjects were informed concerning the nature of the study, promised that nothing would be concealed, that no
deception was involved, and that they could withdraw from the study at any time. Their privacy would remain completely confidential. Seven subjects refused to consent to the experiment and eleven parents did not return the consent form. Subsequent phone calls brought permission for six subjects. The other teenagers were eliminated from the study and those who had belonged to the experimental group were dismissed from the group before the visualizations took place. Since one of the group homes was the Chesapeake Boys Home, consisting of 16 boys, the numbers for males and females were somewhat skewed with 36 boys and 28 girls.

Each of the regional group homes had two preformed groups with seven (7) to nine (9) teenagers in each group. One group from each of the homes was randomly selected to be in the experimental group. The others were placed in the control group. The controls received visualizations after the experiment was completed. All subjects, \( n = 63 \), received their regular treatment program previously described. Before the experiment began, therapists filled out the Child Behavior Checklist for both experimentals and controls. In the first session all subjects filled out the
Beck Depression Inventory as well as the Sentence Completion Test (Short Form). The experimental groups were given an explanation of what visualization consists of and then were trained in relaxation technique. In the subsequent four weeks, the experimental group received visualizations given by their therapists who used scripts that they had learned which had been provided by the experimenter (see Appendix D). At the end of the fifth week all subjects were again asked to complete the Beck Depression Inventory and the Sentence Completion Test. Therapists were asked to fill out the Child Behavior Checklist for each subject. After each session therapists were asked to encourage discussion of what had occurred for the subjects during the visualizations.

Week two involved the induction of relaxation in the first visualization (see Appendix A for actual script used). After the visualization the group therapist allowed for and encouraged discussion of the visualization. At week 3 the groups heard the second relaxation visualization tape. Week four was the third visualization. Week five was the fourth visualization. At the end of the fourth visualization and
discussion all subjects, both experimental and control, were administered post-test measurements. At that time therapists received the post-test for the Child Behavioral Checklist, which they were asked to please fill out on all subjects and return to the experimenter as quickly as possible. The experimenter provided an information phone number where she was available for any clarification of any question that the therapists, parents or subjects might have. The total time for the experiment was five weeks.

**Ethical Considerations**

This study was conducted under the following guidelines in order to protect the rights and well-being of the subjects in the study, as well as the integrity of the regional group homes of Chesapeake and Virginia Beach.

1. This research study was approved by the Human Subjects Research Committee of the College of William and Mary. The study was approved by the head of the regional group homes as well as all of the therapists on the staffs.

2. Subjects were assured of their right to informed consent.
3. The parents of the subjects were assured of their right and their child's right to informed consent.

4. Participation was voluntary and a decision not to participate in no way affected the child's status at the regional group home nor did it in any way increase their length of stay.

5. Any data collected for use in this study in no way affected the subjects' status, diagnosis, or right to receive fair and appropriate treatment at the regional group homes. If any subject wished to have their result explained individually upon request following the experimental sessions, that was done for the subjects.

6. Confidentiality was maintained throughout the study which included subsequent release or publication of study results.

7. Any subject could withdraw from the experimental treatment at any time for any reason with no repercussions. All subjects participated in all phases of the usual treatment program at the regional group homes thus assuring their right to appropriate therapeutic intervention. See Appendix B.
8. Subjects and parents were told that the experimenter was available for individual counseling should the need for it (determined by either parents, therapists or subject) arise.

Specific Hypotheses

Statistical Hypothesis 1

No statistically significant difference in depression, as measured by the Beck Depression Inventory, will be found between the experimental groups and the control groups after four weeks of exposure to guided imagery.

Statistical Hypothesis 2

There will be no statistically significant difference in behavior, as measured by the Child Behavior Checklist, between the experimental groups and the control groups after four weeks of exposure to guided imagery.

Statistical Hypothesis 3

There will be no statistically significant difference in ego development, as measured by the Washington University Sentence Completion Test, between the experimental groups and the control groups after four weeks of exposure to guided imagery.
Experimental Design

Permission slips stating the nature of the experiment were sent out to parents, with self-addressed, stamped envelopes asking for permission to collect information concerning their child's development.

Research Design

The basic design of this experiment is what Campbell and Stanley (1963) call the non-equivalent control group design which is one of the most widespread experimental designs in educational research and involves an experimental and a control group, both given a pre-test and a post-test, but in which the control group and the experimental group do not have pre-experimental sampling equivalence. Rather, the groups can constitute naturally assembled collectives such as classrooms as similar as availability permits yet not so similar that one can dispense with the pre-tests. The assignment of X to one group or the other is assumed to be random and under the experimenters control (Cambell and
Campbell and Stanley go on to state that this design should be recognized as well worth using in many instances in which pre-test/post-test control groups design is not possible. In particular, they note that the addition of even an unmatched or non-equivalent control group reduces greatly the equivocality of interpretation over pre-experimental designs, and the more this similarity is confirmed by the scores on the pre-test, the more effective this control becomes. Assuming that these aforementioned desiderata are approximated for purposes of internal validity, one can regard the design as controlling the main effects of history, maturation, testing, and instrumentation in that the difference for the experimental group between pre-test and post-test (if greater than that for the control group) cannot be explained by main effects of these variables such as would be found effecting both the experimental and the control group (Campbell and Stanley, 1963).
There is a possibility of an external threat to validity due to the interaction of the pre-test with the experimental treatment. However, the pre-tests do not relate directly to the intervention so the pre-tests should have no interaction with the intervention. Therefore, this threat to external validity should be null in this particular design.

One problem was that the subjects within the groups were not blind as to whether they were in a treatment or in a control group. Although the subjects, both in control and experimental groups, were asked not to divulge the nature of the group therapy, nonetheless the chance of discussion among the subjects, inasmuch as they lived in the same house, was high.

One of the most important threats to internal validity involved history. These adolescents are highly volatile, coming from dysfunctional homes. They go home for the weekend after they have reached a certain level and then possibility of fights among the adolescents as well as problems from the home environment could have impinged on
the levels of depression and acting out behavior that were beyond the experimenter's control.

**Statistical Analysis**

The statistical method for analysis was that of analysis of covariance, in which the post-test means were compared using the pre-test scores as a co-variant (Gall, Borg and Gall, 1986). Analysis of covariance and ANOVA adjust the post-test scores for differences between the experimental and control groups on the corresponding pre-test (Gall et al., 1986). Although the literature suggests that the analysis of covariance is appropriate for this experimental design, the fundamental assumption underlying an ANCOVA is that of homogeneity of regression coefficients within the treatment populations (Winer, 1971). When testing the null hypothesis for the homogeneity of regression coefficients, the null hypothesis was rejected for SC and BDI. With its fundamental assumption being violated, the results of the ANCOVA could not be reasonably interpreted. An analysis of variance of gain scores were used. The level of confidence was established at .05.
An alternative to an ANCOVA is an ANOVA on a mixed design. On the variables measured by CBC, SC, and BDI, the design was considered a two-between (home and treatment, one within (pre-test/post-test) repeated measures design. Once it is understood that an assumption underlying the correct use of ANCOVA is that the population regression slopes associated with the treatment populations be equal, one sees that the interpretation of ANCOVA and the associated adjusted means relies heavily on the assumption of homogeneous regression slopes for the various treatment groups. Since this assumption was not met for SC and BDI, the ANCOVA F test and the adjustment process could have led to highly misleading results. For this reason it had been decided that the homogeneity of slopes test be carried out when the ANCOVA was employed. Winer (1971) notes that the purpose of ANCOVA is to estimate and test differences among adjusted means. Since this is true, it is very important to recognize the factors that effect the adjustment. The relative size of the samples, the pooled within group regression coefficient, and the mean difference on the covariant all play a part in the adjustment process. There
is generally little difference between adjusted and unadjusted means when randomized group experiments are employed. This is because small differences on the covariant can generally be expected with these designs. However, when non-randomized designs are employed, the mean differences on the covariant, and hence the degree of adjustment, may be large.

In summary, two consequences of violating the assumption of homogeneity of regression leads to (1) difficulty in interpreting the meaning of a retained null hypothesis (i.e., uncertainty as to whether overall mean effects are masking treatment differences associated with specific levels of 'x') and (2) biased F test. Since a complete interpretation of results requires information concerning the slopes, it was decided that the data be plotted and the test for homogeneity of regression be carried out in this situation where the analysis of covariance was employed. Where the slopes were clearly heterogeneous, the investigator decided to examine the regression functions for each treatment group separately.
The repeated measurement ANOVA was thus used in addition to gain scores.
Chapter 4

Results

The purpose of this study was to examine the effects of visualization on substance-abusing teenagers who had been assigned by the courts to the Regional Group Homes of Virginia Beach and Chesapeake. Measures of behavior, depression and ego development were chosen as dependent variables for this experiment. In this chapter, specific hypotheses will be presented along with their corresponding statistical results.

The literature suggests that the analysis of covariance is appropriate for this experimental design. One of the fundamental assumptions underlying an ANCOVA is that of homogeneity of regression coefficients within the treatment populations. When testing the null hypothesis for the homogeneity of regression coefficients, the null hypothesis was rejected for SC and BDI. With the fundamental assumption being violated, the results of the ANCOVA could not be reasonably interpreted. On the CBC the null hypothesis for homogeneity of regression coefficients could
not be rejected, but the subsequent ANCOVA showed no significant effects.

An alternative to an ANCOVA is an ANOVA on a mixed design. On the variables measured by CBC, SC and BDI, the design was considered a 2-between (home and treatment, one within (pre-test/post-test)) repeated measures design. The analyses, along with the discussion of the significant effects in each, will be presented. The following are the null hypotheses which were poised for testing in the study:

H1 Null Hypothesis 1 states that the mean of the experimental group (visualization) will not be significantly different from the means of the control group (no visualization), in their level of depression as measured by the Beck Depression Inventory.

Since the basic assumptions of ANCOVA were not met (see Table 2), an ANOVA of the post-test means was computed. Treatment was found to be significant (see Table 3). The group means for the experimental group were in the marked depression range (19.4) and moved to a mild depressive score (10.7).
Using the ANOVA on a mixed design, even more information was garnered (see Table 4). On the variable measured by BDI there was a significant main effect for home and pre-test/post-test, as well as a significant interaction between pre-test/post-test and treatment. The significant pre-test/post-test effect suggests that the group home setting is having an effect. The significant effect for home suggests that all group homes are not created equal.

The most important result in the entire study is the significance of the treatment x pre-test/post-test interaction. This significant interaction allows for pair-wise comparisons. Tukey's HSD Test is appropriate for this analysis. Tukey's test value for the difference between means at the .05 level with the given degrees of freedom is 4.19. Of the possible pair-wise comparisons, (1) treatment pre-test x treatment post-test, (2) treatment pre-test x control post-test, (3) treatment pre-test x control post-test, (4) control pre-test x treatment post-test, (5) treatment post-test x control post-test, (6) control pre-test x control post only, one, four and five exceeded Tukey's Honestly Significant Difference. On the variable
measured by BDI, the treatment group evidenced significant improvement pre- to post- whereas the control did not.
TABLE 2

TEST FOR INTERACTION ON BDI

DEP VAR: BDI2  N: 63  MULTIPLE R: 0.689  SQUARED MULTIPLE R: 0.475

ANALYSIS OF VARIANCE

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<tr>
<th>SOURCE</th>
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<th>MEAN-SQUARE</th>
<th>F-RATIO</th>
<th>P*</th>
</tr>
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<tbody>
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<td>0.500</td>
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<td>3315.473</td>
<td>45.111</td>
<td>0.000</td>
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<tr>
<td>GRP*BDI1</td>
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<td>692.827</td>
<td>9.427</td>
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<td>4409.705</td>
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<td>73.495</td>
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</tbody>
</table>

* SMALL P => SIGNIFICANT INTERACTION

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Table 3

BDI Gain Scores

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<th>F</th>
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<td>709.657</td>
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<td>923.878</td>
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<td>0.016357</td>
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<td>348.2887</td>
<td>87.07217</td>
<td>0.578866</td>
<td>0.679194</td>
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<tr>
<td>s/home x treatment</td>
<td>54</td>
<td>8122.598</td>
<td>150.4185</td>
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</table>

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Table 4
ANOVA On a Mixed Design

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<td></td>
<td></td>
</tr>
<tr>
<td>between S</td>
<td>63</td>
<td>13310.99</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>home</td>
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<td>740.76</td>
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<td>9508.88</td>
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<tr>
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<td>6099.50</td>
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<tr>
<td>pre/post</td>
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<td>670.70</td>
<td>670.70</td>
<td>8.15</td>
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<td>home x pre/post</td>
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<td>338.38</td>
<td>84.60</td>
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<td>0.40</td>
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<td>treatment x pre/post</td>
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<td>461.94</td>
<td>461.94</td>
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<td>home x treatment x pre/post</td>
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<td>186.84</td>
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<td>54</td>
<td>4441.64</td>
<td>82.25</td>
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</table>
H2 Null Hypothesis 2 states that there will be no statistically significant difference in behavior as measured by the Child Behavior Checklist, between the experimental groups and the control groups after four weeks of exposure to guided imagery. When an ANCOVA was run, the assumptions for ANCOVA were met, but on the ANOVA no significant differences were found (see Table 5). No significant effect was found using gain scores. The null hypothesis was retained (see Table 6).
Table 5

ANCOVA ON CBC

CBC1 = PRETEST VALUE

CBC2 = POSTTEST VALUE

DEP VAR: CBC2 N: 63 MULTIPLE R: 0.767 SQUARED MULTIPLE R: 0.588

ANALYSIS OF VARIANCE

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<td>GRP</td>
<td>23503.799</td>
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<td></td>
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<td>377.678</td>
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</table>

* LARGE P => NO INTERACTION

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DEP VAR: CBC2  N: 63  MULTIPLE R: 0.764  SQUARED MULTIPLE R: 0.584

ANALYSIS OF VARIANCE

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<td>374.837</td>
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* NO SIGNIFICANT DIFFERENCE BETWEEN GROUPS DUE TO TREATMENT

** PRETEST IS SIGNIFICANT COVARIATE

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Table 6

CBC Gain Scores Pre to Post Treatment vs. Control

<table>
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<tr>
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<th>Treat</th>
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<tr>
<td>Mean</td>
<td>-7.6</td>
<td>-</td>
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<tr>
<td>10.5</td>
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<tr>
<td>Variance</td>
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<td>224.439</td>
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<tr>
<td>Observations</td>
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<td>34</td>
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<td>df</td>
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<tr>
<td>t Stat</td>
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<tr>
<td>P(T&lt;=t) one-tail</td>
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<tr>
<td>t Critical one-tail</td>
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<tr>
<td>P(T&lt;=t) two-tail</td>
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<tr>
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Table 7  
ANOVA On a Mixed Design

CBC

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### Table 8

**Sentence Completion Short Form vs Long Form**

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<td>Standard Error</td>
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<tr>
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Table 9

ANCOVA

(1) TEST FOR INTERACTION ON SC

DEP VAR: SC2  N: 63  MULTIPLE R: 0.667  SQUARED MULTIPLE R: 0.445

ANALYSIS OF VARIANCE

<table>
<thead>
<tr>
<th>SOURCE</th>
<th>SUM-OF-SQUARES</th>
<th>DF</th>
<th>MEAN-SQUARE</th>
<th>F-RATIO</th>
</tr>
</thead>
<tbody>
<tr>
<td>P*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRP</td>
<td>0.689</td>
<td>1</td>
<td>0.689</td>
<td>1.967</td>
</tr>
<tr>
<td></td>
<td>0.166</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC1</td>
<td>6.484</td>
<td>1</td>
<td>6.484</td>
<td>18.515</td>
</tr>
<tr>
<td></td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GRP*SC1</td>
<td>1.726</td>
<td>1</td>
<td>1.726</td>
<td>4.927</td>
</tr>
<tr>
<td></td>
<td>0.030</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ERROR</td>
<td>21.013</td>
<td>60</td>
<td>0.350</td>
<td></td>
</tr>
</tbody>
</table>

* SMALL P => SIGNIFICANT INTERACTION

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Table 10

SC Gain Scores Pre to Post Treatment vs. Control

<table>
<thead>
<tr>
<th></th>
<th>Control</th>
<th>Treat</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>-0.067</td>
<td>0.103</td>
</tr>
<tr>
<td>Variance</td>
<td>0.771</td>
<td>0.285</td>
</tr>
<tr>
<td>Observations</td>
<td>30</td>
<td>34</td>
</tr>
<tr>
<td>Hypothesized Mean Difference</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>df</td>
<td>47</td>
<td></td>
</tr>
<tr>
<td>t Stat</td>
<td>-0.919</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) one-tail</td>
<td>0.181</td>
<td></td>
</tr>
<tr>
<td>t Critical one-tail</td>
<td>1.678</td>
<td></td>
</tr>
<tr>
<td>P(T&lt;=t) two-tail</td>
<td>0.363</td>
<td></td>
</tr>
<tr>
<td>t Critical two-tail</td>
<td>2.012</td>
<td></td>
</tr>
</tbody>
</table>
Using an ANOVA on a mixed design, on a variable measured by CBC, there were two significant main effects: treatment (or lack thereof), and pre-test/post-test. This does not suggest that treatment was effective, only that there were statistically significant differences between the control group and the treatment group on the variable in question (see Table 7). The significance of pre-test/post-test and the direction of the difference (across homes and treatment conditions) suggest that there is value in putting the adolescents in the group home setting (as was also found to be true concerning the BDI).

H3 Null Hypothesis 3 states that there will be no statistically significant difference in ego development as measured by the Washington University Sentence Completion Test between the experimental groups and the control groups after four weeks of exposure to guided imagery.

Before the data concerning pre-test and post-test were computed, an ANOVA was run to determine the validity of the shortened form of the Sentence Completion Test. The samples showed a positive correlation between the short form and the long
form. Correlations were .48, which Loevinger summarizes as adequately validated for research (see Table 8).

Again, when the ANCOVA was run (see Table 9), the assumptions for ANCOVA were not met; and when an ANOVA on gain scores was run, the null hypothesis was confirmed (see Table 10). A further ANOVA on a mixed design was completed, the null hypothesis was again confirmed (see Table 11). The two-between subject variables (treatment and home), as well as their interaction, were highly significant. The results suggest that the homes were different, the treatment and control groups were different, and that the variable measured by SC was brought about by the combination of treatment conditions and group home. In Redmore and Loevinger's (1979) longitudinal study on ego development, adolescents gain one sixth (1/6th) of a stage in two years. The adolescents in this study gained one tenth (1/10th) of a stage in a month (see Table 12). Perhaps one month is an insufficient amount of time of a growth in ego development using visualization. It may be that a longer time is required for such a task.

A careful examination of the actual responses on the stems showed that on the stems "my mother and I ____"; "my father
"my main problem is ____," 65% of the experimental subjects showed that their attitudes towards their parents and themselves did change. For example, on one stem in the pre-test, the response was "My mother and I don't get along very well" and in the post-test that subject's response was "My mother and I are cool," demonstrating a change in attitude, although not in ego development, inasmuch as both stems were scored as I-2 (impulsive). A close look at the data involving the sentence completion reveals that the Sentence Completion Test, although it adequately measured ego development, may not have measured what the visualization changed. The construct involved might be that of attitude towards parents and self rather than ego development.
Table 11

ANOVA On a Mixed Design
Sentence Completion

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>SS</th>
<th>MS</th>
<th>F</th>
<th>p</th>
</tr>
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<tbody>
<tr>
<td>total</td>
<td>125</td>
<td>72.01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>between S</td>
<td>62</td>
<td>20.88</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>home</td>
<td>4</td>
<td>1.31</td>
<td>0.33</td>
<td>50.34</td>
<td>0.00</td>
</tr>
<tr>
<td>treatment</td>
<td>1</td>
<td>15.12</td>
<td>15.12</td>
<td>2324.97</td>
<td>0.00</td>
</tr>
<tr>
<td>home x treatment</td>
<td>4</td>
<td>4.11</td>
<td>1.03</td>
<td>158.11</td>
<td>0.00</td>
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<tr>
<td>error</td>
<td>53</td>
<td>0.34</td>
<td></td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>within S</td>
<td>63</td>
<td>51.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>pre/post</td>
<td>1</td>
<td>0.02</td>
<td>0.02</td>
<td>0.02</td>
<td>0.89</td>
</tr>
<tr>
<td>home x pre/post</td>
<td>4</td>
<td>1.19</td>
<td>0.30</td>
<td>0.32</td>
<td>0.86</td>
</tr>
<tr>
<td>treatment x pre/post</td>
<td>1</td>
<td>0.23</td>
<td>0.23</td>
<td>0.25</td>
<td>0.62</td>
</tr>
<tr>
<td>home x treatment x pre/post</td>
<td>4</td>
<td>1.24</td>
<td>0.31</td>
<td>0.34</td>
<td>0.85</td>
</tr>
<tr>
<td>error</td>
<td>53</td>
<td>48.45</td>
<td></td>
<td>0.91</td>
<td></td>
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</table>

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Table 12
Mean Values and Sample Sizes

**CBCL**

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
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<tbody>
<tr>
<td>Experimental</td>
<td>54.2</td>
<td>44.4</td>
</tr>
<tr>
<td>Control</td>
<td>66.8</td>
<td>60.9</td>
</tr>
</tbody>
</table>

**SC**

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>3.37</td>
<td>3.47</td>
</tr>
<tr>
<td>Control</td>
<td>2.82</td>
<td>2.72</td>
</tr>
</tbody>
</table>

**BDI**

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>19.4</td>
<td>10.7</td>
</tr>
<tr>
<td>Control</td>
<td>16.8</td>
<td>16.1</td>
</tr>
</tbody>
</table>
Chapter 5

Summary, Conclusions, Discussions and Recommendations

Chapter 5 provides an overview of the results of this investigation by summarizing the study, presenting the conclusions drawn, discussing the implications and making recommendations for future research in this area.

Summary

Substance abuse is a significant and formidable problem affecting the lives of up to 30% of the children between twelve and 17 in the United States. Understandably, an enormous amount of time, money and energy is spent trying to prevent and treat young people who suffer with this problem.

The use of alcohol and drugs by adolescents today represents an alarming crisis. Alcoholism and drug abuse have disintegrating effects on the development of the adolescent (Glider, 1989; Jones and Hartman, 1988). Further, these adolescents have a high incidence of depression and suicide.

It is new to find programs designed specifically for the treatment of substance abuse and addiction in young people. These new treatments represent breakthroughs not
only in treatment, but also a dismissing of some of the
barriers that have separated traditional mental health
professions from the recovery movement. Both the recovery
movement and the psychological approach now place
responsibility for recovery on the addict and regard
recovery as a life-long process.

In the past there has been little room for spirituality
in the psychological approach to diagnosis and treatment.
Some practitioners of the psychological approach are now
joining the recovery movement, seeing a deeply spiritual
aspect. This study was an attempt to combine the mental
health approach with the approach of the recovery movement,
by using a method of visualization, which is essentially
from the transpersonal realm, along with the group practices
as described by Flores (1988) and Yalom (1978).

Kanas (1982) cites clinical research which estimates
that the recovery rate is two to three times higher in group
therapy than for patients who receive only individual
psychotherapy (Kanas, 1982; Yalom, 1978).

The theory of psychosynthesis, formulated by Roberto
Assagioli, served as the theoretical basis for this study.
Viewing the human as a whole, psychosynthesis provides a theoretical framework that enables the clinician to formulate a model for understanding the role of addictions in the structure of personality.

Psychosynthesis attempts to cooperate consciously with the natural process of personality development, focusing on integrating various aspects of the whole individual. Importantly, psychosynthesis recognizes that humans have a transpersonal essence and at the same times holds that a person's purpose in life is to manifest this essence, or Self, as fully as possible in the world of everyday personal and social existence (Miller, 1978). Thus, this theory hopefully combines the melding of a more traditional mental health philosophy and that of the 12-step programs.

Psychosynthesis addresses the personal and interpersonal issues recovering persons need to face. One of the most important techniques of psychosynthesis involves the use of visualization which was utilized in this study. Guided imagery is being used in some alcoholic treatment programs (Sheik, 1889; Whitfield, 1985; Sheik and Jordan, 1983; Birmingham, 1986; Birmingham and Sheehy, 1984).
Subjects for this study consisted of all of the inmates of the regional group homes of Virginia Beach and Chesapeake. There are five regional group homes and all of the members were included in the study as either experimental or control subjects with the exception of those adolescents who left the Homes when their time, as designated by the courts, was up and those not wishing to participate.

It was hoped that this study would demonstrate that the use of visualization would have a positive effect on decreasing acting out behavior and depression and increasing ego development among substance abusing teenagers. Recent research demonstrates that visualization is indeed a powerful force. Direct controlled research corroborate the clinical evidence that imagery has a curative effect. Visualization can produce significant changes in bodily responses, and mental images have been shown to affect vasomotor responses in general - sexual responses, heart rate, blood pressure, EMG, salivary responses, and immune responses (Sheik, 1889; Whitfield, 1985; Sheik and Jordan,
Groups using guided imagery become significantly more inner directed and show an increase in self-acceptance. Furthermore, the experience of guided imagery tends to result in an increase in psychological well-being, independence, and a capacity to be self-supportive. Studies have demonstrated that imaginal techniques can reduce unpleasant mood states (Hart and Means, 1990; Feinberg-Moss and Oatley, 1990; Cohen and Twemlow, 1981).

Many of these studies conducted to research psychological states used volunteers rather than actual psychiatric patients. This study hoped to correct that void by working with subjects who had a clinical history of drug use as well as acting out behavior and depression. No studies of visualization have been published dealing with clinically depressed teenagers with a history of depression and acting out behaviors.

Specific Hypotheses

Statistical Hypothesis 1
No statistically significant difference in depression, as measured by the Beck Depression Inventory, will be found between the experimental groups and the control groups after four weeks of exposure to guided imagery.

Statistical Hypothesis 2

There will be no statistically significant difference in behavior, as measured by the Child Behavior Checklist, between the experimental groups and the control groups after four weeks of exposure to guided imagery.

Statistical Hypothesis 3

There will be no statistically significant difference in ego development, as measured by the Washington University Sentence Completion Test, between the experimental groups and the control groups after four weeks of exposure to guided imagery.

Statistical Analysis

The null hypotheses poised for testing in this study are relisted below:

H1 Null Hypothesis 1 states that the mean of the experimental group (visualization) will not be significantly different from the means of the control group (no
visualization) after four weeks of exposure to guided imagery in their level of depression as measured by the Beck Depression Inventory.

Since the basic assumptions of ANCOVA were not met, an ANOVA of the post-test means was computed. Treatment was found to be significant. The group means for the experimental group were in the Marked Depression range (19.4) and moved to a Mild Depressive score (10.7).

H2 Null Hypothesis 2 states that there will be no statistically significant difference in behavior as measured by the Child Behavior Checklist, between the experimental groups and the control groups after four weeks of exposure to guided imagery. When an ANCOVA was run, the assumptions for ANCOVA were met; no statistical difference was found.
H3Null Hypothesis 3 states that there will be no statistically significant difference in ego development as measured by the Washington University Sentence Completion Test between the experimental groups and the control groups after four weeks of exposure to guided imagery. An ANOVA was run to confirm the validity between a short form of the Sentence Completion as compared to the long form. The short form correlated highly with the long form showing a multiple r of .696. (Format of the 'r') The r² of .48 very nearly approached that of Loevinger et al. (1970) at .50. When an ANCOVA was run on the Short Form, pretest/posttest, the assumptions for ANCOVA were not met, and when an ANOVA was run, the null hypothesis was confirmed.

Discussion and Implications

Summary of Findings

The analysis of the data collected relative to the principal objectives of this study indicated that for depression, visualization did have an ameliorating effect. The difference between the control group and the experimental group was significant. The analysis also revealed no significant improvement on behavior as measured
by the Child Behavior Checklist although there was a trend for the experimental group towards improvement. The differences did not reach statistical significance. Therefore, the hypothesis that visualization would help improve behavior was rejected. The data revealed no significant change in ego development as measured by the Washington University Sentence Completion Test.

**Interpretation**

In the writer's opinion, these data indicated that visualization may be helpful in alleviating depression in acting-out, substance-abusing teenagers. Further research may show how behavior can be changed through visualization, but no definitive statement can be made concerning the effect of visualization on behavior. The construct ego development in this study remained unchanged, although attitudes did show some signs of change.

The literature indicates (Wallace, 1985; Flores, 1988) strongly feel that substance abusers need to work in a group setting. Flores (1988) further points out that traditional orthodox methods of treatment have been insufficient.
Alcoholics Anonymous, as well as such theorists as Jung
(Wilson and Jung, 1987) and Assagioli (1973) think that
recovery is dependent in part on faith in a "higher power."
Visualization in this study has demonstrated that it can
affect levels of depression in a positive way. Affecting
levels of depression is most important in dealing with the
substance-abusing adolescent. Levy and Deykin (1989), as
well as Mitchell et al. (1989), report that major depression
is an important part of the problem, inasmuch as depression
often coexists with substance abuse. Levy and Deykin (1989)
assess the occurrence of suicide ideation, suicide attempts,
major depression and substance abuse, all interact together
to create a high risk factor for suicide. Hendren and
Blumenthal (1989) state that conduct disorders and
depression are the psychiatric disorders most highly
associated with youth suicide. Kosky et al. (1990) note
that suicide attempts are highly associated with chronic
family discord and substance abuse. Stowell (1991) notes
that depressive symptoms may result from the prolonged
alcohol abuse but sometimes the depressive symptoms precede
the alcohol abuse for adolescents. DeMilio (1989) found
that substance abusing teenagers have concurrent conduct disorders, major depressive disorders, and hyperactivity and impulse disorders. Breaking the cycle, at least in the area of depression, may help to break the cycle in terms of the need to self-medicate to alleviate the pain of the depression, and if the depression is alleviated, the need for acting out behavior may help to alleviate the need for self-medicating substance abuse.

Another issue to be considered is whether or not the Child Behavior Checklist was the best measure to use. Although the data indicated that all subjects significantly improved in their behavior after four weeks of being in a group home, and the experimental group improved somewhat more than the control group, this difference did not reach statistical significance. Despite the results of the data, the therapists themselves, and the leaders of the Group Homes, seemed to notice a significant difference in the behaviors of the adolescents. Each therapist noted that after the visualization all the experimental subjects seemed very much calmer and more focused, although they did not indicate this on the Child Behavior Checklist. In fact,
after the post-test data had been collected, the therapists in one home asked that I, instead of delivering the visualizations to the therapy group, please come out to deliver a visualization before the adolescents went to bed. I complied, and the therapists noted that the adolescents fell asleep much more quickly and there was less strife and fewer altercations than normal. The usual time for the adolescents to get settled was about an hour, but with visualization, all of the teens were very calm by the time the visualization work was complete, and some were asleep.

Another home asked that, instead of their delivering it in the form of a script, the experimenter please deliver the visualization before the group therapy because it made the therapy sessions go so much more smoothly and the teenagers were much more cooperative during the therapy session.

Yet another Group Home involved in the study asked after the data were collected that I come out and, instead of delivering the visualizations just to the control group once the experiment was over, that I please start their school day off with the visualization because the students could focus and concentrate much better on their studies. I
complied. Again, the Child Behavior Checklist did not reflect the differences that the various therapists noted either at bedtime, during group therapy itself, or preceding their school day. Apparently the effects were not long-lasting enough, at least with the four weeks that the experiment actually took place. Perhaps longer exposure would serve to make a permanent improvement in behavior.

Although the data from the study itself did not indicate that behavior, at least as measured by the Child Behavior Checklist, was affected over a four-week period, levels of depression most certainly were affected. A clinician, then, in dealing with substance-abusing teens could well start out a group therapy session with a visualization to aid the teens in overcoming the depression concurrent with substance abuse.

Discussion of the Problems and Limitations

There were a number of problems and limitations encountered in the process of implementing this research study which should be considered when interpreting these data. One of the problems encountered that may have affected this study was the difference in the subjects'
ability to visualize. This difference in the ability to visualize may have had a significant effect on the results since some of the subjects may not have been able to picture the guided imagery. In replications of this study it is recommended that each subject be tested for the ability to visualize and one subgroup may involve subjects who have been taught to improve their visualization technique.

Another of the problems encountered in this study was that six of the 30 control subjects scored a zero on the Beck Depression Inventory, a fairly unusual score for the BDI. It is not known whether this high number of zero scores is a reflection of extreme thinking on the part of adolescents, that is to say "I feel better than I did, therefore I feel perfectly undepressed," or whether they were merely dismissing the test and were not taking it seriously. In replications of this study it is recommended that the subjects be tested in smaller groups so that the therapist could determine how seriously the subject was taking the inventory. One of the therapists from House Five actually commented that the subjects were totally uninterested in taking this inventory again and did in fact
dismiss it, casually encircling all zeros and handing the test in.

Another problem encountered was the difference in therapists. The ANOVA on repeated measures indicated that the houses were different. It is not known whether this difference stemmed from a difference in the subjects themselves or a difference in the way that the homes were run, or in the difference in the abilities of the therapists. In future studies it is recommended that a trained therapist do all of the visualizations and also that the groups themselves be smaller. Given the attention span of acting-out adolescents, smaller groups of three to five may work better than the larger groups used in this study.

The greatest problem encountered in this study was in using the Sentence Completion Test. It may be that ego development is an achievement that would take longer than four weeks to really alter. In order for ego development to proceed, perhaps a change in attitude would have to come first. It may be that visualization could first change attitude towards parents and self (the main concern of this study) which could allow ego development to proceed. The
study attempted to demonstrate that visualization could increase self-acceptance and allow for a letting go of grievances and developing a better attitude towards parents. Such a change could then lead to higher ego development. In replications of this study, it is recommended that an attitude scale be used instead of a scale for ego development.

Suggestions for Further Research

Corey and Corey (1987) demonstrate that offering themes of discussion in group therapy with adolescents results in longer abstinence in chemically-dependent adolescents rather than a vague and general asking "What would you like to talk about today." The visualizations in this study centered around alleviating feelings of sadness and anger. The high number of responses on the post-test demonstrating a change in attitude towards parents seem to imply that conflicts with parents may be resolved through visualization. Perhaps a theme for future studies might revolve around conflict resolution with parents in the visualization.

Another study that might attempt to look more closely into the effects of visualization might involve inpatients.
who could receive daily visualizations as opposed to weekly visualizations to see whether results would be clearer. Another possibility would be, again using inpatient groups, to see whether the visualization is more effective before a group therapy session as opposed to after a group therapy session, before with discussion, afterwards with no discussion, as opposed to just before bedtime with no discussion, or just before bedtime with a brief discussion.

Shaw (1992) maintains that through group therapy adolescent substance abusers may experience successes that will lead to a sense of self-confidence and self-respect. Baab (1992) maintains that it is beneficial for adolescents to learn methods of altering their way of being and doing other than through the use of substances. Baab describes that the substance-abusing adolescents have healthy parts of the personality existing at one level of conscious awareness and unhealthy parts of the personality in another level of arousal. Suppressed or repressed material may resurface periodically for the client which Baab maintains may be the adolescent’s explanation for the use of substances. A study
may be constructed that would allow theories of
visualizations to permit the adolescent to explore and
resolve and finally integrate the self-destructive parts of
his or her mind with the constructive self-nurturing part.

Discussion

There were some findings derived from the study which
may have practical implications for others involved in
research or applied practice in the area. Adolescents who
are depressed seem to respond to visualization practices.
This may involve a relaxation of the body that may lead to
feelings of hope. Since the body is less tense the
adolescent may feel that he or she can deal with the
problems presented in the visualization and derive a feeling
of empowerment. The fact that there was a movement towards
behavioral change may demonstrate that with acting out
behavior the practitioner or teacher may use a
relaxation/visualization to refocus the adolescent. Since a
number of the adolescents did make changes in their
statements regarding their attitude or the way that they
look at their parents, it may mean that visualization can
lead to some attitude change. This, however, would require further research.

According to Whitfield (1985), it is a well-known fact among professionals involved in alcoholism and addictive therapy that the most effective treatment programs in this area are those that have a strong spiritual emphasis. However, most professionals find this fact embarrassing and incompatible with what they believe to be the scientific world view.

So how, then, may spirituality help? Western mechanistic science has traditionally seen the world in terms of separate objects, making a sharp division between mind and matter. Recently this has been called a false dichotomy. Gregory Bateson's (1972) definition of the mind and especially the new physics (Zukav, 1979) show that the observer of reality is not separate from the object observed, but actually affects the object. Therefore, the notion of a unilaterally controlled, separate self is fundamentally wrong and untenable.

And so, according to Bateson's analysis of the psychodynamics of alcoholism, an alcoholic is in some sense
more sane than others. When sober, the alcoholic functions like most Westerners in terms based entirely on the erroneous premise that enslavement to the ideals of materialistic society is normal. But these ideals are not bearable for the alcoholic. The alcoholic intoxication provides a partial and temporary solution in a more correct state of mind, that of being filled with "spirits." When the alcoholic hits bottom, he/she surrenders to a higher power, which involves a deep recognition that one is a part of a larger whole (Bateson, 1972).

A key finding of this study is that visualization may reduce depression in substance abusing adolescents in group homes. Since the visualizations utilized were transpersonal in nature, this raises the issue of the possible efficacy of spirituality in recovery. One must be cautious in this interpretation for other factors may have been involved. One might postulate, for example, that the deep breathing and relaxation alone could provide the same results, although Feinberg-Moss and Oatley, in their reperatory grids, saw more extensive personality changes in the reperatory grids with their psychosynthesis imaging group.
over the relaxation group. Cohen and Twemlow found that the guided imagery group did significantly better than the free imagery group, with both groups having first been hypnotized. None of these studies, including the present one, can precisely say what about the visualizations works or why, although Lang's propositional theory suggests some possibilities.

With these caveats in mind, this investigator feels that the present study may provide a link in the connecting of spirituality to the treatment of, and by extension, recovery from, the depression involved in substance abuse.

When the term "spirituality" is used, the term is not limited to the god of any specific denomination, but is defined as a relationship with a Higher Power or God, as one understands God to be. This form of spirituality requires giving up the illusion of control, surrendering to a higher power, and even hitting bottom or experiencing the ego death (Grof, 1987). These experiences have been recognized by transpersonal psychology as important to emotional and physical healing, and vital to the development of true spiritual awareness. The kind of spirituality meant by the
transpersonal approach is compatible with Jungian psychology, consciousness research and cybernetics and systems theory. As has been noted, traditional Western science is traditionally antireligious and anti-spiritual. However, transpersonal psychology (Wilber, 1979; Walsh and Vaughan, 1985) is challenging this philosophical prejudice.

This challenge was initiated by Carl Jung. Jung played an important role in inspiring Alcoholics Anonymous, described in correspondence between Bill Wilson, cofounder of AA, and Jung in 1961 (Wilson and Jung, 1987). One of the other cofounders of AA (Roland H.) had been in treatment for a year with Jung. Jung told him that his case was hopeless, and that his only chance was to come in contact with a profound spiritual experience, which Roland H. did -- eventually helping Bill Wilson and his friend, Edwin T. These were the founders of AA. Jung explained to Bill Wilson that he understood the craving for alcohol to be in fact a spiritual hunger, which only a spiritual experience could satisfy.
In this paper, spirituality is defined as the principle of conscious and vital life, animating the body and the mind. Spirituality involves every aspect of one's consciousness, from the deep recesses to one's everyday practical life. This spiritual part of ourselves is that which Wilber tells us has been called many names (Wilber, 1979), including spirit, essence, true nature, soul, and higher self. For the purposes of this paper, we have called it the Self. This Self is the wisest part of a human being -- the part that is at peace with itself. It is that part of the psyche where one can find a sanctuary from stress. The Self is not the mind. Hampton-Turner (1982) shows some distinguishing characteristics of the mind and the Self. Characteristics of the mind include its use of defenses, its righteousness, its attachments, its addictions, its thinking in terms of worst enemy/best friend, of bondage/liberation; it hides the Self; it wants to be special. The Self, on the other hand, has the characteristics of positivity, creativity, boundless love, bliss, consciousness, intuitive or direct knowing, enlightenment, detachment, humility. Hampton-Turner (1982) also refers to the mind as being
rational and linear, verbal, understandable. This is the state the alcoholic seeks to achieve using alcohol.

To approach the problem, we must draw from many traditions: Eastern disciplines emphasize the spiritual aspects, while Western disciplines focus on personality. Contemporary society, with its bias towards materialism, is inclined to regard as real only what is tangible. Yet a wave of anger is no less real than a wave of the sea. Both phenomena have their causes and create their effects. Both can be observed and described. The mental image of a castle is as real as the castle itself. It is real as a subjective experience and also in the sense that it constitutes the preliminary condition for the construction of the castle. Cirinei (1970) continues to elaborate: if one removes one's gaze from a material object, that object does not cease to exist. If one burns it, chemistry demonstrates that its substance endures in another form. Some content of the psyche, such as the experiences of early childhood, seem to vanish without trace, but this also is an illusion as psychoanalysis has demonstrated. The contents of the psyche continue to exist and work in the unconscious. So the
psyche is just as real as are visible things -- in a certain sense more so, for it is an inner condition which inevitably causes the outer effects (Cirinei, 1970).

Modern physics has defeated materialism on its own ground by showing that matter is pure appearance which is ultimately that mysterious something we call energy. Energy can be considered to form a bridge between the psyche and matter. Psychological phenomena, like physical ones, also possess energy. We acknowledge this every time we speak of the greater or lesser intensity of our feelings, thoughts, mental images and so on (Assagioli, 1965). Psychosynthesis accepts this point of view and elaborates techniques that can be used for directing, transforming and sublimating various psychological energies such as aggressiveness (Cirinei, 1970).

This study has attempted to demonstrate, empirically, that reconciling the two metaphors (that of science with that of the transpersonal) may lead to effective transforming of depression in substance-abusing adolescents.
In this study, the efficacy of a transpersonal treatment (visualization) was statistically significant in reducing depression among substance abusing adolescents. Perhaps this empirical confirmation of transpersonal techniques may lead to a lessening of the scientific prejudice against the transpersonal.
APPENDIX A

Sentence Completion Test

1. Raising a family --

2. The thing I like about myself is --

3. My mother and I --

4. What gets me into trouble is --

5. My father --

6. I feel sorry --

7. When I am nervous, I --

8. Men are lucky because --

9. I am --

10. My main problem is --

11. If I can't get what I want --

12. My conscience bothers me if --
APPENDIX B

Letters of Consent to Parents or Guardians

Candice Cook-Darby

College of William and Mary

School of Education

Dear Parent/Guardian of Resident of the Regional Group Homes:

Your child has been involved in the Regional Group Home program for a few months now, and hopefully has learned a little about himself/herself and his/her relationships to others. I'm doing a study to see whether or not I can help kids like yours in the way they look at themselves and the way they relate to others. I'd like to teach your child how to do some guided imagery. They'll be asked to fill out a couple of questionnaires, and then will be asked to close their eyes and sit back and relax, and listen to some instructions on imagining. If they are in the study, they will be asked to do some guided imagery.

There will be four weeks of guided imaginings. Then they'll be asked to fill out the same questionnaires, and we
can see whether the stuff works. Visualization helps teens with their problems.

By the way, if at any time your child wants to pull out of the study, they’re certainly permitted to do that. All information that they give me will be kept completely anonymous. I'll have it coded so that nobody will know their answers. I won't be concealing anything from them or you, or trying to trick them or you in any way and, if they should get into any kind of problems with this study, they or you can ask their counselor how to get in touch with me, and we can talk about any problems that they might be having regarding the study.

Please indicate your desire for your child to be involved in the study by signing below.

Thanks again.

Sincerely,

Candice Cook-Darby

Student
Parent

Date
Dear Resident of the Regional Group Homes:

You have been involved in the Regional Group Home program for a few months now, and hopefully you've learned a little about yourself and your relationships to others. I'm doing a study to see whether or not I can help kids like you in the way they look at themselves and the way they relate to others. I'd like to teach you how to do some guided imagery. You'll be asked to fill out a couple of questionnaires, and then you'll be asked to close your eyes and sit back and relax, and listen to some instructions on imagining. If you are in the study, you will be asked to do some guided imagery.

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Please indicate your desire to be involved in the study by signing below.

Thanks again.

Sincerely,

Candice Cook-Darby

__________________________________________

Student

__________________________________________

Date
APPENDIX D

The Visualizations

Scripts Read by Therapists To Experimental Subjects

WEEK ONE

In school you have often heard that having a good imagination meant that you were a good story teller, and whether that was a good or a bad thing depended on the circumstances. What scientists are now discovering is that imagination can help you in your everyday problems. By using your imagination you can help solve your problems and get yourself out of pain. Scientists are now showing how your imagination can, in your mind, be as effective as an actual experience and making images in your brain can lead to real changes in your body and in the way you act and think.

The way we start out using visualization (another word for this is imagery) is by learning how to relax completely. So sit quietly and comfortably or, if you like, you can even lie down. Look around you and become aware of all that you see. See it in all its detail as clearly and as vividly as possible. Take a few moments to do this.... Now
close your eyes and breathe in slowly. Try to bring your breath in as deeply as you can, all the way down into your belly, and just let the air go, not controlling the exhale in any way. Breathe in and let it go. Breath in and let it go. As your whole body becomes more and more relaxed and sinks down, deep into the cushions of the couch or floor, breathe in and just let the air go. And now, when you breathe in, you say to yourself "I am," and when you breathe out you say to yourself "relaxed. I am ... relaxed....I am ... relaxed .... I am ... relaxed ...." Good.

Now, as you breathe in you recognize that you are perfectly safe, perfectly comfortable, and how all day long you fight the force of gravity, struggling to do, but for right now you give up the struggle and just sink down, down to a safe, quiet place that is just for you, because just right now you have no place you have to go, nothing you have to do, nowhere you have to be, just to relax and let go. Now in your mind's eye you see how you are completely surrounded and protected by a pure healing white light. This light surrounds you and protects you and soaks into
every pore in your body, and you see in your mind's eye how when you breathe in you actually breathe in this light.

Breathe in, and the light fills your body going all the way down to your toes, relaxing your toes, and you release the air. Breathe in the light and see how it is filling your feet, filling your lower legs, filling your thighs, relaxing them. See the light fill your lower abdomen, fill your stomach, fill your heart and lungs, and your whole body lets go just a little bit more as you breathe in the light and breathe out the tension. Feel your shoulders relax and fill with light. See how the light goes all the way down to your fingertips filing your hands. They might even start to tingle just a bit. See your lower arms fill with light, and your upper arms fill with light, and feel your shoulders let go just a little bit more as you breathe in the light and breathe out the tension. See the light fill your neck and throat and your whole head, as the back of your head relaxes, the top of your head, your forehead, all around your eyes, relax. All around your mouth and your jaw, just let go. Your whole body now is completely filled with light and so relax. You feel so good, so comfortable. Perfectly
safe, perfectly comfortable, perfectly secure. And now I will count backwards from five and you will open your eyes, awake and alert and refreshed, ready to discuss your experience. Five, four, three, two, one, when you are ready open your eyes. [Allow some time for discussion about what was experienced before the group is dismissed.]

WEEK TWO

PREPARATION:

Discuss the meaning of "totems" in ancient cultures. Stress the idea that totems, usually animal symbols, were considered to be the lifelong protector of people, and the personality traits of the totem reflected important personality traits of the recipient. Very often it was the totem itself that guided, directed, protected and inspired the individual throughout life.

Totems were given to individuals by a wise person such as a Medicine Man or Woman revered as a mediator between the gods and people by members of a tribe or clan.

IMAGERY:
[Repeat relaxation procedure the same as Week 1.

Instead of bringing them out of the relaxation, give the following visualization.] You are feeling so safe and secure and comfortable that you can allow yourself to see more than you usually see and understand more than you would usually understand. See in your mind's eye that you are walking into a house. You walk through the front door into a great room with two very comfortable chairs in it. In one of the chairs is a wise old person. This person has a source of understanding and knows who you are, what you've been, what has happened to you, and what you can become in the future. This wise old person can help you direct your energies toward achieving your goals and solving your problems.

Ask your Old Wise Person to give you your own special totem ... the animal symbol that will give you strength ... and will help you to always make good decisions about your life ... What animal totem is given to you? (pause) ... Do you recognize this animal? (pause) ... Ask your Wise Person to describe the animal totem to you by telling you how you and the animal are alike.
For example, if your Wise Person gave you a lion, the Person might say "The lion is smart and very strong, and you are smart and very strong ... The lion protects its young and you protect younger children whom you love and care for." (pause) ... Now ask your totem if there is anything you need to know right now to be happy ... secure ... and to sense that your life is deeply meaningful to you (pause) ... On the count of three take a deep breath ... hold it ... and exhale with a slight sigh ...

WEEK THREE

Meeting the Inner Child

(adapted from Hay, 1986)

Induce Relaxation

When you were a tiny baby
You were pure joy and love
You had such courage
You loved yourself totally
Every part of your body
You knew you were perfect
And that is the truth of your being
All the rest is learned nonsense and can be unlearned.
I want you to see yourself as a little child of 5 or 6.
Realize there is only one thing this little child wants of you
And that is love.
Tell it how much you love it, how much you care.
Admire its cleverness, its individuality, its joy and laughter. Its affection
Tell it it's okay to make mistakes while learning
Tell it you'll always be there to support it no matter what
Now make this child very small so you can put it in your heart.
So that whenever you look down you will see this little face looking up at you and you can give it lots of love.
Now visualize your mother as a little girl of 4 or 5,
Frightened, looking for love
And not knowing where to find it.
Let her know how much you love her, how much you care.
Let her know she can rely on you,
That you will always be there for her.
No matter what.
When she quiets down and begins to feel safe
Let her get very small, just the size to put into your
heart.
Now put her there, with your own little child. Then let
them

give each other lots of love.
Now visualize your father as a little boy of 3 or 4,
Frightened, crying, looking for love.
See the tears run down his frightened little face as he
doesn't

know where to turn.
So reach out your arms and hold his trembling little body.
Let him feel how much you love him.
When his tears are dried and you feel the love and the peace
in

his little body,
Let him get very small until he's just the size to fit into
your heart.
So those three little children can give each other lots of
love
And you can love them all.
There is so much love inside your heart that you could heal the entire planet, but just for now, let us use this love to heal you.

Feel a warmth beginning to grow in your heart center. Let this love inside your heart allow you to have understanding in a way you never had. Let this love in your own heart bring peace to your inner being so you are always centered. Take a moment to enjoy this feeling.

Pause for 30 seconds.

Your body is so peaceful and relaxed. It's almost like resting on a cloud. In fact, you are on a cloud and you feel so good. You are absolutely safe and secure. You are so completely safe that you can now allow yourself to see more than you usually see.

This cloud gently comes to rest on a mountaintop.
In the valley below, you see your entire family lined up before you.

All of them that you have ever met or known are there. From your special vantage point, you are able to see what it is they all have in common.

Look for that special thread that runs through your family that connects them all together.

If you can see this connecting link now, then you will be able to see how you fit in and what you can learn.

If you do not see it now don't worry, you will in a little while.

It will flash into your mind with great illumination and understanding.

Understanding, awareness and knowledge is the key that opens the door to forgiveness and love.

Forgiveness and love is your freedom in the here and now.
Let this same cloud lower you from the mountain. Turn your attention to the countryside in front of you. Let your eyes move from scene to scene. As you drink in the beauty before you, let your eyes travel down a shady country lane that leads to a sunny meadow. On one side of the meadow are tall trees and wild flowers scattered in the grasses. As you look, you see two people running across the meadow, and as you look you see they are your parents. Your parents are running across this peaceful meadow. From your peaceful vantage point, you begin to notice some things about them. Are they running together, side by side, or is one in front of the other? Which one? Do they look happy? What is the expression on their faces? How do their bodies move? How old are they? Is anyone else from the family
running with them? Use this scene to gather further knowledge and understanding.

WEEK FOUR

Changing unwanted feelings

(Adapted from Murdock, 1982)

Induce relaxation. It is very important to own your feelings and make them OK to have. What is most important is that we allow ourselves to feel whatever it is we are experiencing. We aren't stuck with bad feelings, however, and can use the power of positive energy, positive imaging, to change any negative feelings to positive ones. Allow yourself to fully experience a feeling that you don't like ... one that annoys you (pause) ... Now take this feeling and go away to a place where everyone is feeling the same way (pause) ... Be sure that you are in this scene with the others...experiencing it fully (pause) ... Now back away or out of this scene and move to a place where you can observe the scene from a distance. Notice what the situation looks like when you remove yourself from it (pause) ... Now think of an opposite feeling ... a positive one that counteracts ... transforms ... or removes the unwanted feeling ... What
positive feeling are you concentrating on? (pause) ... Now take this feeling and visualize it spreading throughout this place ... covering everyone and everything ... transforming the entire scene with its powerfully positive energy (pause) ... It's time for you to enter the scene ... so do this now ... Become a part of the environment and let yourself experience the full impact of this wonderful positive energy that has completely filled your place (pause) ... Let this feeling permeate your being ... feel it everywhere in your body ... in your mind ... throughout your emotions ... uplifting your spirit (pause) ... Enjoy this feeling of well being initiated by this positive emotion (pause) ... If there is anyone you know whom you think would benefit from being in this wonderfully nurturing situation, bring them in at this time and watch them experience the beautiful energy generated by your powerfully positive emotion (pause) ... Remember to do this anytime you feel the need to lift yourself out of negativity or unwanted, depressing feelings (pause) ... Prepare yourself now to return to us here in the room ... fully refreshed ... renewed ... ready to work with the imagery experience (pause) ... On the count of three ...
DISCUSSION:

What negative or unpleasant emotion did you choose to work with?
Describe how you felt while carrying this emotion within you.
What did the scene...others...look like while being flooded with this unwanted feeling?
What positive emotion did you select to counteract the negative emotion?

Describe what happened to the scene...others...when you filled the place with your powerfully positive emotion.

WEEK FIVE

Getting Rid of Anger

Induce relaxation. Now take a moment to think about anger...what it is and where you feel it in your body ...
Think about what situations trigger your anger ... and how you usually deal with anger ... Now travel inside your body until you come to the place where you hold, where you store, your anger (pause) ... Look carefully at this place inside you ... What does it look like? Do you see any people in there? ... things? ... colors? (pause) ... Listen for voices
... What do you hear? (pause) ... Are there any smells at this place where you store anger? (pause) ... Now think of a beautiful color that you like very much ... Let this color wash over your anger. What happens to your anger when color washes over it? (pause) ... Now let a scene that is very beautiful to you appear at the spot where you hold anger ... What happens to your anger when the beautiful place takes over? (pause) .. Now hear beautiful music and let this music fill this place ... What happens to your anger when the beautiful music takes over? (pause) ... Now check to see if any feelings of anger remain (pause) ... If so, allow the color(s), beautiful scenery and music to completely take over your entire body ... Relax and enjoy these comfortable feelings (pause) ... Keep this feeling of peacefulness ... stillness ... calm ... within you (pause) ... On the count of three ...

DISCUSSION:

Discuss the questions posed in the imagery activity.
REFERENCES


programming and the transformation of meaning. Moab, UT: Real People Press.


Eisen, S. V., Youngman, D. J.,


etiology treatment and prevention. Gaithersburg, MD: Aspen.


Sparks, T. Transpersonal treatment of addictions: Radical return to roots. ReVision, 1987, 10(2), 49-64.


Sweet, E. Unattained milestones in the chemically dependent adolescent from a dysfunctional family. Journal of Adolescent Chemical Dependency, 1990, 1(2) 139-147.


Winer, R. A., Chauncey, & Barber. The influence of verbal or symbolic stimuli on salivary gland secretion.


THE USE OF VISUALIZATION IN THE TREATMENT OF SUBSTANCE ABUSING ADOLESCENTS

ABSTRACT

The purpose of this study was to investigate the effectiveness of visualization in the treatment of adolescents who abuse substances. This study measured whether the use of visualization had an impact on levels of depression, acting out behavior and ego development.

The sample consisted of 63 teenagers between the ages of 13 and 18 who had been referred to a residential group home by the court system. The adolescents were evaluated using the Child Behavior Checklist, the Beck Depression Inventory, and the Washington University Sentence Completion Test. The subjects were evaluated at the beginning of the study and again at the end of four weeks of visualization.

The research indicated that the experimental subjects were significantly less depressed at the end of the study. There were no statistical differences found in acting out behavior or in level of ego development.

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