THE EFFECTS OF IMPLOSIVE THERAPY ON FEAR OF INTERPERSONAL INTERACTION AND COUNSELING EFFECTIVENESS

DISSERTATION

Presented to the Graduate Council of the North Texas State University in Partial Fulfillment of the Requirements

For the Degree of

DOCTOR OF PHILOSOPHY

By

Thomas S. Tanski, B.S., M.S.

Denton, Texas

May, 1975
Tanski, Thomas S., The Effects of Implosive Therapy on Fear of Interpersonal Interaction and Counseling Effectiveness. Doctor of Philosophy (Counseling and Student Services), May, 1975, 124 pp., 12 tables, bibliography, 78 titles.

The problem of this study was the reduction of a hypothesized fear of intimate interpersonal interaction among counselor trainees.

This study had three purposes:

1. To determine whether implosive therapy is effective in reducing conditioned fear of close interpersonal interaction.

2. To determine whether the use of implosive therapy is effective in enhancing the counseling effectiveness of counselor trainees.

3. To provide information that may be beneficial for future research involving the use of implosive techniques in counselor training.

The study involved two intact groups of master's level counseling practicum students. There were eleven subjects in Group I and nine subjects in Group II.

All subjects were administered the Social Avoidance and Distress Scale and the Personal Orientation Inventory during the third week of the semester, immediately before their first client contact. They were administered these same instruments during the fifth week (Post-test I) and seventh week (Post-test II) of the semester.
Two five-minute segments were video taped from each subject's first, third, and fifth counseling sessions. All tape segments were presented in random order to three raters who used the Counselor Evaluation Rating Scale to rate each of the six counseling segments for each of the twenty subjects. Ratings were averaged together to obtain an index of counseling effectiveness for each subject on each session.

Both groups received identical treatment and were imploded along the dimension of anxiety of close interpersonal interaction. Group I was imploded one week prior to Post-test I, while Group II was imploded one week prior to Post-test II. Implosion consisted of one eighty-minute session during which subjects were instructed to visualize four sets of anxiety-evoking scenes. The first scene dealt with the dimension of the emotional tone of the client's voice. In the second scene, the dimension was the client's facial expressions. The third scene dealt with the dimension of eye contact, and the final scene dealt with the dimension of posture and proximity. Each scene was presented until it would no longer elicit visual signs of anxiety.

Comparisons of the adjusted group means on the Social Avoidance and Distress Scale, the Capacity for Intimate Contact Scale of the Personal Orientation Inventory and the Counselor Evaluation Rating Scale for the two groups were conducted at Post-test I and Post-test II by means of an analysis of covariance. The pre-test measures on the three
scales were the covariate measures. The post-test measures on the three scales were the dependent variables.

Six hypotheses were formulated for the study. The .10 level of significance was chosen as the level at which the hypotheses would be accepted or rejected.

Hypotheses I, II, and III were not supported. Hypotheses IV, V, and VI were accepted; however, no conclusions could be drawn without prior acceptance of at least one of the three hypotheses: I, II, or III. It was concluded that:

1. Group implosive therapy, as utilized in this study, was not effective in reducing conditioned fear of close interpersonal interaction.

2. The underlying assumption of the present study that the counselor trainees are as likely as clients to have developed a fear of close interpersonal interaction is seriously questioned.

3. Group implosive therapy as applied in this study is not effective in increasing the counseling effectiveness of counselor trainees.
# TABLE OF CONTENTS

**LIST OF TABLES** ................................................................. v

Chapter

I. INTRODUCTION ............................................................... 1

  Statement of the Problem
  Purposes of the Study
  Hypotheses
  Background and Significance of the Study
  Limitations
  Basic Assumptions

II. REVIEW OF THE RELATED LITERATURE .................................. 10

  Interpersonal Skills of Effective Counselors
  Socially Conditioned Fear of Intimate Personal Interaction
  Implosive Therapy
  Comparative Studies
  Synthesis of the Reviewed Literature

III. METHOD ................................................................. 56

  Description of Subjects
  Description of Raters and Rating System
  Implosive Therapy
  Description of Instruments
  Personal Orientation Inventory
  Counselor Evaluation Rating Scale
  Procedures for Collecting Data
  Procedures for Analysis of Data

IV. RESULTS AND DISCUSSION ............................................. 77

  Hypothesis I
  Hypothesis II
  Hypothesis III
  Hypothesis IV
  Hypothesis V
  Hypothesis VI
V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS  .  .  .  Page 92

The Problem
The Hypotheses
The Method
Results
Conclusions
Recommendations

APPENDICES  .................................................. 105

BIBLIOGRAPHY  .................................................. 114
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.</td>
<td>Means and Standard Deviations for the Counselor Evaluation Rating Scale</td>
<td>79</td>
</tr>
<tr>
<td>II.</td>
<td>Analysis of Covariance Data for the Comparison of Ratings on the Counselor Evaluation Rating Scale</td>
<td>80</td>
</tr>
<tr>
<td>III.</td>
<td>Means and Standard Deviations on the Social Avoidance and Distress Scale</td>
<td>81</td>
</tr>
<tr>
<td>IV.</td>
<td>Analysis of Covariance Data for the Comparison of Scores on the Social Avoidance and Distress Scale</td>
<td>82</td>
</tr>
<tr>
<td>V.</td>
<td>Means and Standard Deviations on the Capacity for Intimate Contact Scale of the Personality Orientation Inventory</td>
<td>83</td>
</tr>
<tr>
<td>VI.</td>
<td>Analysis of Covariance Data for the Comparison of Scores on the Capacity for Intimate Contact Scale of the Personality Orientation Inventory</td>
<td>84</td>
</tr>
<tr>
<td>VII.</td>
<td>Means and Standard Deviations on the Counselor Evaluation Rating Scale</td>
<td>85</td>
</tr>
<tr>
<td>VIII.</td>
<td>Analysis of Covariance Data for the Comparison of Scores on the Counselor Evaluation Rating Scale</td>
<td>86</td>
</tr>
<tr>
<td>IX.</td>
<td>Means and Standard Deviations on the Social Avoidance and Distress Scale</td>
<td>87</td>
</tr>
<tr>
<td>X.</td>
<td>Analysis of Covariance Data for the Comparison of Scores on the Social Avoidance and Distress Scale</td>
<td>88</td>
</tr>
<tr>
<td>XI.</td>
<td>Means and Standard Deviations on the Capacity for Intimate Contact Scale of the Personality Orientation Inventory</td>
<td>89</td>
</tr>
<tr>
<td>XII.</td>
<td>Analysis of Covariance Data for the Comparison of Scores on the Personality Orientation Inventory</td>
<td>90</td>
</tr>
</tbody>
</table>
CHAPTER I

INTRODUCTION

In recent years there has been a relatively large accumulation of research evidence that suggests that effectiveness in counseling and psychotherapy is related to the nature of the relationship established between the client and the counselor or therapist. Truax and Mitchell (12) conclude that the effective therapist possesses three main characteristics: (1) he is authentic or genuine in the relationship; (2) he creates a secure atmosphere by offering nonpossessive warmth; and (3) he has a high degree of accurate empathic understanding of the client. Carkhuff (2) elaborates further and proposes that the core conditions necessary for achieving positive client change are empathic understanding, respect, concreteness, genuineness, confrontation and immediacy. These core conditions are considered to be the common elements of the psychotherapeutic relationship regardless of the therapist's orientation or techniques used. Truax and Carkhuff (11) state that the expression of warmth, empathic understanding, and respect is closely related with the emotional involvement and intimacy that exists between the client and counselor. A relationship with these conditions allows the counselor to become a potent model and reinforcer of appropriate behavior.
The goal of most counselor-education programs is assumed to be the production of effective counselors, but this goal does not appear to have been achieved universally. Recent literature (3, 12) suggests that some counselors produce constructive change in the client while others either have no impact or produce destructive consequences. A major reason for counseling ineffectiveness appears to be the counselor's inability to develop an intimate relationship with his client. Carkhuff (3) proposed that ineffective counselors may be the product of a succession of retarding relationships that have left them without the developed capacities to engage in constructive interpersonal encounters.

Sociological and clinical evidence (1, 4, 5, 6, 8) generally suggests that people can acquire a socially conditioned fear of interaction in our social environment. Fry (7) makes the assumption that counselors are as likely as the client to have developed, to a varying degree, conditioned anxiety responses to interpersonal interaction. This generalized anxiety militates against the counselor's engaging in intimate relationships, and thereby limits his therapeutic effectiveness. If this anxiety can be reduced or extinguished, then the procedures utilized toward this objective may be useful adjuncts to any program involved in preparing effective counselors.

Several different behavior-therapy techniques have proven to be effective in reducing conditioned fear. One of the most
frequently used techniques is systematic desensitization (13). It has been found to be effective in reducing a variety of fears, including conditioned fear of intimate personal interaction (7), and it has been used both individually and in groups. A related technique of more recent origin is implosive therapy (10). Its effectiveness in reducing conditioned fear both individually and in groups has also been demonstrated. To date, however, implosive therapy has not been used to reduce socially conditioned fears of intimate personal interaction in a group setting. If implosive therapy can be found to be effective in reducing fear of intimate personal interaction when applied in a group setting, it may provide an efficient method for increasing the counseling effectiveness of a large number of counseling students.

Statement of the Problem

The problem of this study was the reduction of fear of intimate personal interaction among counselors.

Purposes of the Study

The purposes of this study were (1) to determine whether implosive therapy is effective in reducing conditioned fear of close interpersonal interaction, (2) to determine whether the use of implosive therapy is effective in enhancing the counseling effectiveness of counselor trainees in a practicum situation, and (3) to provide information that may be beneficial for future research involving the use of implosive techniques in counselor training.
Hypotheses

To carry out the purposes of this study, the following hypotheses were tested:

I. The students in Group I, after participating in group implosive therapy, will show a significantly greater adjusted mean score (Post-test I) on the Counselor Evaluation Rating Scale than the students in Group II, who have not participated in group implosive therapy prior to Post-test I.

II. The students in Group I, after participating in group implosive therapy, will show a significantly lower adjusted mean score (Post-test I) obtained on the Social Avoidance and Distress Scale than the students in Group II who have not participated in group implosive therapy prior to Post-test I.

III. The students in Group I, after participating in group implosive therapy, will show a significantly higher adjusted mean score (Post-test I) on the Capacity for Intimate Contact Scale of the Personal Orientation Inventory than the students in Group II, who have not participated in group implosive therapy prior to Post-test I.

IV. At the conclusion of the study, after Group II has participated in group implosive therapy, there will be no significant difference between the adjusted mean scores (Post-test II) of the two groups on the Counselor Evaluation Rating Scale.
V. At the conclusion of the study, after Group II has participated in group implosive therapy, there will be no significant difference between the adjusted mean scores (Post-test II) of the two groups obtained on the Social Avoidance and Distress Scale.

VI. At the conclusion of the study, after Group II has participated in group implosive therapy, there will be no significant difference between the adjusted mean scores (Post-test II) of the two groups obtained on the Capacity for Intimate Contact Scale of the Personal Orientation Inventory.

Background and Significance of the Study

The goal of most counselor-education programs is assumed to be the production of effective counselors. Traditional procedures for achieving this goal have included training programs aimed at improving the counselor's response repertoire and improving feedback to the counselor following counseling sessions in order to point out desirable or undesirable behaviors.

If Fry (7) is correct in assuming that counselors are as likely as the client to have developed a conditioned anxiety response to interpersonal interaction, an effective and efficient procedure is needed to reduce or eliminate this anxiety so that the counselor trainee can capitalize more fully on any training procedures and experiences designed to improve counseling effectiveness.
The use of behavior modification techniques as training procedures for counselors is a very recent development. Operant techniques for shaping appropriate behaviors have been used frequently, but respondent techniques have been used only during the past two years. Fry (7) was successful in significantly increasing the level of empathy, respect, concreteness, and genuineness in subjects who were systematically desensitized along the dimension of anxiety related to intimacy. Similarly, Rihani (9) was successful in utilizing implosion to help counselor trainees reflect higher levels of feelings and emotions. A review of the literature failed to reveal any attempt to duplicate Fry's (7) reduction of anxiety related to intimacy through the use of implosive therapy.

The general trend in the literature concerning desensitization and implosion indicates that both techniques are more effective than other traditional methods in dealing with conditioned fears. Implosive therapy appears to be the more efficient procedure because fewer treatment sessions are required for acceptable results. If implosive therapy can be found to be effective in reducing fear of intimate personal interaction when applied in a group setting, it could provide an efficient method for increasing the counseling effectiveness of a large number of student counselors.
Limitations

This study was restricted to two classes of students taking the master's-level practicum during the fall semester (1974) at North Texas State University. These were the only two practicums in the fall semester that had similar client populations. A further limitation is that some inherent differences in the two intact experimental groups could affect the outcome of the study even though statistical procedures were used to equate the two groups on the major variables.

Basic Assumptions

It was assumed that counselor trainees are as likely as their clients to have developed a conditioned fear of close interpersonal interaction. It was further assumed that the subjects would respond honestly to the instruments used to measure capacity for intimate contact and the degree of anxiety in social situations. It was assumed that each counselor trainee would attempt to be maximally facilitative to all clients during all the sessions. It was also assumed that the instruments were sufficiently valid for the purposes of the study. It was assumed that the subjects were really experiencing anxiety when they indicated that they were anxious. It was also assumed that the persons used to administer the implosive procedures and evaluate the video recordings were conscientious and objective in doing their tasks.
CHAPTER BIBLIOGRAPHY


CHAPTER II

REVIEW OF THE RELATED LITERATURE

The review of related literature is presented in five sections: (1) Interpersonal Skills of Effective Counselors; (2) Socially Conditioned Fear of Intimate Personal Interaction; (3) Implosive Therapy; (4) Comparative Studies of Implosive Therapy; and (5) Synthesis of the Reviewed Literature.

Interpersonal Skills of Effective Counselors

The counseling process is an extremely complex interaction of a multitude of fluctuating variables. These variables include the counselor's personality, the client's personality, the nature of the problem, the counseling setting, and the client's home environment, just to name a few. This infinite variability would appear to preclude any scientific analysis of the counseling process. However, despite numerous methodological problems, it has been possible to identify certain counselor qualities that are believed by many authorities to cut across theoretical frameworks of therapy.

Carl Rogers and other client-centered therapists were the first to subject therapy sessions to systematic observations and analysis through the use of audio tape recordings. Rogers (47) rejected technique when he asserted that the
"necessary and sufficient" conditions for therapeutic change were the counselor's ability to communicate to his client the qualities of empathic understanding and unconditional positive regard while being congruent or genuine as a person. Effective counseling, according to Rogers (48), is related to the type of relationship a counselor is able to establish with his client. When the counselor offers high levels of congruence, empathy, and unconditional positive regard, the client will experience constructive personality change and development. In extending Rogers' basic theory, Truax and Carkhuff (56) state that the expression of warmth, empathic understanding, and respect is closely related with high emotional involvement and intimacy between counselor and client.

Many researchers (10, 57, 5) have accepted Rogers' basic assumptions and have expanded the position while engaging in extensive research aimed at clarifying the nature of the counseling process. The pioneer work of Whitehorn and Betz (62) at Johns Hopkins Hospital became the model for future research into the effective role of the counselor's accurate empathy, non-possessive warmth, and genuineness.

Whitehorn and Betz (62) conducted a retrospective study to compare the characteristics of seven psychiatrists who had an improvement rate of 75 percent in their schizophrenic patients with the characteristics of seven other psychiatrists of similar training who had an improvement rate of 27 percent. The effective therapists were warm and attempted to understand
the patient in a personal and immediate way, whereas the less effective therapists failed to establish a close interpersonal relationship.

A similar study (56) of psychotherapy with sixteen hospitalized schizophrenics over a period of four years revealed that those patients who received high levels of non-possessive warmth, genuineness, and accurate empathy from their therapist showed significant positive personality and behavior change. Those patients who were exposed to relatively low levels of empathy, warmth, and genuineness deteriorated with respect to personality and behavioral functioning.

Truax (55), in a study utilizing fourteen schizophrenics receiving individual psychotherapy matched with fourteen control patients, reached the same conclusions as in the previous studies. However, he established that patients receiving high conditions in therapy spent significantly more time out of the hospital than either the control group or those receiving low conditions. Those receiving low conditions did not differ significantly from the control group.

Another study by Truax, Wargo, and Silber (58), showed that juvenile delinquents who received high conditions of empathy, warmth, and genuineness in group therapy improved significantly beyond the control group on several measures. A one-year follow-up indicated that the high-condition group had spent significantly more time out of the institution than had the controls.
Bergin (4) states that the teachers' level of warmth and empathy can influence learning in the class. High levels of these conditions favor effective learning and positive growth, whereas low conditions can have negative effects such as retarding learning.

Collectively, these studies suggest that therapists and counselors who are accurately empathic, non-possessively warm, and genuine are able to become intimate and emotionally involved with the patient or client and therefore are effective in helping clients. These findings, according to Truax and Mitchell (57), seem to hold for a variety of therapists and counselors, regardless of theoretical orientation, and with a wide variety of clients in both individual and group psychotherapy or counseling.

Truax and Mitchell (57) tentatively theorize that accurate empathy, non-possessive warmth, genuineness, and other therapeutic interpersonal skills have indirect effects upon patient change in four modalities:
1) they serve to reinforce positive aspects of the patient self-concept, modifying the existing self-concepts and thereby leading to changes in the patient's own self-reinforcement system;
2) they serve to reinforce self-exploratory behavior and thereby elicit self-concepts and anxiety-laden material that can be then modified by selective reinforcement;
3) they serve to extinguish anxiety or fear responses associated with specific cues, both those elicited by the relationship with the therapist and those elicited by patient self-exploration; and
4) they serve to reinforce human relating, encountering or interacting, and serve to extinguish fear or avoidance responses associated with human relating (57, p. 322).
With respect to the fourth statement, Carkhuff (10) hypothesizes that an individual who provides low levels of the core conditions is the product of a succession of retarding relationships that have left him without the developed capacities to engage in constructive interpersonal encounters. Fry's (22) basic premise is that counselors are as likely as clients to have developed conditioned anxiety responses to "human warmth" communicated by significant others in the past. The average person cast in the helping role has a varying degree of socially conditioned fear of intimate personal interaction. Such a generalized anxiety could account for the lower levels of empathy and warmth offered by many counselors.

Any anxiety on the part of the counselor can have serious consequences for the process of therapy. Bandura (1) obtained anxiety and insight measures for three main conflict areas (dependency, hostility, and sexuality) from forty-two psychotherapists. These ratings were compared with global ratings of psychotherapeutic competence. An inverse relationship was found which indicated that the presence of anxiety in the therapist, whether recognized or not, affected his ability to do successful psychotherapy.

Socially Conditioned Fear of Intimate Personal Interaction

There is some sociological and clinical evidence that generally supports the assumption of the presence of a
socially conditioned fear of intimate personal interaction. This fear is present in a varying degree ranging from the extreme social withdrawal of the schizophrenic to the more common shyness of the relatively normal individual. Such individuals may have in common an early history where the contingencies of close interpersonal interaction included consequences ranging from painful aversion to simple non-reinforcement. Under such conditions of consequence, an individual could learn to avoid close interpersonal interaction without being consciously aware of what he was doing.

It is generally accepted that adverse intrafamilial forces are major factors in molding the developing personality of a child. Lidz and Lidz amplify this point when they state that:

The early family environment is commonly accepted as a critical force in personality development both normal and abnormal. Numerous other factors, some of which may be of shattering intensity, may disturb the process of personality development, but few can be as long lasting and as pervasive as the intrafamilial relationship. Here the basic attitudes toward later interpersonal relationships are established; the formation of the projective system by which the individual perceives the world is begun (33, p. 332).

Lidz and Lidz (33) investigated the relationship between the severity of personality adjustment and the degree of family maladjustment. They conducted a survey of fifty case histories (twenty-seven males, twenty-three females) of schizophrenic patients under the age of twenty-one, who had been patients in the Henry Phipps Psychiatric Clinic. These
cases were sifted for all information pertinent to the family background of the patient. Attention was focused on objective situations that could be readily identified as opposed to personal reactions.

This survey indicated that 40 percent of the subjects had been deprived of at least one parent, and in 50 percent of these cases the loss was due to serious emotional instability of a parent. In contrast, in a group of sixty-nine medical students, only 17.4 percent had lost a parent by the same age. Another finding was that 61 percent of the subjects had homes marked by strife resulting from parental incompatability. Many subjects (48 percent) had parents who were either psychotic, chronically or seriously neurotic, or psychopathic. Rearing practices were judged to be bizarre in at least 41 percent of the cases, while in other cases the subject had been rejected by at least one parent. The paternal influences were noxious as frequently as were the maternal influences. In discussing family influences, Lidz and Lidz wrote:

Stated conversely, only five of the fifty schizophrenic patients could be said to have clearly come from reasonably stable homes in which they had been raised by two stable and compatible parents according to fairly acceptable principles of child rearing (33, p. 343).

They concluded that adverse intrafamilial forces were major factors contributing to the development of schizophrenic behavior in these subjects.
In a study that compared twenty-one seriously maladjusted adolescents matched with an equal number of well-adjusted adolescents in age, sex, race, and father's occupational level, Cass (11) concluded that children who display social maladjustment tend, in general, to be children who report high levels of maternal control and whose mothers are insufficiently aware of the children's emotional needs.

In a similar study, Montalto (40) administered the Fels Parent Behavior Rating Scale to thirty-eight mothers of fifty-seven children aged six to seven years old whose Rorschach protocol had been evaluated for personality factors. He concluded that there was a positive correspondence between mothers' attitudes and their children's personality characteristics. For example, Montalto stated that "excessively high scores in solicitousness for the child's welfare suggests that the maternal anxiety is communicated to the child rendering him less secure in emotional contacts" (40, p. 166).

Utilizing a population of elementary school children in a New York State suburban school, Christensen (12) explored the relationship between permissiveness and warmth of teachers and the affect-need and achievement level of pupils. He concluded that the affective response of the teacher is more important than permissiveness for growth in achievement.

Frazee (20) turned to a more deviant population of twenty-three male children who later became schizophrenic. These children were compared with twenty-three matched
children who did not become schizophrenic to determine whether pressures and frustrations that eventually result in the breakdown of psychological functioning are to be found in childhood experiences and relationships. In comparison to the control group, the study group presented more difficulties in the area of social relationships outside the home as reflected by shyness, listlessness, excessive daydreaming, and seclusiveness. The parents of the study group were characterized by very poor personality adjustment. Twice as many mothers in this group were domineering, punitive personalities. Also, there was a markedly higher frequency of chronic domestic instability in this group. In terms of parent-child relationships, there was a high incidence of overprotective, infantalizing mothers and severely cruel and rejecting fathers. The mothers tended to be passive with negligent attitudes. On the whole, these children suffered severe deprivation in emotional relationships with their parents.

A study by Baxter, Becker, and Hooks (3) compared the defensive style of parents of schizophrenics and neurotic controls as an index of the relative maturity of their ego functions. Defensive style was assessed by Rorschach protocol and the Wechsler Adult Intelligence Scale. The investigators concluded that the level of ego maturity of the parents of the schizophrenics was significantly less than the maturity and social effectiveness of the parents of the neurotic controls.
These studies collectively suggest that early interaction with significant others can markedly contribute to the development of a socially conditioned fear of interaction. This fear is present in varying degrees and may become generalized from significant others to interpersonal interaction in general. Fry states that "despite a high degree of cooperative intent, an anxiety or fear is inherent in the helpers' makeup that prohibits them from engaging in warm, empathic, and intimate relationships" (22, p. 215).

Implosive Therapy

The problem of this study focuses on the reduction or elimination of socially conditioned fear of interpersonal interaction. Fry (22) was successful in significantly increasing the level of empathy, respect, concreteness, and genuineness in subjects who were systematically desensitized along the dimension of anxiety related to intimacy. However, systematic desensitization can be a time-consuming enterprise. Wolpe and Lazarus (64) suggest that about twenty minutes of the first six sessions be devoted to relaxation training supplemented with daily homework. The number of desensitization sessions required varies greatly. Wolpe and Lazarus state that "one patient may recover in about a half dozen sessions; yet another may require a hundred or more" (64, p. 85). Clearly, what is required then is a procedure that would be at least as effective as systematic desensitization but would require fewer sessions, thus being more
efficient. Implosive therapy (52) appears to fulfill these requirements and has the added advantage of simplicity in that relaxation training is not required as in systematic desensitization.

Both implosive therapy and systematic desensitization belong to the generic family of behavior therapies. Franks (20) states that if behavior is defined in terms of response, then behavior therapy becomes a method of response modification involving the application of some stimulus-response type of learning theory. Behavior therapy is then defined as a beneficial modification of behavior in accordance with experimentally validated principles based upon stimulus-response concepts of learning and the biophysical properties of the organism.

One of the basic assumptions underlying many behavior modification techniques is that most psychological disturbances are learned through respondent or classical conditioning. Based on this assumption, two basic approaches have emerged for the elimination of conditioned respondents (61). One approach is counterconditioning whereby a new conditioned response, which is incompatible with the conditioned response that is to be eliminated, is conditioned to the conditioned stimulus. Systematic desensitization is based on this principle. The second approach is extinction, in which the conditioned stimulus is repeated many times without pairing it
with the unconditioned stimulus. Extinction forms the basis for implosive therapy.

According to many behaviorists, neurotic symptoms are learned. The original painful experience, according to Hogan (26), was aversive and produced anxiety. This anxiety became conditioned to all stimuli present at the original learning. These conditioned stimuli now have the capacity to elicit anxiety from the individual. Because of stimulus generalization, the person will respond to similar stimuli with emotional responses.

In order to avoid anxiety the individual learns behavior patterns which keep him from encountering the conditioned cues and anxiety. The avoidance response brings about a reduction of anxiety which is highly reinforcing, thereby further strengthening the avoidance response.

In implosive therapy, the subject is encouraged not to make the avoidance response to the conditioned stimulus. An attempt is made to recreate the original learning situation, but without the actual pain. This goal is achieved by means of verbal instructions to the individual to imagine the noxious aversive stimuli hypothesized to be present in the original learning situation. The subject is instructed to experience as much anxiety as possible until the conditioned response, when followed by non-reinforcement, is extinguished.

Stampfl states specifically that:

All that is necessary for effective treatment is to re-present these conditioned cues in the absence of primary reinforcement. Since the task of accurately
establishing the original conditioning cues is difficult, the presentation of hypothesized cues serves as an excellent substitute. Complete accuracy is not essential since some effect, through the principle of generalization of extinction, would be expected when an approximation is presented (52, p. 499).

Wenrich succinctly summarizes Stampfl's fundamental principle as follows:

If a conditioned stimulus is presented without an accompanying unconditioned stimulus (or, as Stampfl and Levis call it, an accompanying primary reinforcement), an intense emotional reaction will be generated; and, with repeated presentations of these anxiety-eliciting stimuli, the reaction will subside and cease altogether (61, p. 17).

The following seven steps described by Stampfl and Levis (53) provide a summary of the actual treatment procedure.

1. The therapist attempts to identify the stimuli related to the phobic object. Such an analysis should incorporate symptom contingent cues as well as additional hypothesized cues believed to be motivating the symptomatology.

2. The patient is given training in visualizing essentially "neutral" nonthreatening scenes in imagery.

3. The patient is asked to imagine scenes which incorporate cues directly related to the phobic situation. For example, in the case of acrophobia, the following sequence of scenes might be presented: (a) a tall building is described which the patient sees himself visualizing from a distance; (b) he walks closer and closer toward the building until he is standing in front of it; (c) he enters into the building and climbs the stairs to the roof of the building, periodically looking down as he climbs; (d) he walks over to the edge of the room and looks down, seeing the street below. Each step of the way is described by the therapist with great clarity and in considerable detail.

4. With each set of fearful scenes introduced, the patient is urged not to avoid these cues while they are being presented and, indeed, to experience as much anxiety as possible. He is also instructed to attend to the sensory manifestations of the anxiety that he experiences, since the feedback from the anxiety state itself also can function as a cue.
5. Each scene is repeated until some anxiety reduction has occurred.

6. After repeated exposure to the symptom-contingent cues, the therapist progressively introduces additional associative cues activated by the phobic situation, as well as the clinically hypothesized cues thought to be associated with phobic object. For example, if fear of bodily injury is hypothesized in the acrophobic case, scenes might be presented in which the patient is asked to visualize himself jumping off the tall building. A detailed description of the patient falling, of the ground getting closer and closer, and of his hitting the ground is described. The impact of the fall, the feeling of bones breaking, the pouring out of blood, and other bodily injury cues are included.

7. The therapist trains the patient to work through the scenes by himself so that additional repetitions in the form of a homework assignment can be given outside the therapy session.

In reality, few investigators utilize the hypothesized sequential cues described in step six. Smith et al. in reviewing all of the available literature on implosion concluded that:

Without exception all of the studies utilized symptom-contingent cues as described by Stampfl, but only a few used both symptom-contingent cues and hypothesized sequential anxiety cues. These studies indicating the clearest improvement rate did not include any attempt to treat hypothesized sequential anxiety cues (50, p.360).

Morganstern (41) interprets this disparity between theory and practice as a weakness in the theory underlying implosion. However, Levis (31) asserts that Stampfl never stated that psychodynamic cues have to be included in all cases of implosive therapy. Stampfl and Levis (54) actually recommend the use of dynamic cues only in those cases where such aversive stimuli appear likely and that such cues tend to predominate in more severe cases of behavioral disturbances.
In comparing flooding with desensitization, Marks (36,37) concludes that the two procedures differ only in degree. They are at opposite ends of a continuum of intensity of confrontation. Flooding involves exposing the subject to stimuli that elicit high levels of anxiety while desensitization implies a very gradual approach to the phobic object combined with relaxation. Somewhere along the continuum the two procedures become indistinguishable and may be described as exposure or confrontation.

Flooding is the generic term for those procedures in which forms of confrontation invoke intense emotion. Implosion, according to Marks (37), denotes flooding of subjects in fantasy as opposed to real life.

In developing the theoretical rationale underlying implosive therapy, Stampfl drew freely from the laboratory research on the extinction of fear responses in animals. The pioneer work in this area began with Masserman's (38) studies of flooding. He utilized a noxious stimulus paired with eating to successfully produce "experimental neurosis" in cats, including strong avoidance to food. A movable barrier within the cage was used to push slowly the hungry animal towards the food box. The closer the animal came to the food box, the greater the intensity of anxiety and unsuccessful attempts. Eventually the hunger drive would predominate and the animal would hurriedly gulp the food. Once
the motivational impasse (fear vs. hunger) was disrupted, the feeding behavior became more normal and the neurotic behaviors became less intense.

Since Masserman's original study, there have been thousands of published studies about fear reduction in animals. Polin (43) utilized a procedure which was very similar to implosive therapy. He was interested in studying the relative effectiveness of continuous high-intensity stimulation (flooding) as compared with intermittent exposure to the conditioned stimulus. Three equivalent groups of rats were conditioned for ten days to make an avoidance response (CR) to a buzzer (CS) which had been paired with electrical shock (UCS).

During experimental extinction, the control group received four days of rest while the barrier group was confined to one side of the treatment box and prevented from making an escape response to the other side. The barrier group was presented with twenty five-second presentations of the buzzer (CS) per day for four days. The stimulus flooding group was exposed continuously to the buzzer (CS) for one hundred seconds daily and were free to make a response to the other side. However, the response did not terminate the CS.

Following the experimental extinction procedures, the three groups received thirteen days of identical extinction. The animals were allowed to escape from the CS by running to the other side of the treatment box. During this extinction
period, the flooding group extinguished faster than the other two groups. The results were statistically significant. This study appears to give experimental support to flooding type procedures.

More recently, a study by Berman and Katzer (6) was designed to overcome some of the shortcomings of earlier studies and attempted to isolate the effects of duration of CS exposure from those of response-contingent CS termination. A 2 x 2 treatment design was employed, comparing barrier with no barrier and trial exposure with massed exposure. In addition, two control groups were added. The first control group served as a no-treatment control while the second control group received the same amount of CS exposure as each of the four treatment groups; also, the animals' responses controlled the termination of the CS.

In avoidance training, the CS tone was followed five seconds later by shock. If the animal crossed the shuttle box, the CS was terminated and shock was avoided.

In the Trial-Barrier treatment, the animals received forty separate trials during which the CS was presented for five seconds. Responding was prevented by means of a barrier. The Massed-Barrier treatment included a single 200 second presentation of the CS with the barrier preventing responding. In the Trial treatment the animals received forty separate trials in each of which the CS was presented for five seconds. The barrier was absent, but responses had no effect upon the
termination of the CS. The Massed treatment consisted of a single 200 second presentation of the CS with the barrier absent, and response having no effect upon the termination of the CS. The CS Time Control treatment included termination of the CS when the animal responded. Treatment was ended when the animal had received a total of 200 seconds of CS exposure.

Extinction trials indicated that the treatment groups with a barrier extinguished more rapidly than those without a barrier. Also, those treatments which employed a series of trials led to more rapid extinction than those using a massed CS exposure. The investigators (6) concluded that the results of this investigation suggested several possible implications for the clinical treatment of phobic behavior:

First, the results indicate that to achieve maximum effectiveness, a treatment procedure should present the subject with a long series of exposures to the feared stimulus as opposed to the few massive presentations advocated by some writers. Second, this study suggests that preventing the occurrence of the typical avoidance response, either by physical prevention or, perhaps, by inducing a competing response (for example, training the subject to relax as in Wolpe’s systematic desensitization), shall greatly enhance the effectiveness of the therapy. Third, the fact that there were at least some animals in every one of the treatment groups of this study who extinguished almost immediately might explain why among different, and opposing, clinical procedures can all report some instances of success (6, p. 255).

Generally, flooding procedures are basically supported by most animal studies on response prevention which indicate that inescapable exposure to the conditioned aversive stimuli produces a significant decrement in avoidance behavior.
These studies also generally suggest that the rate of extinction of avoidance response is positively related to the amount of response prevention. However, there is still active debate and investigation of the numerous parameters believed to be involved in implosive therapy.

One of the earliest reports of the application of a flooding procedure to the treatment of human problems was by Malleson (35). He treated a case of severe examination panic by a method he called reactive inhibition. This technique is very similar to implosive therapy. The subject in this study was an Indian student experiencing severe examination panic forty-eight hours before an examination. He had already failed a previous examination because of his debilitating test anxiety. Treatment consisted of his experiencing his anxiety. Also, he was asked to describe the terrible consequences that he felt would follow his failure. These consequences included ridicule from his friends, disappointment from his family and financial loss. As he visualized these consequences and experienced his fear, his anxiety increased and then began to diminish. Within half an hour he was calm. He was instructed to practice these procedures any time he felt the slightest anxiety. By the time of the examination he was almost unable to experience any anxiety. He passed the examination without any difficulty. The major significance of this study was that it demonstrated the brevity of this type of treatment. It suggests that implosive
therapy techniques require less time than desensitization in reducing anxiety.

More recent case studies support this conclusion. Rainey (45) treated a twenty-five-year-old male with a long history of chronic obsessive-compulsive behavior by flooding in vivo. Within forty-eight hours, both his ritualistic behavior and his obsessive thoughts had been extinguished. At the time of an eighteen-month follow-up he was free of symptoms. Similarly, Lamontagne and Marks (30) treated two patients with chronic psychogenic urinary retention by prolonged exposure to the inhibiting situation. Both patients improved rapidly, and a nine-month follow-up indicated that they had maintained their gains. Rubodeau and Rubodeau (49) utilized a cassette recording to control stimulus input during twelve thirty-minute sessions of implosion. At the end of these sessions a female undergraduate with severe germ and crowd phobia was free of her symptoms. A six-month follow-up indicated no recurrence of phobic behavior or symptom substitution.

Collectively these studies suggest that a relatively short-term treatment procedure can have long-term effects ranging up to at least eighteen months. Also of interest in the last study (49) is the suggestion that these effects may be achieved through the use of semi-automated procedures, such as cassette recordings.
Case studies are interesting and a rich source for research hypotheses, but individually they generally contribute little to scientific knowledge. It is primarily through controlled studies that one is able to establish the efficacy of treatment procedures and delineate the parameters involved. Controlled studies using implosion with human subjects did not begin until 1965.

One of the first reports of the clinical application of implosive therapy was Hogan's (25) study with psychotic patients. Twenty-six experimental subjects were treated with implosive therapy while twenty-four control subjects were treated with traditional psychotherapy methods. The subjects were equated for degree of disturbance as measured by the MMPI, age, education, level of intellectual functioning, length of institutionalization, and prior hospitalization. Significant shifts away from pathology on five MMPI scales (F, Hs, D, Hy, and Sc) were found in the group treated by implosive therapy. Follow-up one year later revealed that eighteen of the twenty-six imploded subjects had been released from the hospital. Only eight of the twenty-four control subjects had been released.

Kirchner and Hogan (29) conducted a study to reduce the therapist variable in implosive therapy. To achieve this goal, twenty-five rat phobic female undergraduates were randomly assigned to an implosion or control group. Each group received treatment in a language laboratory equipped with
individual earphones. The experimental subjects listened to one forty-minute tape recording that described rats biting and attacking them, while the controls were instructed to imagine pleasant scenes while listening to music. At the conclusion of the study, a behavioral post-test was used which comprised of the opportunity to handle a live rat. The results indicated that ten of the sixteen imploded subjects (62 percent) picked up the rat while only five of the nineteen controls (26 percent) did so.

This study lends support to the feasibility of applying implosive therapy in a group setting. Also, the use of a tape recording suggests that an individual hierarchy for each individual subject may not be necessary.

In a similar study, Hogan and Kirchner (28) demonstrated the effectiveness of one session of implosive therapy in reducing a fear of rats in non-psychiatric volunteer subjects (female students). The experimental subjects received individual implosion of approximately thirty-nine minutes in length. The control subjects were also seen individually for approximately thirty minutes during which they were asked to visualize neutral imagery. On the behavioral post-test, fourteen out of twenty-one imploded subjects (67 percent) were able to pick up the rat. Only two of the controls (10 percent) were able to do so.

The same researchers conducted a third study (27) on volunteer female college students who were afraid of snakes.
Thirty subjects were randomly assigned to either implosive, eclectic verbal therapy, or bibliotherapy treatment. Each subject was seen individually for one session lasting forty-five minutes. On the behavioral post-test which required the subject to pick up the snake, seven out of ten (70 percent) of the imploded subjects were successful. Four (40 percent) of the eclectic verbal group were successful, while only one (10 percent) of the bibliotherapy group succeeded. The fifteen failures of both control groups were subsequently treated with one session of implosive therapy, and on the post-test ten of them were able to pick up the snake. The results of this experiment are consistent with the two preceding studies in demonstrating the effectiveness of one relatively short (forty to forty-five minute) implosive session.

Wolpin and Raines (65) attempted to differentiate the effects of visual imagery, expected roles, and extinction in reducing fear and avoidance behavior in female in-patients who had a fear of snakes. The six subjects were exposed to three different treatment procedures. Two subjects were instructed to tense their muscles while visualizing items from a fear hierarchy, and two subjects were instructed to visualize the same scenes without any instructions for tension or relaxation of muscles. The final two subjects visualized high anxiety-evoking items from the top of the hierarchy without any instructions for tension or relaxation of muscles. All
six subjects experienced a decrease in their fear of snakes. The results of this study were interpreted as being consistent with Stampfl's implosive therapy results.

Levis and Carrera (32) investigated the effectiveness of implosive therapy with outpatients. The study was designed as an exploratory study to determine the feasibility and value of more effective instructions of this behavioral therapy. Forty patients were divided into one experimental and three control groups. The experimental group received a total of ten hours of implosion. One control group was placed on a waiting list, and the second control group received insight and supportive therapy for ten hours. The third control group received conventional type treatment by the implosive therapist prior to his having any knowledge about implosive therapy. Only the implosive therapy group showed a consistent trend to shift away from psychotherapy on nine out of ten MMPI scores. The experimenters concluded that:

Since the control groups failed to show any marked improvement on the test measures, some evidence is presented that the effects of Group IT are not due to the number of therapy sessions, the skills and personal qualities of the therapist independent of the treatment, or the effects resulting from the commitment to and expectation of professional treatment (32, p. 508).

Hodgson and Rachman (24) questioned Stampfl's assumption that arousal of intense affect associated in some manner with the symptom is necessary and sufficient for effective implosion. These investigators hypothesized that implosion may
be effective because of a "contrast phenomenon." The contrast is between the mild phobic-test items in comparison to the catastrophic implosive scenes. If this contrast can produce reduction in fear, then it may be possible to reduce the fear by using any preparatory frightening experience.

To test this hypothesis, fifty female college students (who were equated on a behavioral snake approach test) were randomly assigned to one of five treatment groups. Each treatment consisted of listening to a forty-minute tape, followed immediately by a behavioral-approach test and two questionnaires. One group listened to an implosion tape. A second group listened to thirty minutes of horrific images unrelated to the phobia followed by snake images. The third group received the same treatment as the second group with the exception that the snake images were delayed twenty-four hours. The fourth group listened to a tape of horror images and the fifth group listened to pleasant imagery. There were no significant differences between the groups on the behavioral test. These results differ markedly from the improvements reported by Kirchner and Hogan (29). Improvement of the second group on one questionnaire was interpreted as confirmation of the contrast hypothesis, but only if nonspecific items are immediately followed by phobic stimuli.

The conclusion of Hodgson and Rachman (24) gained some support from a closely related study by Watson and Marks (60) that demonstrated that both relevant and irrelevant fear cues
produced significant improvement on clinical and attitudinal measures. Only irrelevant fear treatment produced significant physiological improvements. The experimenters concluded that:

The two treatments did not differ significantly from each other in their effects, except that irrelevant fear produced significantly more improvement than did relevant flooding in subjective anxiety during phobic imagery. The experience of relevant and irrelevant fear in fantasy reduced phobic anxiety and avoidance to a similar extent, but appeared to do so through different mechanisms . . . (60, p. 275).

A recent and highly relevant study by McCutchen (34) failed to support either the work of Hodgson and Rachman (24) or Watson and Marks (60). This study was designed to investigate (1) the effectiveness of implosive therapy, (2) the differential effects of the length of implosive therapy sessions, (3) the theoretical concepts underlying implosion, and (4) the physiological and behavioral responses to relevant and irrelevant stimuli.

Subjects were selected for this study on the basis of their inability to watch a film about surgery. The data suggested that implosion was a viable method of behavior modification, particularly if the subjects were imploded through the point of physiological habituation to specific and relevant cues. However, subjects treated with irrelevant stimuli or no stimuli did not show any significant improvement. It was concluded that Stampfl's theory of extinction appeared to be defensible; however, the theories of "behavioral contrast" and "exhaustion" were not supported. In
support of this final statement, Hazelhurst's (23) study, utilizing a yoked design, also failed to find support for the exhaustion hypothesis. Watson, Gaind, and Marks' (59) uncontrolled study suggested that cognitive change tends to follow rather than precede physiological changes. This conclusion would also appear to be supportive of McCutchen's (34) conclusion concerning physiological habituation.

Although there are many studies which have demonstrated the efficiency of implosive therapy, there are some such as the Hodgson and Rachman (24) experiment which have failed to do so.

Fazio (18) reported two double-blind experiments designed to evaluate reality-testing and supportive aspects of implosive therapy independent of the anxiety-eliciting scenes. College females with a fear of cockroaches were randomly assigned to one of three tape-recorded treatment groups. Implosion consisted of listening to three twenty-nine minute tapes. In both studies, the imploded subjects failed to improve significantly on an overt behavior test.

Dawley (15) attempted to reduce test anxiety through the use of group implosive therapy. Twenty-six test anxious undergraduates were randomly assigned to one of three treatments: (1) implosive therapy, (2) placebo attention, and (3) no-treatment control. The implosive therapy group received five twenty-minute treatments over a two-and-one-half week period. Analysis of the results failed to support the
hypothesis that there would be a significant difference between the implosive group and the two control groups.

Other comparative studies have failed to support the effectiveness of implosive therapy. These studies will be reviewed in the next section along with other studies which deal specifically with comparative investigations.

Comparative Studies

Several studies have been conducted in order to compare the effectiveness of implosive therapy or flooding with systematic desensitization or other conventional methods of therapy. The following section of this chapter focuses on these comparative studies.

Barrett (2) conducted a study to compare directly the effectiveness and efficiency of implosive therapy and of systematic desensitization. To accomplish this, twenty-six normal adult males and females with a fear of snakes were randomly assigned to one of three treatment groups: (1) desensitization, (2) implosion, and (3) no-treatment control. The desensitization group participated in four training sessions followed by up to eleven desensitization sessions. The implosion therapy group received a similar training session, but it was followed by sessions in which anxiety-eliciting scenes were imagined.

At the conclusion of the study, implosive therapy and systematic desensitization were found to be equally effective in reducing snake phobic behavior. However, implosive therapy
took an average of four and one-tenth sessions to reach the criterion, while systematic desensitization took an average of nine and one-tenth sessions. It was concluded that implosive therapy was more efficient in that it was completed in 45 percent of the time required by desensitization. These gains were still evident at the time of a six-month follow-up.

A very similar study by Calef and MacLean (9), using students with speech anxiety, warranted similar conclusions. Reciprocal inhibition (desensitization) and reactive inhibition (implosion) treatment methods were found to be equally effective, and both procedures were superior to no treatment. The results of this study indicated that implosive therapy could be applied to group treatment, which means that it may be a very economical and efficient procedure.

DeMoore (15) compared desensitization with prolonged high intensity stimulation (flooding) in treating male college students with a fear of snakes. Both desensitization and flooding groups received four twenty-minute sessions of treatment. Both the desensitization and flooding groups improved equally and showed significantly more change than the control group.

Mylar and Clement (42) also found equal effectiveness for desensitization and implosion in treating public speaking anxiety, thereby supporting the findings of Calef and MacLean (9). The lack of a control group in this study severely
limits the conclusions that can be drawn. Of particular interest in this study was the fact that both groups received five one-hour sessions of taped treatment.

A well-designed study by Boulougouris, Marks, and Marset (8) is even acknowledged by critics of implosive therapy (41) as offering clear evidence that flooding (IT) might be superior to desensitization (SD). A crossover design was utilized to expose sixteen patients with phobic disorders to both of the treatment procedures. Treatment consisted of six sessions of desensitization (or implosion) followed by six sessions of implosion (or desensitization). Each session was of fifty minutes duration. The fifth and sixth sessions were followed by seventy minutes of IT or SD in practice. The treatments were conducted two to three times weekly. Clinical and physiological measures were taken before treatment and two days after the sixth and twelfth sessions. Clinical measures were collected for one year. Flooding (implosion) was significantly superior to desensitization on all clinical and physiological measures.

A second crossover study by Crowe, Marks, Agras, and Leitenberg (14) compared implosion, time-limited desensitization, and shaping in treating outpatients with moderately severe phobias. A block design was used so that all subjects received all treatments in random order. On behavioral avoidance measures, shaping was significantly superior to desensitization with implosion in the middle and not significantly different from the other two treatments. The
authors concluded that shaping and implosion have some potential, as compared with desensitization, in the treatment of phobic patients.

A comparative study by Boudewyns and Wilson (7) evaluated implosive therapy and desensitization procedures using free association and standard hospital milieu treatment with six voluntary psychiatric patients. The implosion group was found to be superior on more measures and maintained their improvements better than the desensitization group six months after therapy. The results of this study are consistent with the findings of Boulougouris et al. (8) and those of Crowe et al. (14).

From the preceding review of the literature, it may be concluded that both implosion and systematic desensitization have traditionally been used for therapeutic purposes with phobic college students, clinical outpatients, and psychiatric inpatients. A recent study by Rihani (46) did not utilize any of the forementioned subject pools and will be reviewed at this point because of its particular relevance to the present study.

Rihani (46) compared the effects of implosive therapy and systematic desensitization upon counselor trainees' anxiety and ability to communicate emotions. Both techniques were utilized as training methods with counselor trainees who were assumed to be normal people. The goal was to reduce or eliminate the counselor's anxiety when dealing
with high affect problems and to help the counselor reflect and communicate feelings and emotions appropriately to a client without experiencing debilitating anxiety.

Forty-two graduate students in counseling were randomly assigned to one of three conditions: (1) implosion, (2) desensitization, and (3) placebo control. Each condition consisted of two introductory sessions and five treatment sessions, each lasting thirty minutes. All sessions were presented by tape recordings. At the conclusion of the study, only one hypothesis was confirmed which suggested that the implosive group was able to reflect higher levels of feelings and emotions.

Rihani's (46) study supports the feasibility of utilizing implosive procedures as training techniques for a non-clinical population. The present study utilizes a similar population.

Not all comparative studies have found implosion to be an equivalent or superior technique. Rachman (44) used a flooding procedure to treat three subjects who had a fear of spiders. These subjects were compared to three other subjects who had previously undergone desensitization and to three no-treatment controls. Treatment lasted forty-five minutes for five sessions spread over two weeks. During flooding, subjects were instructed to imagine scenes for two minutes at a time. The flooding and control subjects did not improve, whereas desensitization subjects improved
markedly. There are some serious methodological limitations in this study. For instance, visualization of items for two minutes is not massed practice and cannot be considered to be flooding. In actuality the subjects were rehearsing their fear responses which could have increased their fear of snakes. Also, the limited sample size makes meaningful interpretation impossible.

A similar study by Willis and Edwards (63) also found implosive therapy ineffective in treating mice phobic undergraduate females. However, this study also contained a serious methodological error which invalidates the comparison. The therapists terminated treatment sessions when subjects were increasing in anxiety levels. As in the Rachman (44) study, this procedure would tend to sensitize clients.

These same risks were also evident in the study by Mealiea and Nawas (39) which found desensitization to be more effective than implosion in the treatment of snake phobias. The implosion items were presented in a randomized order. This will not produce a steady increasing level of anxiety until extinction takes place.

Fazio (18) compared implosive therapy with reality-supportive therapy. Each group received four sessions of treatment. It was concluded that a brief course of one-to-one implosive therapy was not an effective treatment for non-college volunteers with semiclinical phobias of insects. Reality or supportive therapy was effective.
Recent studies by Cornish and Dilley (13) and by Smith and Nye (51) found systematic desensitization to be more effective than implosive therapy in reducing test anxiety in undergraduates. However, implosive therapy was followed by a significant reduction in anxiety measures. In both studies, implosion had some post-test positive effects.

Synthesis of the Reviewed Literature

The studies of Whitehorn and Betz (62), Truax and Carkhuff (56), Truax (55), Truax, Wargo, and Silber (58), and Bergin (4) collectively suggest that therapists and counselors who are accurately empathic, nonpossessively warm, and genuine are effective in producing constructive personality change and development in the client.

Rogers (48) and Truax and Carkhuff (56) state that the expression of warmth, empathic understanding, and respect is closely related with high emotional involvement and intimacy between counselor and client. A relationship of high emotional involvement and intimacy is important in counseling because, according to Truax and Mitchell (57), it allows the counselor to become a potent reinforcer of appropriate behavior. Conversely, an individual who provides low levels of the core conditions is a product of a succession of retarding relationships that have left him without the developed capacities to engage in constructive interpersonal encounters (56).

The studies of Lidz and Lidz (33), Cass (11), Montalto (40), Christensen (12), Frazee (21), and Baxter, Becker, and
Hooks (3) collectively suggest that early interaction with significant others can markedly contribute to the development of a socially conditioned fear of interaction. This fear is present in varying degrees and has become generalized from significant others to interpersonal interaction in general.

Fry (22) hypothesizes that counselors are as likely as clients to have developed conditioned anxiety responses to "human warmth" communicated by significant others in the past. The average person cast in the helping role has a varying degree of socially conditioned fear of intimate personal interaction. Bandura (1) found that the presence of anxiety in the therapist reduces his ability to do successful psychotherapy.

Fry (22) reports having successfully desensitized professional helpers along the dimension of anxiety related to intimacy, thereby reducing or eliminating socially conditioned fear of interaction. There is no evidence in the literature to date of anyone's attempting to achieve Fry's results through the use of implosive therapy, which appears to be a simpler and more efficient procedure than desensitization. However, Rihani (46) used implosion as a training procedure for counselor trainees and increased their ability to reflect high levels of feelings and emotions.

Implosion therapy, according to Stampfl and Levis (52), is a behavior-modification procedure based on extinction during which the conditioned stimulus is repeated many times
without pairing it with the unconditioned stimulus. Generally, the animal studies of Masserman (38), Polin (43), and Berman and Katzer (6) on flooding support the extinction hypothesis by demonstrating that inescapable exposure to the conditioned aversive stimuli produces a decrement in avoidance behavior. However, Hodgson and Rachman (24) propose that in humans, implosion is effective because of a "contrast phenomenon."

Regardless of the theoretical rationale that may eventually emerge to explain the process, implosion has empirically demonstrated effectiveness. The case studies of Malle- son (35), Rainey (45), Lamontagne and Marks (30), and Rubodeau (49) demonstrate the clinical effectiveness of short term implosive therapy.

Controlled studies of implosive therapy begin with Hogan's (25) study of psychotic patients. The studies of Kirchner and Hogan (29), Hogan and Kirchner (28), Hogan and Kirchner (27), and Levis and Carrera (32) established the effectiveness of implosion in treating volunteer university students and outpatients for rat and snake phobias.

The study by Hogan and Kirchner (27) was the first to successfully utilize tape recorded implosive therapy. However, Hodgson and Rachman (24) utilized similar taped implosive procedures, but without success. The Hogan and Kirchner (29) study also demonstrated feasibility of applying implosive therapy to a group setting.
Four comparative studies, Barrett (2), Calef and MacLean (9), DeMoore (16), Mylar and Clement (42), attempted a direct comparison of the effectiveness of implosive therapy and systematic desensitization. All four concluded that both treatments were equally effective. However, Barrett (2) and Calef and MacLean (9) both suggested that implosion may be the more efficient procedure because it can be completed in less time.

The Calef and MacLean (9) study provided further evidence of the effectiveness of implosion in a group setting. The study by Mylar and Clement (42) was of particular interest because the treatments were administered by tape as in the Hogan and Kirchner (29) study.

The well-designed crossover study by Boulougouris, Marks, and Marset (8) utilized both clinical and physiological measures and offers clear evidence that flooding may be superior to desensitization. This conclusion is supported by the comparative study by Boudewyns and Watson (7). Another crossover study by Crowe, Marks, Agras, and Leitenberg (14) indicated that shaping was superior to desensitization, with implosion between the other two treatments with respect to effectiveness.

Rihani (46) achieved partial success in using implosion to increase the counselor's ability to reflect high levels of feelings and emotions. However, the expected reduction in anxiety was not manifest on the scales that were used. Desensitization did not produce any improvements.
This study supports the feasibility of utilizing implosive procedures in training techniques for non-clinical populations. Taped treatments were utilized in this study.

Not all studies have found implosion to be effective. Fazio's (19) two double-blind experiments failed to produce any significant improvement on overt behavior tests in imploded subjects. The procedures in this study were presented by tape. Also, Dawley (15) failed to reduce test anxiety through the use of implosion therapy.

The comparative studies of Rachman (44), Willis and Edwards (63), and Mealiea and Nawas (39) all found implosion to be ineffective in comparison to systematic desensitization. However, all three of these studies contain serious methodological errors. The procedures used cannot be classed as implosion or flooding.

Fazio (18) found that a brief course of individual implosive therapy was not effective in treating non-college volunteers with semi-classical phobias. Besides the three studies (39, 44, 63) that can be disregarded on methodological grounds, most of the other studies in which implosion was found to be partially effective (46) or totally ineffective (24, 19) have one thing in common: they have used taped procedures. One of the studies (42) for which the results showed equal effectiveness for desensitization and implosion also contained taped procedures. Marks (36) reviewed eight studies in which flooding (implosion) was ineffective.
Out of the eight studies, six used taped presentation of treatment. Of the nine effective studies reviewed, only two used taped procedures.

The implications of Marks' (36) findings are that taped procedures generally do not permit monitoring the anxiety level of subjects and adjusting the presentations accordingly. The taped procedure could terminate before the subject had extinguished his fear. Also, in taped presentations it may be easier for the subject to make an avoidance response by directing his attention from the tape. Both of these possibilities would work against successful implosion. Dee (17) seriously questions the efficacy of standardized-taped therapy.

Both Marks (36) and Smith et al. (50) after reviewing the extensive literature on flooding concluded that under appropriate conditions of exposure, implosion is an effective procedure for reducing avoidance behavior and subjective reports of fear. Prolonged exposure is recommended until all aspects of anxiety have subsided. Marks (36) recommends sessions lasting one to two hours in length.

A comprehensive theoretical explanation of implosion has not yet emerged. Hodgson and Rachman (24) hypothesized a "contrast phenomenon." McCutchen's (34) study failed to find support for both "behavioral contrast" and an "exhaustion" hypothesis, but did support Stampfl's (52) "extinction" position. Smith et al. (50) state that constructs from adaptation
level theory, modeling theory, and cognitive rehearsal may ultimately account for the effectiveness of flooding procedures (implosion).
CHAPTER BIBLIOGRAPHY


5. ________, "The Effects of Psychotherapy: Negative Results Revisited," Journal of Counseling Psychology, X (Fall, 1963), 244-250.


53. __________ and D. J. Levis, "Implosive Therapy - A Behavior Therapy?" Behavior Research and Therapy, VI (February, 1968), 31-36.


CHAPTER III

METHOD

The purposes of this study were (1) to determine whether implosive therapy is effective in reducing conditioned fear of close interpersonal interaction, (2) to determine whether the use of implosive therapy is effective in enhancing the counseling effectiveness of counselor trainees in a practicum situation, and (3) to provide information that may be beneficial for future research involving the use of implosive techniques in counselor training. This chapter provides a description of the procedures used to achieve the purposes of the study.

Description of Subjects

The subjects selected for the study were twenty students enrolled in two sections of the master's level counseling practicum during the fall semester of 1974 at North Texas State University. These particular sections of counseling practicum were chosen because both groups were expected to work with similar client populations. Both of the practicum classes were contacted three weeks after the beginning of the semester, at which time each counselor trainee was about to initiate his first contact with a client. Each subject was offered the opportunity to take part in an experimental
study concerned with counseling effectiveness. No further
details were given because of the possibility of establishing
counselor trainee expectancies which could confound outcomes.
All twenty students agreed to participate in the study.

Almost all of the subjects in the study were commuting
and working students; therefore, practical considerations
d dictated the use of intact groups. Group I met on Monday
evenings and consisted of five males and six females with an
average age of 29.5 years. The youngest subject was twenty-
four years old and the oldest was forty-three years old.
Group II met on Tuesday evenings and consisted of five males
and four females with an average age of 32.1 years. The
youngest subject was twenty-three years old and the oldest
was forty-one years old.

All subjects were administered the Social Avoidance and
Distress Scale and the Capacity for Intimate Contact Scale
during the third week of the semester immediately before
their first client contact. They were administered these
same instruments during the fifth (Post-test I) and seventh
(Post-test II) weeks of the semester.

Description of Raters and Rating System

Three independent raters were used in this study. Two
raters were post-internship doctoral candidates in the coun-
seling program at North Texas State University. The third
rater was a master's level psychometrist with six years of
counseling experience. The raters were selected in terms of previous experience in the use of the Counselor Evaluation Rating Scale and willingness to participate in the study. The raters were paid for their services, but were not informed of the purpose of the study.

Rater reliability was established prior to the collection of any data by having the three raters independently rate sixteen ten-minute segments of counseling sessions that had been employed in another study. The first six segments were used as practice ratings. Rater reliability was determined from the final ten ratings.

Two five-minute segments were video taped from each subject's first, third, and fifth counseling sessions. One segment came from the first half of the counseling sessions and the second segment came from the final half. The three raters used the Counselor Evaluation Rating Scale to rate each of the six counseling segments for each of the twenty subjects. All tape segments were presented to the raters in random order during the eighth week of the semester after all the data had been collected, in order to control for rater bias or expectancy. The two ratings for each subject by each rater on the Pre-test were averaged to obtain one score for each subject for each rater. Then the three averaged ratings for each subject were averaged once again to obtain one score for each subject. This same procedure
was used to obtain one score for each subject on Post-test I and Post-test II.

Implosive Therapy

Both groups were imploded along the dimension of anxiety of close interpersonal interaction. Group I was imploded one week prior to Post-test I, while Group II was imploded one week prior to Post-test II. The same experimenter administered identical procedures to both groups.

Each group met with the therapist (experimenter) once for a total time of one hour and thirty minutes. The meetings were held in the evening after the conclusion of the regular practicum duties for that evening. The sessions were conducted in a room selected to eliminate outside disturbances. The first ten minutes of the sessions were devoted to the presentation of the rationale for implosive therapy, which was similar to the rationale used by Dawley (4). At the completion of the rationale, the subjects were instructed to close their eyes. The remaining eighty minutes were spent in having the subjects visualize four sets of anxiety-evoking scenes which were derived from Fry's (5) procedures. The subjects were also instructed to concentrate on experiencing fully any anxiety that was elicited. Detailed instructions pertaining to the visualization of the stimuli in each scene were presented by the experimenter. These instructions were to assist the subjects in visualizing the scene and experiencing the accompanying anxiety. Each scene was
presented so as to increase the level of anxiety as the scene progressed. Once the high point of the scene had been reached, this level was sustained until all external signs of anxiety had subsided in each subject. The signs of anxiety utilized were facial expression, respiratory rate, muscle tension, body movement, and posture. When anxiety could no longer be elicited by a scene, it was terminated. The total presentation of each scene lasted approximately twenty minutes. At the conclusion of each scene, the subjects were instructed to open their eyes, look around, and note that nothing had happened to them. They were then instructed to close their eyes again and visualize the next scene.

The four anxiety-eliciting scenes reflect the four dimensions that Mehrabian (8) believes underlie the communication of warmth and intimacy between individuals. It was assumed that these dimensions would elicit anxiety in individuals with a conditioned fear of close interpersonal interaction.

The first scene dealt with the dimension of the emotional tone of the client's voice. Generally, the subject (counselor trainee) had to imagine himself in a counseling setting where the client's voice with appropriate undulations first conveyed high levels of surprise which progressively turned to warmth, happiness, and then love. In the second scene, the dimension was the client's facial expressions.
The subject once again had to imagine himself in an intensive counseling situation in which the client's facial expressions progressively denoted care, concern, approval, attraction, and finally love. The third scene dealt with the dimension of eye contact. The subject was asked to imagine a counseling session that had fallen into silence, but in which both counselor trainee and client had established eye contact. Unbroken eye contact was maintained for an extended period of time. The counselor trainee focused on how uncomfortable the situation was.

The final scene dealt with the dimension of posture and proximity. Here the counselor trainee had to imagine himself in a counseling situation which began with the client slouched down in his chair and considerable physical distance between the counselor and client. As the session progressed, the client gradually sat upright, and then began slowly moving his chair towards the counselor trainee until they were virtually knee-to-knee with the client leaning towards the counselor at a forty-five degree angle. The counselor could no longer back away. The four basic scenes were amplified considerably in detail and intensity beyond the present general description.

Audio tape recordings were made of both implosive sessions. These tapes were assessed for significant differences by one of the three raters who were used for rating the counseling segment tapes. No major differences were detected in the two tapes.
Description of Instruments

The Social Avoidance and Distress Scale (11) was designed specifically to assess the level of anxiety expressed in social situations. (See Appendix A.) The scale is divided into two subscales: social avoidance and social distress. Social avoidance is defined as avoiding being with, talking to, or escaping from others for any reason. Both avoidance and the desire for avoidance are included. Social distress is defined as the repeated expression of a negative emotion, such as being upset, distressed, tense, or anxious in social interactions. The items of the scale are worded so that the opposite instance of a trait indicates absence of that trait, not the presence of some other trait.

The Social Avoidance and Distress Scale consists of twenty-eight items evenly divided between true and false responses. These items were chosen to eliminate as much social desirability variance as possible. The mean biserial correlation of the scale items, corrected for presence of item in the total score, was .77 (N=205, p .01). A second index of homogeneity, the KR-20 reliability statistic, yielded a value of .94. These data indicate that the scale is very homogeneous.

Initial data for test-retest reliability over a one-month period, using a sample of 154 university students, yielded a product-moment test-retest correlation of .68. A second sample of twenty-one university students yielded
a coefficient of .79. The authors concluded that these figures indicate sufficient reliability for the scale.

The distribution of the Social Avoidance and Distress Scale was skewed. Based on a sample of 205 university students, the model score was zero, the mean was 9.11, the median was 7, and the standard deviation was 8.01. The authors explain the skew in the scale by hypothesizing that the variables determining extreme social withdrawal or distress are probably not normally distributed within the general population. Males reported more social avoidance and distress than females. The mean score for males (N=60) was 11.20, but for females (N=145) it was 8.24. This difference is significant (t=2.64, p<.01).

The authors reported a moderate correlation (.54) between the Social Avoidance and Distress Scale and the Manifest Anxiety Scale (10). This would be expected if the Manifest Anxiety Scale is a measure of general anxiety. The Social Avoidance and Distress Scale also had a negative correlation (-.76) with the affiliation scale of the Personality Research Form (6). This would also be expected in that social avoidance and affiliation are opposing polarities.

Watson and Friend (11) report two experimental studies that provide additional validation for the Social Avoidance and Distress Scale (SAD). In the first study, forty-six subjects were randomly selected as the low anxious (LA) group from a pool of eighty-two subjects scoring zero or one
on the SAD. Similarly, fifty-two subjects were randomly selected as the high anxiety (HA) group from a pool of eighty-five subjects scoring twelve or above. Within these two groups, subjects were randomly assigned to an Essay vs. Group Discussion condition. In the Essay condition the subjects were told that they would return later and would be placed in an isolated cubicle to write an essay on an interesting and controversial topic. The Group Discussion subjects were told that they would be placed in a small group to participate actively in a discussion of an interesting and controversial topic. All subjects then participated in filling out a five-point questionnaire indicating how interested they were in returning later to participate in their assigned activities and how worried or concerned they were about the scheduled activities.

The data clearly indicated \( F=6.70, \text{df}=1/94, p<.05 \) that subjects who scored highly on the SAD scale were less likely to be interested in returning later to continue the study, and more likely than the low anxious group to choose to be alone, both indexes of social avoidance. Also, the high anxiety subjects were more worried and uneasy than the low anxiety subjects, indicating distress.

In the second study, ninety-seven high anxiety subjects with scores of eleven and above, and fifty-eight low anxiety subjects with scores below three, were randomly assigned to a cubicle with another person and encouraged to talk. Each
subject decided individually how much they would talk. Each subject was then asked to indicate on a four-point scale how much he had talked. The high-anxiety subjects reported significantly less talking \((t=2.20, \text{df}=42, p<.05)\) than the low-anxiety subjects. The authors conclude that not talking to others is a kind of social avoidance. The SAD scale was supported in this study because it differentiated subjects according to how much they reported talking to others.

The **Social Avoidance and Distress Scale** does appear to have some validity, and thus it was selected for use in the present study. Because it confines its questions to specific situations or conditions (social interaction), it should have greater predictive validity for those situations than scales that purport to assess general anxiety.

The authors conclude that very little is known about the development of high levels of social anxiety and its effect on the individual. However, they speculate that the amount of social avoidance and distress may be a function of prior punishment or frustration in social interaction. The individual with high levels of social avoidance and distress is isolated and often fearful.

**Personal Orientation Inventory**

The **Personal Orientation Inventory** (9) consists of 150 two-choice comparative value and behavior judgments. (See Appendix A.) The scales were developed around value concepts having broad personal and social relevance, based on
Maslow's concept of a self-actualizing person. All items are non-threatening and are based on observed value judgments of clinically troubled clients seen by several therapists over a five-year period.

The Personal Orientation Inventory is comprised of twelve scales. One of these scales, the Capacity for Intimate Contact Scale, was used to measure the person's ability to develop meaningful, contactful relationships with other people. A low score indicates that one has difficulty with warm interpersonal relationships. A high score indicates the ability to relate intensely to another individual, either tenderly or aggressively.

The normative data are based on 2,607 college freshmen and are biased toward the college student population. A test-retest reliability coefficient of .75 for the Capacity for Intimate Contact scale is reported in the Manual for the Personal Orientation Inventory.

Bloxum (2) states that the content validity of the scales is good. The variables being assessed by the items are broadly defined, and the content of the items in each scale is appropriately varied. The Manual reports that all twelve scales of the Personal Orientation Inventory are able to discriminate between mental health levels of beginning therapy and advanced therapy groups at the .01 level of significance. This indicates good discriminant validity.
The Capacity for Intimate Contact scale had a correlation of \(-.46\) with the Social Introversion-Extroversion Scale (SI) of the MMPI. This correlation was significant at the .01 confidence level and indicates some concurrent validity. The Manual concludes that this correlation appears to support the notion that the Personal Orientation Inventory is measuring attributes which are important in developing harmonious interpersonal relationships. Other reported correlations for the Capacity for Intimate Contact scale are \(-.30\) with the Social scale of the Personal Orientation Inventory and \(.26\) with the Extroversion scale of the Eysenck Personality Inventory. These correlations were also significant at the .01 level of significance.

The Seventh Mental Measurements Yearbook (3) lists 123 studies using the Personal Orientation Inventory. Bloxum (2) concludes that the validity of the instrument can be well documented by summarizing the results of studies of the Inner Support Scale. However, the instrument lacks some desirable properties as an inventory because of the item overlap in the subscales. This problem ceases to exist if only one subscale is used, as in the present study.

Counselor Evaluation Rating Scale

The Counselor Evaluation Rating Scale (see Appendix A) developed by Kelly and Myrick (7) was used to assess counselor effectiveness. The instrument is composed of twenty-seven items which enable a respondent to rate a counselor's
performance in counseling and supervision. The CER scale yields three scores: counseling, supervision, and total. Thirteen items are designed to assess an individual's effectiveness in counseling while another thirteen items appraise the counselor's work and progress in supervision. The final independent item consists of the supervisor's recommendation of the student for a counseling position. For the present study only the thirteen items assessing the individual's effectiveness in counseling were used, with permission of the authors.

The instrument does appear to have some face validity despite the lack of a large body of supporting research at this time. Following a review of professional literature, the authors developed a list of characteristics considered important for the comprehensive evaluation of student counselors. The list represents such factors as facilitative behaviors in counseling, acceptance, theoretical rationale, perception of clients, and self-evaluation skills. The final twenty-seven items were selected during a twelve week counseling practicum, where all items were analyzed, classified, and assessed in terms of face validity as measures of effective behaviors in counseling and supervision. These items are representative of three facets in a counseling practicum: understanding of a counseling rationale, counseling practice with clients, and exploration of self and counseling relationships. Understanding of a counseling rationale (Items
3, 6, 9, 14, 19, 23, and 26) focuses on the way in which a counselor conceptualizes his work. Counseling practice with clients (Items 1, 2, 5, 8, 11, 12, 13, 17, 18, 21, and 22) concerns the manner in which the counselor approaches his clients and the counseling techniques and behaviors he employs. Exploration of self and counseling relationships (Items 4, 7, 10, 15, 16, 20, 24, and 25) concerns the counselors' amenability to personal and professional growth.

The authors of the instrument used a split-half reliability procedure with a Spearman-Brown correction and reported a coefficient of .95 for forty-five student counselors and their supervisors. A comparison of the thirteen counseling items and the thirteen supervising items produced a correlation coefficient of .86. A test-retest reliability procedure was used to test the stability of the instrument over a period of four weeks between ratings, and a reliability coefficient of .94 was found.

Kelly and Myrick (7) state that the Counselor Evaluation Rating Scale offers a standardized approach for conceptualizing counselor performance and progress, and also serves to reduce the vagueness and inequity involving assessment. Counseling performance may be evaluated in terms of total points scored, thereby facilitating research in the area of counseling effectiveness.

The potential that this instrument appears to have in rating counselor effectiveness, and the fact that it can be
used by raters who are not committed to any specific model of counseling, supported its use in the present study.

**Procedures for Collecting Data**

Two intact sections of the master's level counseling practicum were used in this study. One section (which was labeled Group I) contained eleven students, and the second section (labeled Group II) contained nine subjects. The two sections provided a total of twenty subjects.

The experimental design employed in this study was a modified multiple baseline design adapted from Baer et al. (1). The schematic representation was as follows:

\[
\begin{align*}
0_1 & \times 0_2 \quad 0_3 \\
0_4 & \quad 0_5 \times 0_6
\end{align*}
\]

where 01 and 04 represent Pre-test measures on the Social Avoidance and Distress Scale, Personal Orientation Inventory, and the Counselor Evaluation Rating Scale. 02 and 05 represent Post-test I measures and 03 and 06 were Post-test II measures on the Social Avoidance and Distress Scale, the Personal Orientation Inventory, and Counselor Evaluation Rating Scale. The symbol X indicates the administration of implosive therapy.

The instruments used for the pre-tests were administered to all the counselor trainees approximately one hour before they were to engage in their first counseling session (third week of the semester) of the practicum. This was done in
order to obtain an index of the subject's anxiety prior to any contact with a client which could have had a desensitizing effect. Two five-minute video tape segments were recorded of each subject's first counseling session as part of the pre-test data. One segment was taken from the first half of the counseling session and the other segment was taken from the last half of the session. These recordings were held for a period of five weeks before they were evaluated by the raters. Tapes were presented in random order to the raters in order to control for possible rater bias. The tapes constituting the pre-test and two post-tests were marked in code, so that they could be identified by the researcher but not by the raters. The specific procedure for rating the video tapes on the Counselor Evaluation Rating Scale and arriving at an index of counselor effectiveness has been described in this chapter under the heading of raters and rating system.

During the fourth week of the semester, one week after the collection of the pre-test data, implosive procedures were administered to Group I. Group II did not receive any treatment procedures at this time. The actual determination of which group was to be the first to receive the experimental treatment was decided by the flip of a coin. Both groups met with their regular clients during this week with the exception that Group I received one hour and twenty minutes of implosion while Group II engaged in their regular
practicum activities after seeing their last client. The implosive procedures utilized were described in more detail in an earlier section of this chapter.

During the fifth week of the semester, one week after Group I received implosion, all subjects in both groups completed the Social Avoidance and Distress Scale and the Personal Orientation Inventory as part of the Post-test I data. These data were collected at the beginning of that evening practicum. Once again two five-minute video tape segments were collected for each subject in the two groups in exactly the same manner as for the Pre-test. These video-tape segments were evaluated on the Counselor Evaluation Rating Scale by the raters at a later time in order to arrive at a Post-test I index of counseling effectiveness.

Implosive therapy identical to that administered to Group I two weeks earlier was administered to Group II during the sixth week of the semester. This time Group I did not receive any experimental treatment. Both groups met with their regular clients during the evening, but this time Group II received the implosive procedures while Group I engaged in regular practicum activities.

One week after Group II received implosion, the seventh week of the semester, all members of both groups completed the Social Avoidance and Distress Scale and the Personal Orientation Inventory for the Post-test II data. Again video tapes were made of two five-minute segments of each subject's
counseling session. These segments were later rated on the **Counselor Evaluation Rating Scale** in order to obtain a Post-test II index of counseling effectiveness.

During the eighth week of the semester, the three raters evaluated all of the tapes collected during the preceding five weeks. The tapes were presented in random order and the mean scores of the three judges were averaged together to obtain a composite score for each individual subject on the Pre-test, Post-test I, and Post-test II measures of counseling effectiveness. (See Appendix B.)

Generally, each counselor trainee met once a week with the same client during the five weeks of the study. The subject was always video taped while he was with this same client. During the fourth week of the study approximately three subjects in each group acquired a second client. However, many of these second clients failed to show up at their appointed times. It was felt that these extra clients contributed little in terms of possible desensitization sessions.

Although the primary interest was the Capacity for Intimate Contact Scale of the **Personal Orientation Inventory**, it should be noted that the whole **Personal Orientation Inventory** was administered for the Pre-test, Post-test I, and Post-test II. It was felt that the administration of the whole scale would minimize faking and response set.
Procedures for Analysis of Data

The means and standard deviations for the two groups were computed from the Pre-test, Post-test I, and Post-test II scores on the Social Avoidance and Distress Scale, the Capacity for Intimate Contact Scale of the Personal Orientation Inventory, and the Counselor Evaluation Rating Scale.

The Spearman rank-order correlation coefficient formula was used to demonstrate inter-rater reliability on the Counselor Evaluation Rating Scale. Each rater's pre-test scores on the twenty subjects were rank-ordered from highest to lowest score on the Counselor Evaluation Rating Scale. The rankings of Rater I were compared with ranking of Rater II, the rankings of Rater II were compared with Rater III, and the rankings of Rater I were compared with those of Rater III. A Spearman rank-order correlation coefficient was computed for each of these pairings. The identical procedures were carried out on both the Post-test I and Post-test II ratings.

Hypotheses I, II, and III were tested using the one way analysis of covariance for unequal cells. The Pre-test scores on the Social Avoidance and Distress Scale, the Capacity for Intimate Contact Scale of the Personal Orientation Inventory, and the Counselor Evaluation Rating Scale were the covariate measures and the Post-test I scores on these same instruments were the dependent variables. The results...
are reported in terms of an F-ratio for the measures of each instrument used. The F-test for analysis of covariance statistically tests the differences between adjusted means; these means being adjusted on the basis of the covariate measure.

Hypotheses IV, V, and VI were also tested using the one-way analysis of covariance for unequal cells. The Pre-test scores on the Social Avoidance and Distress Scale, the Capacity for Intimate Contact Scale of the Personal Orientation Inventory, and the Counselor Evaluation Rating Scale were the covariate measures and the Post-test II scores on these same instruments were the dependent variables. The results are reported in terms of an F-ratio for the measures of each instrument used.

The .10 level of significance was used as the criterion for testing all six hypotheses.
CHAPTER BIBLIOGRAPHY


Rater reliability on the Counselor Evaluation Rating Scale was demonstrated prior to the collection of any experimental data by having the raters rate ten especially prepared counseling segments, and comparing the ratings with the Spearman rank-order correlation formula. Comparisons were made between Raters I and II, Raters I and III, and Raters II and III.

The data indicated that there was a correlation coefficient of .79 between Raters I and II, a correlation coefficient of .81 between Raters I and III, and a correlation coefficient of .70 between Raters II and III. The correlation coefficient value between Raters I and II and between Raters I and III were significant at the .01 level. The correlation coefficient value for Raters II and III was significant at the .05 level. These reliability coefficients showed a substantial degree of inter-rater reliability.

All of the measures of the Counselor Evaluation Rating Scale were also compared by means of the Spearman rank-order correlation formula. Comparisons were made between the rankings of the subjects by the three raters. Rater I rankings were compared with Rater II rankings, Rater II
rankings were compared with Rater III rankings, and Rater I rankings were compared with Rater III rankings.

Pre-test data showed that there was a .62 correlation coefficient between Raters I and II, a .74 correlation coefficient between Raters I and III, and a .76 correlation coefficient between Raters II and III.

Post-test I data showed that there was a .73 correlation coefficient between Rater I and II, and .85 correlation coefficient between Raters I and III, and a .59 correlation coefficient between Raters II and III.

Post-test II data showed that there was a .79 correlation coefficient between Raters I and II, a .83 correlation coefficient between Raters I and III, and a .69 correlation coefficient between Raters II and III. It is not known why some of the correlation coefficients varied from the Pre-test to Post-tests I and II.

All of the reported correlation coefficients found between the ratings were significant at the .01 level, and were considered high enough to warrant the use of the Counselor Evaluation Rating Scale as an instrument for measuring counseling effectiveness.

Hypothesis I

For testing purposes the stated hypotheses of Chapter I were restated in the null form. Null Hypothesis I was:
There will be no significant difference between the adjusted
means of Group I and Group II on the Counselor Evaluation Rating Scale.

The mean scores, adjusted mean scores, and standard deviations obtained from the Counselor Evaluation Rating Scale are presented in Table I.

**TABLE I**
MEANS AND STANDARD DEVIATIONS FOR THE COUNSELOR EVALUATION RATING SCALE

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Adjusted</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Treatment)</td>
<td>11</td>
<td>46.9236</td>
<td>46.9391</td>
<td>45.7837</td>
<td>5.6679</td>
<td>6.2358</td>
</tr>
<tr>
<td>II (Control)</td>
<td>9</td>
<td>42.1689</td>
<td>45.9989</td>
<td>47.4109</td>
<td>4.0928</td>
<td>2.3602</td>
</tr>
</tbody>
</table>

Table I shows that Group I started off with a higher score than Group II on the Pre-test. The actual difference was nearly five points. Group II showed a mean increase of over three points from the Pre-test to Post-test I, while the Group I mean remained virtually unchanged. The adjusted mean of Group II was somewhat higher than the adjusted mean of Group I indicating that the control group had improved a little more than the treatment group.

There was a small difference in standard deviation for the two groups on the Pre-test. Group II was slightly more homogeneous than Group I with respect to scale scores. The
standard deviations of the two groups differed considerably on Post-test I, as evidenced by the values of 6.2358 and 2.3602. Group I, the treatment group, increased slightly in heterogeneity, while Group II became much more homogeneous (as evidenced by a relatively low standard deviation of 2.3602).

The analysis of covariance data for the two groups on the Counselor Evaluation Rating Scale are presented in Table II.

### TABLE II

**ANALYSIS OF COVARIANCE DATA FOR THE COMPARISON OF RATINGS ON THE COUNSELOR EVALUATION RATING SCALE**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>10.5208</td>
<td>1</td>
<td>10.5208</td>
<td>0.5949</td>
<td>0.4511</td>
</tr>
<tr>
<td>Within</td>
<td>300.6475</td>
<td>17</td>
<td>17.6851</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>311.1682</td>
<td>18</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
</tr>
</tbody>
</table>

The F-ratio of .5949 shown on Table II was significant at the .45 level. Thus, the mean increase in scale scores was not significantly different for the two groups, and Null Hypothesis I was not rejected.

**Hypothesis II**

Null Hypothesis II was: There will be no significant difference between the adjusted means of Group I and Group II on the Social Avoidance and Distress Scale.
The mean scores, adjusted mean scores, and standard deviations obtained from the Social Avoidance and Distress Scale are presented in Table III.

**TABLE III**

**MEANS AND STANDARD DEVIATIONS ON THE SOCIAL AVOIDANCE AND DISTRESS SCALE**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre-Test</th>
<th>Post-Test I</th>
<th>Adjusted</th>
<th>Pre-Test</th>
<th>Post-Test I</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Treatment)</td>
<td>11</td>
<td>4.6364</td>
<td>3.2727</td>
<td>2.8329</td>
<td>4.0564</td>
<td>2.9014</td>
</tr>
<tr>
<td>II (Control)</td>
<td>9</td>
<td>2.8889</td>
<td>2.3333</td>
<td>2.8709</td>
<td>2.0276</td>
<td>1.5000</td>
</tr>
</tbody>
</table>

This table shows that Group I had a higher pre-test mean than Group II. The treatment group had more than a one-point drop in the Post-test I mean, while the control group mean decreased by approximately half a point. The adjusted Post-test I means for the two groups were virtually the same.

The standard deviations indicated that the Control Group scores varied less than those of the Treatment Group, both in the Pre-test and Post-test I. Both groups became more homogeneous during the treatment period, as evidenced by pre-test and post-test standard deviation changes from 4.0564 to 2.9014 for Group I, and from 2.0276 to 1.5000 for Group II.
The analysis of covariance data for the two groups on the Social Avoidance and Distress Scale are presented in Table IV.

TABLE IV

ANALYSIS OF COVARIANCE DATA FOR THE COMPARISON OF SCORES ON THE SOCIAL AVOIDANCE AND DISTRESS SCALE

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>0.0066</td>
<td>1</td>
<td>0.0066</td>
<td>0.0028</td>
<td>0.9585</td>
</tr>
<tr>
<td>Within</td>
<td>40.4220</td>
<td>17</td>
<td>2.3778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>40.4286</td>
<td>18</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

The F-ratio of 0.0028 is significant at the .96 level. This means that the adjusted mean of Group I was not significantly lower than that of Group II. On the basis of these data, Null Hypothesis II of no difference between adjusted means was not rejected. The very slight adjusted-mean advantage for the control group very likely can be attributed to chance.

Hypothesis III

Null Hypothesis III states that there will be no significant difference between the adjusted means of Group I and Group II on the Capacity for Intimate Contact Scale of the Personal Orientation Inventory.
The mean scores, adjusted mean scores, and standard deviations obtained from the Personal Orientation Inventory are presented in Table V.

### TABLE V

**MEANS AND STANDARD DEVIATIONS ON THE CAPACITY FOR INTIMATE CONTACT SCALE OF THE PERSONAL ORIENTATION INVENTORY**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Means</th>
<th>Standard Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre-Test</td>
<td>Post-Test I</td>
</tr>
<tr>
<td>II (Control)</td>
<td>9</td>
<td>19.3333</td>
<td>21.6667</td>
</tr>
</tbody>
</table>

Table V shows that the Pre-test means of the two groups differed by less than one point. Both groups showed an increase of over two points from the Pre-test to Post-test I, with the resulting means being almost the same. The adjusted means of both groups were almost identical.

The standard deviations for the two groups were very similar on the Pre-test. On Post-test I, Group II became slightly more homogeneous, as evidenced by the Pre-test and Post-test I standard deviation changes from 3.8406 to 2.8724. The standard deviation of Group I did not vary much from pre-test to post-test.
The analysis of covariance data for the two groups on the Capacity for Intimate Contact Scale of the Personal Orientation Inventory are presented in Table VI.

### TABLE VI

**ANALYSIS OF COVARIANCE DATA FOR THE COMPARISON OF SCORES ON THE CAPACITY FOR INTIMATE CONTACT SCALE OF THE PERSONAL ORIENTATION INVENTORY**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>0.0029</td>
<td>1</td>
<td>0.0029</td>
<td>0.0005</td>
<td>0.9826</td>
</tr>
<tr>
<td>Within</td>
<td>100.2839</td>
<td>17</td>
<td>5.8991</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>100.2868</td>
<td>18</td>
<td>. .</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The F-ratio of 0.0005 shown in Table VI is significant at the .98 level. This means that the adjusted mean of Group I (Treatment Group) was not significantly higher than that of Group II (Control Group). On the basis of the data, Null Hypothesis III was not rejected. The very slight adjusted-mean difference in favor of the Experimental Group most likely is a chance difference.

**Hypothesis IV**

Hypothesis IV was postulated in the null form in Chapter I and stated that: At the conclusion of the study, after Group II has participated in group implosive therapy, there will be no significant difference between the adjusted
means of the two groups on the Counselor Evaluation Rating Scale.

The mean scores, adjusted mean scores, and standard deviations obtained from the Counselor Evaluation Rating Scale are provided in Table VII.

TABLE VII
MEANS AND STANDARD DEVIATIONS ON THE COUNSELOR EVALUATION RATING SCALE

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Adjusted</th>
<th>Pre-Test</th>
<th>Post-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Control)</td>
<td>11</td>
<td>46.9236</td>
<td>50.7727</td>
<td>49.3583</td>
<td>5.6679</td>
<td>4.8365</td>
</tr>
<tr>
<td>II (Treatment)</td>
<td>9</td>
<td>42.1689</td>
<td>46.4978</td>
<td>48.2264</td>
<td>4.0928</td>
<td>4.0441</td>
</tr>
</tbody>
</table>

Table VII shows that the Pre-test means of the two groups differed by over four points. This difference was maintained in Post-test II even though the means of both groups had increased by about four points each. The adjusted Post-test II means differed by only one point, with the Treatment Group having the lower adjusted group mean of 48.2262.

The standard deviation of Group II remained virtually unchanged from the Pre-test to Post-test II, indicating little change in variability. Group I showed a small change in the direction of greater homogeneity as evidenced by a change in standard deviations from 5.6679 to 4.8365 from the Pre-test to Post-test II.
The analysis of covariance data for the two groups on the Counselor Evaluation Rating Scale are presented in Table VIII.

**TABLE VIII**

ANALYSIS OF COVARIANCE DATA FOR THE COMPARISON OF SCORES ON THE COUNSELOR EVALUATION RATING SCALE

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>5.0908</td>
<td>1</td>
<td>5.0908</td>
<td>0.5219</td>
<td>0.4798</td>
</tr>
<tr>
<td>Within</td>
<td>165.8101</td>
<td>17</td>
<td>9.7535</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>170.0908</td>
<td>18</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
</tr>
</tbody>
</table>
would be no significant difference between the adjusted means on the Social Avoidance and Distress Scale for the two groups.

The mean scores, adjusted mean scores, and standard deviations obtained from the Social Avoidance and Distress Scale are provided in Table IX.

**TABLE IX**

MEANS AND STANDARD DEVIATIONS ON THE SOCIAL AVOIDANCE AND DISTRESS SCALE

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre-Test</th>
<th>Post-Test II</th>
<th>Adjusted</th>
<th>Pre-Test</th>
<th>Post-Test II</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Control)</td>
<td>11</td>
<td>4.6364</td>
<td>3.0000</td>
<td>2.6017</td>
<td>4.0564</td>
<td>2.8636</td>
</tr>
<tr>
<td>II (Treatment)</td>
<td>9</td>
<td>2.8889</td>
<td>2.0000</td>
<td>2.4868</td>
<td>2.0276</td>
<td>1.2247</td>
</tr>
</tbody>
</table>

Table IX shows that Group I had a higher mean than Group II on the Pre-test. On Post-test II both groups had decreased their mean score and differed by one point. The adjusted Post-test II means for the two groups were very similar.

The standard deviations show that both groups increased in homogeneity from the Pre-test to Post-test II as evidenced by standard deviation changes from 4.0564 to 2.8636 for Group I and from 2.0276 to 1.2247 for Group II. Group II was more homogeneous than Group I on Post-test II as evidenced by standard deviations of 1.2247 and 2.8636, respectively.
The analysis of covariance data for the two groups on the Social Avoidance and Distress Scale are presented in Table X.

**TABLE X**

**ANALYSIS OF COVARIANCE DATA FOR THE COMPARISON OF SCORES ON THE SOCIAL AVOIDANCE AND DISTRESS SCALE**

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>0.0607</td>
<td>1</td>
<td>0.0607</td>
<td>0.0238</td>
<td>0.8792</td>
</tr>
<tr>
<td>Within</td>
<td>43.3503</td>
<td>17</td>
<td>2.5500</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>43.4110</td>
<td>18</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
</tr>
</tbody>
</table>

The $F$-ratio of 0.0238 shown in Table X was significant at the .88 level. This means that the adjusted mean of the Post-test II scores of Group I, the Control Group, was not significantly different than the adjusted mean of Group II, the Treatment Group. On the basis of these data, Hypothesis V was accepted. The slight difference between the adjusted means on the Social Avoidance and Distress Scale very probably was due to chance.

**Hypothesis VI**

Hypothesis VI was postulated in the null form in Chapter I and stated that: At the conclusion of the study, after Group II has participated in group implosive therapy, there would be no significant difference between the adjusted
means (Post-test II) of the two groups obtained on the Capacity for Intimate Contact Scale of the Personal Orientation Inventory.

The mean scores, adjusted mean scores, and standard deviations obtained from the Personal Orientation Inventory are presented in Table XI.

**TABLE XI**

MEANS AND STANDARD DEVIATIONS ON THE CAPACITY FOR INTIMATE CONTACT SCALE OF THE PERSONAL ORIENTATION INVENTORY

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre-Test</th>
<th>Post-Test II</th>
<th>Adjusted</th>
<th>Pre-Test</th>
<th>Post-Test II</th>
</tr>
</thead>
<tbody>
<tr>
<td>I (Control)</td>
<td>11</td>
<td>18.5454</td>
<td>21.0909</td>
<td>21.1828</td>
<td>3.2975</td>
<td>2.6630</td>
</tr>
<tr>
<td>II (Treatment)</td>
<td>9</td>
<td>19.3333</td>
<td>22.5555</td>
<td>22.4432</td>
<td>3.8406</td>
<td>1.7403</td>
</tr>
</tbody>
</table>

Table XI shows that both groups began with similar pre-test means. Both group means increased from the Pre-test to Post-test II as evidenced by changes from 18.5454 to 21.0909 for Group I and from 19.3333 to 22.5555 for Group II. The adjusted Post-test II means of both groups differed by a little more than one point and were very similar to the raw Post-test II scores.

The standard deviations of both groups on the Pre-test were similar. On Post-test II both groups had become less heterogeneous, with Group II being more homogeneous than
than Group I as indicated by standard deviation changes from 3.2975 to 2.6630 and from 3.8406 to 1.7403, respectively.

The analysis of covariance data for the two groups on the Personal Orientation Inventory are presented in Table XII.

**TABLE XII**

ANALYSIS OF COVARIANCE DATA FOR THE COMPARISON OF SCORES ON THE PERSONAL ORIENTATION INVENTORY

<table>
<thead>
<tr>
<th>Source of Variance</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between</td>
<td>7.7580</td>
<td>1</td>
<td>7.7580</td>
<td>1.6509</td>
<td>0.2161</td>
</tr>
<tr>
<td>Within</td>
<td>79.8883</td>
<td>17</td>
<td>4.6993</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>87.6462</td>
<td>18</td>
<td>...</td>
<td>...</td>
<td>...</td>
</tr>
</tbody>
</table>

The F-ratio of 1.6509 shown in Table XII is significant at the .21 level, indicating that the adjusted mean of Group I (Control) was not significantly different than that of Group II (Treatment) at the .10 criterion level. On the basis of the data, Hypothesis VI was not rejected. The advantage in adjusted means for the Treatment Group on the Personal Orientation Inventory approached, but did not reach the desired level of significance, and may be attributed to chance.

Even though Hypotheses IV, V, and VI were accepted, it was not possible to conclude that the experimental treatment produced any significant effects. In order to conclude that implosion was an effective treatment procedure, it would have
been necessary to obtain significant changes in means on Post-test I, which would have permitted acceptance of at least one of the three hypotheses, Hypotheses I, II, or III. Since Hypotheses I, II, and III were not accepted and Hypotheses IV, V, and VI (stated in the null form) were accepted, it is possible to conclude only that the treatment did not produce any significant effects.

In addition to the formal instruments already discussed, all subjects were encouraged to provide some informal feedback concerning their impressions of and reactions to the implosive procedures. Approximately half of the subjects in each group experienced some difficulty in concentrating and visualizing some scenes because of fatigue resulting from a day's work followed by an evening's practicum. Only three subjects in each group actually manifested observable signs of anxiety, such as facial grimaces and muscle tension. However, not all subjects reacted the same way to the same scenes. The facial expression scenes and the eye contact scenes were the two scenes that appeared to elicit the most anxiety. The three subjects in each group who manifested signs of anxiety also reported experiencing some anxiety. All subjects expressed interest in the study, but none were aware of the actual purpose of the study.
CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study involved the use of implosive therapy as a training procedure in a counseling practicum. The implosive therapy was administered to the trainees in a counseling practicum at North Texas State University during the fall semester of 1974.

The Problem

The problem was the reduction of fear of intimate interpersonal interaction among counselors.

The specific purposes of the study were:

1. To determine whether implosive therapy is effective in reducing conditioned fear of close interpersonal interaction.

2. To determine whether the use of implosive therapy is effective in enhancing the counseling effectiveness of counselor trainees in a practicum situation.

3. To provide information that may be beneficial for future research involving the use of implosive techniques in counselor training.
The Hypotheses

The following hypotheses were tested:

I. The students in Group I, after participating in group implosive therapy, will show a significantly greater adjusted-mean score (Post-test I) on the Counselor Evaluation Rating Scale than the students in Group II who have not participated in group implosive therapy prior to Post-test I.

II. The students in Group I, after participating in group implosive therapy, will show a significantly lower adjusted-mean score (Post-test I) obtained on the Social Avoidance and Distress Scale than the students in Group II who have not participated in group implosive therapy prior to Post-test I.

III. The students in Group I, after participating in group implosive therapy, will show a significantly higher adjusted-mean score (Post-test I) on the Capacity for Intimate Contact Scale of the Personal Orientation Inventory than the students in Group II who have not participated in group implosive therapy prior to Post-test I.

IV. At the conclusion of the study, after Group II has participated in group implosive therapy, there will be no significant differences between the adjusted-mean scores (Post-test II) of the two groups on the Counselor Evaluation Rating Scale.

V. At the conclusion of the study, after Group II has participated in group implosive therapy, there will be no
significant differences between the adjusted-mean scores (Post-test II) of the two groups obtained on the Social Avoidance and Distress Scale.

VI. At the conclusion of the study, after Group II has participated in group implosive therapy, there will be no significant difference between the adjusted-mean scores (Post-test II) of the two groups obtained in the Capacity for Intimate Contact Scale of the Personal Orientation Inventory.

The Method

The subjects were twenty counselor trainees from two practicum classes of the master's level program in counseling at North Texas State University during the fall semester of 1974. All twenty subjects volunteered to participate in a research project concerned with counseling effectiveness. Practical limitations dictated the use of an intact-group design.

All subjects were administered the Social Avoidance and Distress Scale and the Personal Orientation Inventory immediately prior to their first client contact. These same scales were administered again prior to the third and fifth client contacts to collect the Post-test I and Post-test II data.

Three raters, two post-internship doctoral candidates in the counseling program at North Texas State University and one master's level psychometrist, were used to evaluate video-tape segments of counseling sessions. Each rater used
the Counselor Evaluation Rating Scale to evaluate two five-minute counseling segments taken from each subject's first, third, and fifth counseling sessions. Each rater's two scores for each session were averaged together to obtain a single score, and then the three ratings of the three judges were averaged again to obtain one composite mean for each subject on each session. These ratings of the first, third, and fifth sessions were part of the Pre-test, Post-test I, and Post-test II data, respectively.

One week after collection of the pre-test data, one group (Group I) was selected by the flip of a coin, to participate in the treatment procedure and the other group (Group II) became the control group which did not receive any treatment. The treatment procedures consisted of a ten-minute rationale of implosive therapy followed by eighty minutes of implosive therapy. The implosive procedures were directed at the elimination or reduction of anxiety related to intimacy in close interpersonal interaction. The subjects were instructed to imagine four sets of anxiety-eliciting scenes related to (1) the client's emotional tone of voice which contained undulations denoting surprise, warmth, happiness, and love, (2) the client's facial expressions denoting care, concern, approval, attraction, and love, (3) extended eye contact with the client, and (4) posture and proximity, with the client very close and leaning towards the counselor at a forty-five degree angle. Each scene was presented until all physical signs of anxiety had abated.
Post-test I data were collected from all subjects one week after the participation of Group I in the implosive procedures. Post-test I data were collected with the same instruments used in the pre-test. One week after the collection of Post-test I data, Group II received implosive therapy which was identical to that received by Group I. At this time Group I did not receive any treatment. One week after Group II received implosive therapy, all subjects were administered the same instruments used in the Pre-test and Post-test I.

The reliability of the raters on the Counselor Evaluation Rating Scale was determined by using the Spearman rank-order correlation formula. Post-test I and Post-test II adjusted-mean differences between the two groups on the scores obtained on the Social Avoidance and Distress Scale, the Capacity for Intimate Contact Scale of the Personal Orientation Inventory, and the Counselor Evaluation Rating Scale were analyzed by using the analysis of covariance. A significance level of .10 was required for the rejection of the null hypothesis.

Results

The hypothesis which predicted that the students in Group I, after participating in group implosive therapy, would show a significantly greater adjusted-mean score (Post-test I) on the Counselor Evaluation Rating Scale than the
students in Group II who had not participated in group implosive therapy prior to Post-test I, was not accepted.

The hypothesis which predicted that the students in Group I, after participating in group implosive therapy, would show a significantly lower adjusted-mean score (Post-test I) obtained on the **Social Avoidance and Distress Scale** than the students in Group II who had not participated in group implosive therapy prior to Post-test I, was not accepted.

The hypothesis which predicted that the students in Group I, after participating in group implosive therapy, would show a significantly higher adjusted-mean score (Post-test I) on the **Capacity for Intimate Contact Scale of the Personal Orientation Inventory** than the students in Group II who had not participated in group implosive therapy prior to Post-test I, was not accepted.

The hypothesis which predicted that, at the conclusion of the study, after Group II has participated in group implosive therapy, there would be no significant difference between the adjusted-mean scores (Post-test II) of the two groups on the **Counselor Evaluation Rating Scale**, was accepted. However, no conclusion can be drawn concerning this hypothesis without prior acceptance of Hypothesis I.

The hypothesis which predicted that at the conclusion of the study, after Group II had participated in group implosive therapy, there would be no significant difference
between the adjusted-mean scores (Post-test II) of the two groups obtained on the Social Avoidance and Distress Scale, was accepted. However, no conclusions can be drawn from this hypothesis without the prior acceptance of Hypothesis II.

The hypothesis which predicted that at the conclusion of the study, after Group II has participated in group implosive therapy, there would be no significant difference between the adjusted-mean scores (Post-test II) of the two groups obtained on the Capacity for Intimate Contact Scale of the Personal Orientation Inventory, was accepted. However no conclusions can be drawn from this hypothesis without the prior acceptance of Hypothesis III.

The results of the present study failed to support the results obtained by Fry (8) using systematic desensitization and those of Rihani (13) utilizing implosion. The use of implosive therapy as a training procedure for increasing the counseling effectiveness of counselor trainees by decreasing anxiety related to intimacy of interpersonal interaction was not effective in the present study. Superficially these results tend to support the findings of Hodgson and Rachman (9), Fazio (7), and Fazio (6) which failed to demonstrate the effectiveness of implosion. The data from the present study do not support the findings of the well-designed crossover studies of Boulougouris, Marks, and Marset (2), Boudewyns and Wilson (1), and Crowe, Marks, Atras,
and Leitenberg (3) which demonstrated the effectiveness of implosive therapy.

The primary question is whether the procedures utilized in the present study can be considered to be implosive therapy. Analysis indicates that the parameters in the present study were consistent with previous research. In the present study each scene was presented for approximately twenty minutes which is consistent with the time used in other studies. Wolpin and Raines (15) used an average of ten minutes for therapy, Dawley (4) used fifteen minutes, and DeMoore (5) used twenty minutes. Also, the eighty-minute total duration of treatment in this study is comparable to the forty minutes used by Kirchner and Hogan (12) and Hogan and Kirchner (11), the sixty minutes used by Hogan and Kirchner (10), and the eighty minutes used by DeMoore (5).

The four scenes used in the present study did successfully elicit anxiety in three subjects in each group. It was concluded that the scenes did have the capacity to generate some anxiety in some of the subjects. Other subjects in the two groups may not have experienced significant amounts of anxiety because fatigue hampered their ability to concentrate on visualized scenes for extended periods of time. Dawley (4) concluded that for successful implosion there must be an adequate visualization of the stimuli presented, along with the experiencing of the elicited anxiety.
Another reason why the implosive procedures did not produce any significant results may be that there was very little anxiety related to close interpersonal interaction to begin with. Fry's (8) assumption that counselors are as likely as client to have developed a fear of close interpersonal interaction may not be true with respect to the students used in this study. There is some evidence to support this line of thought. Watson and Friend (14) stated that on the population of university students used to obtain normative data on the Social Avoidance and Distress Scale the mean score for males was 11.20, and the mean score for females was 8.24. The Pre-test mean scores of 4.64 for Group I and 2.89 for Group II were far below those of the normative population, suggesting that both Group I and Group II were quite low on social avoidance and distress at the beginning of the study.

Almost all of the counselor trainees in the two groups expressed considerable apprehension and anxiety related to the practicum experience. However, these apparently were not fears related to interacting intimately with another individual, but they may have been directed at such concrete things as not knowing what to say to the client, not knowing how to react to specific client behaviors, and fear of being evaluated by the professor. Some students stated that their anxieties were of sufficient intensity to impede counseling.
Conclusions

The results of this study suggest the following conclusions:

1. Group implosive therapy, as utilized in this study, is not effective in reducing conditioned fear of close interpersonal interaction.

2. The underlying assumptions of the present study that the counselor trainees are as likely as clients to have developed a fear of close interpersonal interaction is seriously questioned.

3. Group implosive therapy, as applied in this study, is not effective in increasing the counseling effectiveness of counselor trainees.

Recommendations

On the basis of the findings of this investigation, the following recommendations are offered.

1. Replication of the present study with a focusing on the specific fear-producing aspects of the practicum setting that appear common to most students. These aspects would include fear of being evaluated, fear of not knowing what to say, and fear of not knowing what to do in certain counseling situations.

2. An attempt should be made to present the implosive procedures early in the day in order to minimize fatigue effects that could interfere with sustained scene imagination.
3. Consideration should be given to beginning the implosive procedures during the first practicum meeting and providing the students with several sessions prior to their first client contact. This step might help the counselor trainee to experience greater freedom from anxiety during the first client contact.

4. Future research in the application of implosive therapy as a counselor-training procedure might explore the possibility of augmenting the effects of implosion through the use of flooding by specifically prepared films or video tapes of difficult counseling sessions.

5. Psychophysiological measuring instruments such as the Galvanic Skin Response Apparatus and Cardiotachometer may be useful in detecting the onset and extinction of anxiety. Consideration should be given to their use in future implosion research.
CHAPTER BIBLIOGRAPHY


APPENDICES
## APPENDIX A

### Counselor Evaluation Rating Scale

- **Counselor name**

Please evaluate counseling performance according to the statements below. Mark each statement in the left hand blank according to how strongly you agree or disagree. Write in +3, +2, +1, or -1, -2, or -3, to represent the following:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>+3</td>
<td>I strongly agree</td>
</tr>
<tr>
<td>+2</td>
<td>I agree</td>
</tr>
<tr>
<td>+1</td>
<td>I slightly agree</td>
</tr>
<tr>
<td>-1</td>
<td>I slightly disagree</td>
</tr>
<tr>
<td>-2</td>
<td>I disagree</td>
</tr>
<tr>
<td>-3</td>
<td>I strongly disagree</td>
</tr>
<tr>
<td>0</td>
<td>Uncertain</td>
</tr>
</tbody>
</table>

1. Demonstrates an interest in client's problems.
2. Tends to approach clients in a mechanical, perfunctory manner.
3. Tends to talk more than client during counseling.
4. Is sensitive to dynamics of self in counseling relationships.
5. Is genuinely relaxed and comfortable in the counseling sessions.
6. Is aware of both content and feeling in counseling session.
7. Tends to be rigid in counseling behavior.
8. Lectures and moralizes in counseling.
9. Can be spontaneous in counseling, yet behavior is relevant.
10. Lacks self-confidence in establishing counseling relationships.
11. Can express thoughts and feelings clearly in counseling.
12. Verbal behavior in counseling is appropriately flexible and varied according to the situation.
13. Applies a consistent rationale of human behavior to counseling.

106
1. I feel relaxed even in unfamiliar social situations.  
2. I try to avoid situations which force me to be very sociable.  
3. It is easy for me to relax when I am with strangers.  
4. I have no particular desire to avoid people.  
5. I often find social occasions upsetting.  
6. I usually feel calm and comfortable at social occasions.  
7. I am usually at ease when talking to someone of the opposite sex.  
8. I try to avoid talking to people unless I know them well.  
9. If the chance comes to meet new people, I often take it.  
10. I often feel nervous or tense in casual get-togethers in which both sexes are present.  
11. I am usually nervous with people unless I know them well.  
12. I usually feel relaxed when I am with a group of people.  
13. I often want to get away from people.  
14. I usually feel uncomfortable when I am in a group of people I don't know.  
15. I usually feel relaxed when I meet someone for the first time.  
16. Being introduced to people makes me tense and nervous.  
17. Even though a room is full of strangers, I may enter it anyway.  
18. I would avoid walking up and joining a large group of people.  
19. When my superiors want to talk with me, I talk willingly.  
20. I often feel on edge when I am with a group of people.  
21. I tend to withdraw from people.  
22. I don't mind talking to people at parties or social gatherings.  
23. I am seldom at ease in a large group of people.  
24. I often think up excuses in order to avoid social engagements.  
25. I sometimes take the responsibility for introducing people to each other.  
26. I try to avoid formal social occasions.  
27. I usually go to whatever social engagements I have.  
28. I find it easy to relax with other people.
APPENDIX B

PRE-TEST DATA

Group I

<table>
<thead>
<tr>
<th>Subject</th>
<th>POI-C*</th>
<th>SAD**</th>
<th>Rater I</th>
<th>Rater II</th>
<th>Rater III</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>24</td>
<td>9</td>
<td>47.0</td>
<td>43.5</td>
<td>58.0</td>
<td>49.5</td>
</tr>
<tr>
<td>2</td>
<td>17</td>
<td>1</td>
<td>56.0</td>
<td>53.0</td>
<td>62.0</td>
<td>57.0</td>
</tr>
<tr>
<td>3</td>
<td>12</td>
<td>1</td>
<td>48.5</td>
<td>44.0</td>
<td>47.0</td>
<td>46.5</td>
</tr>
<tr>
<td>4</td>
<td>21</td>
<td>1</td>
<td>50.5</td>
<td>53.0</td>
<td>53.0</td>
<td>52.17</td>
</tr>
<tr>
<td>5</td>
<td>18</td>
<td>2</td>
<td>53.0</td>
<td>52.0</td>
<td>55.0</td>
<td>53.33</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
<td>3</td>
<td>36.5</td>
<td>42.0</td>
<td>41.0</td>
<td>39.83</td>
</tr>
<tr>
<td>7</td>
<td>19</td>
<td>5</td>
<td>44.0</td>
<td>40.0</td>
<td>47.5</td>
<td>43.83</td>
</tr>
<tr>
<td>8</td>
<td>15</td>
<td>5</td>
<td>42.0</td>
<td>45.5</td>
<td>43.0</td>
<td>43.5</td>
</tr>
<tr>
<td>9</td>
<td>20</td>
<td>14</td>
<td>44.5</td>
<td>39.5</td>
<td>39.5</td>
<td>41.17</td>
</tr>
<tr>
<td>10</td>
<td>22</td>
<td>3</td>
<td>49.0</td>
<td>45.0</td>
<td>51.5</td>
<td>48.5</td>
</tr>
<tr>
<td>11</td>
<td>18</td>
<td>7</td>
<td>41.5</td>
<td>36.5</td>
<td>44.5</td>
<td>40.83</td>
</tr>
</tbody>
</table>

Group II

<table>
<thead>
<tr>
<th>Subject</th>
<th>POI-C*</th>
<th>SAD**</th>
<th>Rater I</th>
<th>Rater II</th>
<th>Rater III</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>19</td>
<td>2</td>
<td>46.5</td>
<td>44.0</td>
<td>43.0</td>
<td>44.5</td>
</tr>
<tr>
<td>13</td>
<td>23</td>
<td>1</td>
<td>35.0</td>
<td>37.5</td>
<td>37.5</td>
<td>36.67</td>
</tr>
<tr>
<td>14</td>
<td>21</td>
<td>7</td>
<td>36.0</td>
<td>36.0</td>
<td>38.0</td>
<td>36.67</td>
</tr>
<tr>
<td>15</td>
<td>23</td>
<td>2</td>
<td>37.5</td>
<td>41.5</td>
<td>51.5</td>
<td>40.17</td>
</tr>
<tr>
<td>16</td>
<td>12</td>
<td>1</td>
<td>38.0</td>
<td>40.0</td>
<td>41.0</td>
<td>39.67</td>
</tr>
<tr>
<td>17</td>
<td>21</td>
<td>5</td>
<td>42.5</td>
<td>49.0</td>
<td>54.5</td>
<td>48.67</td>
</tr>
<tr>
<td>18</td>
<td>20</td>
<td>2</td>
<td>37.0</td>
<td>46.5</td>
<td>51.0</td>
<td>44.83</td>
</tr>
<tr>
<td>19</td>
<td>21</td>
<td>4</td>
<td>43.0</td>
<td>42.5</td>
<td>45.5</td>
<td>43.67</td>
</tr>
<tr>
<td>20</td>
<td>14</td>
<td>2</td>
<td>46.5</td>
<td>40.5</td>
<td>47.0</td>
<td>44.67</td>
</tr>
</tbody>
</table>

*Personal Orientation Inventory

**Social Avoidance and Distress Scale

***Counselor Evaluation Rating Scale
# POST-TEST I DATA

## Group I

<table>
<thead>
<tr>
<th>Subject</th>
<th>POI-C*</th>
<th>SAD**</th>
<th>CERS***</th>
<th>CERS***</th>
<th>CERS***</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rater I</td>
<td>Rater II</td>
<td>Rater III</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>24</td>
<td>8</td>
<td>56.0</td>
<td>49.0</td>
<td>54.0</td>
<td>53.33</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>2</td>
<td>60.0</td>
<td>56.0</td>
<td>64.0</td>
<td>60.0</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>2</td>
<td>41.5</td>
<td>42.5</td>
<td>41.0</td>
<td>41.67</td>
</tr>
<tr>
<td>4</td>
<td>25</td>
<td>2</td>
<td>55.0</td>
<td>51.0</td>
<td>54.0</td>
<td>53.33</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>2</td>
<td>43.0</td>
<td>46.0</td>
<td>46.0</td>
<td>45.0</td>
</tr>
<tr>
<td>6</td>
<td>18</td>
<td>1</td>
<td>44.0</td>
<td>51.0</td>
<td>42.0</td>
<td>45.67</td>
</tr>
<tr>
<td>7</td>
<td>21</td>
<td>0</td>
<td>47.5</td>
<td>47.0</td>
<td>46.5</td>
<td>47.0</td>
</tr>
<tr>
<td>8</td>
<td>18</td>
<td>6</td>
<td>39.0</td>
<td>35.0</td>
<td>41.0</td>
<td>38.33</td>
</tr>
<tr>
<td>9</td>
<td>25</td>
<td>7</td>
<td>40.5</td>
<td>42.0</td>
<td>45.0</td>
<td>42.5</td>
</tr>
<tr>
<td>10</td>
<td>26</td>
<td>0</td>
<td>43.5</td>
<td>46.5</td>
<td>44.5</td>
<td>44.83</td>
</tr>
<tr>
<td>11</td>
<td>19</td>
<td>6</td>
<td>44.5</td>
<td>42.5</td>
<td>47.0</td>
<td>44.67</td>
</tr>
</tbody>
</table>

## Group II

<table>
<thead>
<tr>
<th>Subject</th>
<th>POI-C*</th>
<th>SAD**</th>
<th>CERS***</th>
<th>CERS***</th>
<th>CERS***</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Rater I</td>
<td>Rater II</td>
<td>Rater III</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>22</td>
<td>2</td>
<td>40.0</td>
<td>45.0</td>
<td>44.0</td>
<td>43.0</td>
</tr>
<tr>
<td>13</td>
<td>24</td>
<td>1</td>
<td>50.5</td>
<td>48.0</td>
<td>47.5</td>
<td>46.67</td>
</tr>
<tr>
<td>14</td>
<td>23</td>
<td>5</td>
<td>45.0</td>
<td>44.5</td>
<td>45.5</td>
<td>45.0</td>
</tr>
<tr>
<td>15</td>
<td>24</td>
<td>3</td>
<td>42.0</td>
<td>47.5</td>
<td>43.5</td>
<td>44.33</td>
</tr>
<tr>
<td>16</td>
<td>24</td>
<td>1</td>
<td>43.5</td>
<td>42.5</td>
<td>44.5</td>
<td>43.5</td>
</tr>
<tr>
<td>17</td>
<td>21</td>
<td>4</td>
<td>42.5</td>
<td>47.0</td>
<td>45.0</td>
<td>44.83</td>
</tr>
<tr>
<td>18</td>
<td>20</td>
<td>1</td>
<td>47.0</td>
<td>48.0</td>
<td>51.5</td>
<td>48.83</td>
</tr>
<tr>
<td>19</td>
<td>22</td>
<td>3</td>
<td>50.5</td>
<td>47.5</td>
<td>48.5</td>
<td>48.83</td>
</tr>
<tr>
<td>20</td>
<td>15</td>
<td>1</td>
<td>47.5</td>
<td>46.5</td>
<td>47.0</td>
<td>47.0</td>
</tr>
</tbody>
</table>

*Personal Orientation Inventory

**Social Avoidance and Distress Scale

***Counselor Evaluation Rating Scale
### POST-TEST II DATA

#### Group I

<table>
<thead>
<tr>
<th>Subject</th>
<th>POI-C*</th>
<th>SAD**</th>
<th>Rater I</th>
<th>Rater II</th>
<th>Rater III</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>23</td>
<td>8</td>
<td>56.0</td>
<td>50.0</td>
<td>57.0</td>
<td>54.33</td>
</tr>
<tr>
<td>2</td>
<td>21</td>
<td>1</td>
<td>62.0</td>
<td>55.0</td>
<td>60.5</td>
<td>59.17</td>
</tr>
<tr>
<td>3</td>
<td>18</td>
<td>1</td>
<td>54.0</td>
<td>59.0</td>
<td>53.0</td>
<td>55.33</td>
</tr>
<tr>
<td>4</td>
<td>22</td>
<td>1</td>
<td>55.5</td>
<td>52.5</td>
<td>54.0</td>
<td>54.0</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>1</td>
<td>53.0</td>
<td>47.0</td>
<td>56.5</td>
<td>52.17</td>
</tr>
<tr>
<td>6</td>
<td>22</td>
<td>1</td>
<td>50.0</td>
<td>51.0</td>
<td>42.0</td>
<td>47.67</td>
</tr>
<tr>
<td>7</td>
<td>21</td>
<td>1</td>
<td>52.5</td>
<td>50.5</td>
<td>47.5</td>
<td>50.17</td>
</tr>
<tr>
<td>8</td>
<td>18</td>
<td>6</td>
<td>43.5</td>
<td>40.0</td>
<td>44.0</td>
<td>42.5</td>
</tr>
<tr>
<td>9</td>
<td>22</td>
<td>5</td>
<td>47.0</td>
<td>49.0</td>
<td>52.0</td>
<td>49.33</td>
</tr>
<tr>
<td>10</td>
<td>27</td>
<td>1</td>
<td>52.5</td>
<td>47.5</td>
<td>52.5</td>
<td>58.83</td>
</tr>
<tr>
<td>11</td>
<td>18</td>
<td>7</td>
<td>49.5</td>
<td>46.5</td>
<td>45.0</td>
<td>45.0</td>
</tr>
</tbody>
</table>

#### Group II

<table>
<thead>
<tr>
<th></th>
<th>POI-C*</th>
<th>SAD**</th>
<th>Rater I</th>
<th>Rater II</th>
<th>Rater III</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>12</td>
<td>23</td>
<td>1</td>
<td>43.0</td>
<td>46.0</td>
<td>47.0</td>
<td>45.33</td>
</tr>
<tr>
<td>13</td>
<td>25</td>
<td>1</td>
<td>41.0</td>
<td>43.5</td>
<td>44.0</td>
<td>42.83</td>
</tr>
<tr>
<td>14</td>
<td>20</td>
<td>4</td>
<td>42.0</td>
<td>39.5</td>
<td>40.5</td>
<td>40.66</td>
</tr>
<tr>
<td>15</td>
<td>24</td>
<td>2</td>
<td>49.0</td>
<td>46.5</td>
<td>48.0</td>
<td>47.83</td>
</tr>
<tr>
<td>16</td>
<td>24</td>
<td>1</td>
<td>42.5</td>
<td>42.5</td>
<td>44.5</td>
<td>43.17</td>
</tr>
<tr>
<td>17</td>
<td>20</td>
<td>2</td>
<td>46.5</td>
<td>45.5</td>
<td>50.5</td>
<td>47.5</td>
</tr>
<tr>
<td>18</td>
<td>22</td>
<td>2</td>
<td>48.5</td>
<td>47.5</td>
<td>53.5</td>
<td>49.83</td>
</tr>
<tr>
<td>19</td>
<td>22</td>
<td>4</td>
<td>46.0</td>
<td>49.0</td>
<td>47.0</td>
<td>47.33</td>
</tr>
<tr>
<td>20</td>
<td>23</td>
<td>1</td>
<td>55.0</td>
<td>54.0</td>
<td>53.0</td>
<td>54.0</td>
</tr>
</tbody>
</table>

*Personal Orientation Inventory

**Social Avoidance and Distress Scale

***Counselor Evaluation Rating Scale
Dr. David Watson  
Psychology Department  
University of Hawaii  
Honolulu, Hawaii 96822

Dear Dr. Watson,

I am a graduate student at North Texas State University, and my doctoral dissertation is in the area of improving counseling effectiveness through the use of implosive techniques. Part of my work calls for the assessment of fear of close interpersonal interaction and I thought that your Social Avoidance and Distress Scale could prove to be useful here.

However, I do have some questions regarding the scale that you may be in a position to answer.

1. In scoring the scale, does the individual earn a point each time he agrees with the item or each time he disagrees with the key?

2. Has there been any further research aimed at further validating this scale?

3. Do you know of any other research studies that have utilized this scale?

Your assistance in this matter will be greatly appreciated. A self-addressed stamped envelope is enclosed for your reply.

Sincerely,

Thomas S. Tanski
Dr. Robert D. Myrick  
Associate Professor  
Department of Counselor Education  
University of Florida  
Gainesville, Florida 32601

Dear Dr. Myrick

I am a graduate student at North Texas State University developing a doctoral dissertation in the area of improving counselor effectiveness through the use of implosive techniques.

While looking for a tool to assess counselor effectiveness, I came across your article on the Counselor Evaluation Rating Scale in Counselor Education and Supervision (summer, 1971). The scale appears to fit my needs, particularly the section on counseling effectiveness.

I would like to ask you and Dr. Kelly for permission to use the scale in an abbreviated form comprised only of those items pertaining to actual counseling effectiveness.

A self addressed envelope is enclosed for your convenience. Thank you for your consideration.

Sincerely,

Thomas S. Tanski
August 8, 1974

Mr. Thomas S. Tanski
1607 West Oak, Apt. 121
Denton, Texas 76201

Dear Mr. Tanski:

Thank you for the letter. I appreciate the courtesy of asking permission to use the CERS in your study, although it is public information now. Please feel free to use it in whatever way that you wish.

Good luck in your work.

Sincerely,

Robert D. Myrick
Professor

RDM/gc
BIBLIOGRAPHY

Books


Rogers, C. R., Client-Centered Therapy, Boston, Houghton Mifflin, 1951.


**Articles**


, "The Effects of Psychotherapy: Negative Results Revisited," *Journal of Counseling Psychology*, X (Fall, 1963), 244-250.


___ and D. J. Levis, "Implosive Therapy--A Behavior Therapy?", Behavior Research and Therapy, VI (February, 1968), 31-36.


Unpublished Materials


