THE EFFECT OF GROUP ASSERTIVENESS TRAINING ON SELECTED COGNITIVE VARIABLES

DISSERTATION

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By

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This study was conducted to investigate whether cognitive variables (as measured by six self-report inventories) covaried with changes in behavior following group assertiveness training as postulated by several assertiveness training theorists and practitioners.

Several theorists and practitioners have stated that exposure to assertiveness training effects positive changes in various aspects of self-concept. However, only two studies have been reported in the literature which have investigated these contentions.

The population for this study consisted of thirty-two college students who volunteered for participation in response to advertisements for free assertiveness training. These subjects had not had any previous exposure to formal assertiveness training procedures. The subjects were randomly assigned to either the experimental group or the placebo discussion group.

Pretests and posttests of the Rathus Assertiveness Schedule, the Taylor Manifest Anxiety Scale, the Internal-External Locus of Control Scale, the Expressed Acceptance of Self Scale, the Tennessee Self-Concept Scale, and the Adjective
Check List were administered to both groups. A behavioral measure, the Behavioral Assertiveness Assessment Procedure, was administered to both groups during the eighth training session.

Data obtained from the pretests and posttests on all self-report measures were treated statistically for significance of difference between means, using analysis of covariance. Data obtained from the posttreatment behavioral ratings were treated statistically for significance of difference between means using a one-tailed t-test for independent samples. A significance level of .05 was required for rejection of the null hypothesis for all computations.

Statistical analysis of the data did not support any of the hypotheses. No significant differences were found between the groups on any of the self-report measures or the behavioral ratings, although experimental group subjects consistently scored higher (in the predicted direction) on all self-report measures or were rated higher than placebo group subjects. The hypotheses that experimental group subjects would exhibit significantly higher levels of self-reported assertiveness, self-acceptance, self-esteem, and self-confidence than placebo group subjects were rejected. The hypothesis that the experimental group would exhibit a significantly greater shift toward self-reported internal locus of control than the placebo group was rejected. The hypothesis that the experimental group
would exhibit significantly larger decreases in levels of self-reported anxiety than the placebo group was also rejected. Furthermore, no support was found for the hypothesis that experimental group subjects would exhibit significantly higher levels of objectively-rated assertive behavior than placebo group subjects. An examination of the data revealed substantial improvements on each of the six self-report measures for subjects in both groups. These data were treated statistically with a one-tailed $t$-test for correlated means. The $t$-test data indicated that both groups improved significantly on all cognitive variable measures from pretest to posttest.

Recommendations made were that in future research a no-treatment control group should be added to the basic design of this study; further research might also include an attention control group; and further research should include an unobtrusive pretest behavioral measure which samples a wider range of assertive behaviors than the Behavioral Assertiveness Assessment Procedure.
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CHAPTER I

INTRODUCTION

Assertive behavior may be generally defined as an individual's standing up for his rights without violating the rights of others in the process. Assertiveness training involves training in interaction skills and focuses on the person's rights to request what he desires and to refuse what he does not. The training typically consists of the development of specific individual goals, the rehearsal of appropriate behavior, and the reduction of anxiety in request and refusal situations (15). The popularity of assertiveness training as a therapeutic technique for dealing with inadequate interpersonal and social skills has increased rapidly in the past decade.

Andrew Salter is generally recognized as the originator of the concept of assertiveness training, although initially (1949) he used the term "excitatory behavior" (36). Wolpe (42) introduced the term "assertive training" into the behavior therapy literature in 1958. The method then was being used primarily as an adjunct to counseling and therapy on an individual basis. In 1970 Alberti and Emmons published their book Your Perfect Right: A Guide to Assertive Behavior (1), which sparked the already expanding appeal of assertiveness training.
both to the public and professionals. Alberti and Emmons presented a theoretical rationale for the usefulness of assertiveness training, provided the reader with a self-help program for developing assertive behavior, and gave professional guidelines to follow in using the approach both on an individual and group basis (1).

In the five years following the publication of Your Perfect Right, a virtual plethora of assertiveness training books and manuals has been published and popularized as a number of authors have jumped on the assertiveness "bandwagon." In 1974 Alberti and Emmons published a new edition of Your Perfect Right (2). Several other books soon followed, including Don't Say Yes When You Want To Say No (13); When I Say No, I Feel Guilty (38); The Assertive Woman (31); The New Assertive Woman (8); Assertive Training for Women (28); I Can If I Want To (23); and Stand Up, Speak Out, Talk Back! (3). As is obvious from the foregoing list, assertiveness training was given further impetus by the women's movement. In 1972 Jakubowski-Spector released an assertiveness training film for women (20) and has since then published a handbook of assertiveness training procedures (21). Further evidence of the appeal of assertiveness training to a large number of professionals is a bi-monthly newsletter, Assert: The Newsletter of Assertive Behavior (5), first published in 1975. Thus, there has been a phenomenal growth in the assertiveness
training literature from meager beginnings as a chapter in Wolpe and Lazarus' 1966 book (43) to its present state.

Alberti and Emmons base their theoretical position on the concept of inherent human rights and individual worth. Assertiveness, according to them, essentially means recognizing and standing up for one's rights (1). They define assertiveness as

behavior which enables a person to act in his own best interests, to stand up for himself without undue anxiety, to express his honest feelings comfortably, or to exercise his own rights without denying the rights of others . . . (1, p. 2).

They further state that as a person becomes more assertive in interpersonal relationships, he not only reduces his former anxiety, but also increases his sense of worth as a person (3, p. 33).

The application of assertiveness training to the treatment of clinical problems originated as a means of assisting passive, inhibited individuals to develop expressive behavior (11). Since the inception of assertiveness training, it has been expanded as an effective treatment method to include a myriad of problem behaviors. Specifically, assertiveness training has been applied to such areas as sexual deviation (9, 39), depression (32), interpersonal functioning of schizophrenics (41), and marital conflict (4, 12). It also has been widely used on "normal" populations, e.g., unassertive college students (16, 18, 25, 26, 33). Recently assertiveness
training procedures have been used successfully with paraprofessionals for increasing counselor effectiveness (15).

Although several well-controlled studies attest to the efficacy of various assertiveness training procedures (4, 9, 12, 15, 16, 18, 25, 26, 32, 33, 37, 39, 41) in terms of increasing assertive behavior, little research has been done on the effects of assertiveness training on cognitive variables.

Statement of the Problem

The problem of this research was to determine the effects of group assertiveness training on selected cognitive variables including level of subjectively experienced anxiety, internal-external locus of control, self-esteem, self-acceptance, self-confidence, and self-reported assertiveness.

Purpose of the Study

The purpose of this study was to determine whether certain cognitive and attitudinal changes would covary with changes in behavior as stated in the assertiveness training literature. The investigation of these cognitive and attitudinal changes served to respond to the criticism leveled by traditional therapists that behaviorally-oriented approaches, such as assertiveness training, often ignore the fact that changes in behavior are pointless if the person still feels unhappy, worthless, upset, and miserable (30).
Hypotheses

This study tested the following set of hypotheses:

1. Following the training period, subjects in the experimental group will exhibit significantly higher levels of assertive behavior as measured by the Behavioral Assertiveness Assessment Procedure than subjects in the placebo group.

2. Following the training period, subjects in the experimental group will exhibit a significantly greater gain in self-reported assertiveness as measured by the Rathus Assertiveness Schedule than subjects in the placebo group.

3. Following the training period, subjects in the experimental group will exhibit significantly larger decreases in self-reported levels of anxiety as measured by the Taylor Manifest Anxiety Scale than subjects in the placebo group.

4. Following the training period, subjects in the experimental group will exhibit a significantly greater shift toward self-reported internal locus of control as measured by the Internal-External Locus of Control Scale than subjects in the placebo group.

5. Following the training period, the subjects in the experimental group will exhibit significantly higher levels of self-acceptance as measured by the Expressed Acceptance of Self Scale than subjects in the placebo group.
6. Following the training period, subjects in the experimental group will exhibit significantly higher gains in self-esteem as measured by the **Tennessee Self-Concept Scale** than subjects in the placebo group.

7. Following the training period, subjects in the experimental group will exhibit significantly higher gains in self-confidence as measured by the **Adjective Check List** than subjects in the placebo group.

**Definition of Terms**

1. **Assertive behavior**, as used in this study, refers to interpersonal behaviors which may be categorized into four distinct and specific response patterns: the ability to refuse a request; the ability to make requests or ask for favors; the ability to express both positive and negative feelings; and the ability to initiate, maintain, and terminate general conversations (22).

2. **Assertiveness training**, as used in this study, is defined as an approach to teaching expressive behaviors utilizing the following empirically validated components: behavioral rehearsal, covert rehearsal, coaching (25, 26), and modeling plus instructions (10).

3. **Anxiety**, as used in this study, is defined as self-reported internal anxiety or emotionality (40).
4. **Internal-external locus of control**, as used in this study, refers to self-reported generalized expectancy for internal versus external control of reinforcement (35).

5. **Self-acceptance**, as used in this study, is defined as a person's not attempting to "deny or distort any feelings, motives, limitations, abilities, or favorable qualities which he sees in himself, but rather accepts [accepting] all without self-condemnation" (7, p. 778-779).

6. **Self-esteem**, as used in this study, refers to liking and having respect for oneself which has some realistic basis (34, p. 45).

7. **Self-confidence**, as used in this study, is defined as an evaluation of self as being poised and self-assured (17, p. 8).

8. **Self-concept**, as used in this study, refers to a person's disposition toward positive and negative self-evaluation of various aspects of his behavior (6).

9. **Cognitive variables**, as used in this study, is defined as assumptions, perceptions, and attributions that a person has about himself and his environment (27, p. 358).

10. **Experimental group**, as used in this study, designated those subjects who received assertiveness training as defined above.

11. **Placebo group**, as used in this study, designated those subjects who participated in group discussions and
activities centered around the topic of assertiveness with no behavioral rehearsal (overt or covert) or modeling taking place.

Background and Significance

Assertiveness training has been applied to a group of widely divergent problem behaviors with clinical populations (4, 9, 12, 32, 39, 41) as well as to "unassertive" persons from nonclinical populations (18, 25, 26, 33). Although the efficacy of assertiveness training has been repeatedly demonstrated in increasing levels and frequency of assertive behavior, little research has been done to investigate changes in attitudinal and cognitive variables. These later changes form an integral part of the theoretical basis of assertiveness training.

Wolpe's original formulation of assertive training was based on his principle of reciprocal inhibition which states that "if a response inhibitory of anxiety can be made to occur in the presence of anxiety-evoking stimuli it will weaken the bond between these stimuli and the anxiety" (43, p. 12). He conceptualized non-assertive behavior as learned maladaptive anxiety-response habits in interpersonal situations. These anxiety responses inhibit the expression of appropriate feelings and the performance of adaptive behaviors. Each time an assertive act is performed the previously learned anxiety
response is reciprocally inhibited because the anxiety response is incompatible with an assertive response.

McFall and Marston (26) found no evidence of treatment effects on non-assertive college students' anxiety as measured by a short form of the Taylor Manifest Anxiety Scale (TMAS). They state that subjects simply learned to behave more assertively without indiscriminantly reporting a general reduction in problem behaviors. Lomont, Gilner, Spector, and Skinner (24) found no significant differences on Minnesota Multiphasic Personality Inventory scores of a group of psychiatric inpatients exposed to assertive training. Galassi, Galassi, and Litz (16) found a significant reduction of anxiety experienced by non-assertive college females following assertive training as measured by Wolpe's Subjective Units of Disturbance Scale. Percell, Berwick, and Beigel (30) reported a significant positive relationship between the Lawrence Interpersonal Behavior Test, a measure of assertiveness, and the TMAS for female psychiatric patients. No such correlation was found for males. In a later study, Percell (29) found that following assertive training psychiatric patients showed significant decreases in TMAS scores as well as increased assertiveness compared to control subjects. Thus, no consistent support for Wolpe's original contention that learning to behave assertively reduces anxiety has been demonstrated in the research literature.
Alberti and Emmons (3, p. 13) state that one of the purposes of assertiveness training is to help reduce the sense of "personal powerlessness" experienced by many people in society today. They contend that our highly technological society may be fostering feelings of lack of control over one's destiny as well as a reduced sense of personal value. Assertiveness training enables a person to stand up for himself and to take more initiative, thereby reducing anxiety or tenseness in interpersonal situations and increasing one's sense of self-worth. They describe an assertive individual as being in charge of himself, feeling confident and capable, and as being spontaneous in the expression of feelings and emotions. Alberti and Emmons emphasize that being assertive means choosing how one will act and behaving in a self-fulfilling way rather than behaving according to others' standards (3, p. 27). Implicit in these statements is the assumption that as a person develops assertive behavior he becomes more accepting of self and feels more in control of his own behavior in contrast to feeling controlled by outer forces.

Alberti and Emmons further state that changes in assertive behavior lead to changes in attitudes toward oneself in the following sequence: as a person behaves more adequately assertive this behavior gains more positive responses from others in his environment; this positive feedback leads to an
enhanced evaluation of self-worth and more positive feelings about oneself (3, pp. 75-76).

Osborn and Harris (28) report that they have found rapid positive changes in self-image and self-confidence as a consequence of assertiveness training (as measured by the Rosenberg Self-Esteem Scale). They further contend that these changes appear to follow rather than precede changes in behavior (28, pp. 50-51). However, they provide no research references to support these contentions.

In spite of these claims, little research has been reported on the effects of assertiveness training on self-concept or attitudes toward self which lend empirical support to Alberti and Emmons' or Osborn and Harris' statements. Percell (29), using assertiveness training with psychiatric patients, found an increase in self-acceptance, as measured by the Expressed Acceptance of Self Scale, following training. A correlation was noted between increased self-acceptance and a behavioral measure of assertiveness. In another study with psychiatric patients, Percell et al. (30) found a similar positive relationship between increased assertiveness and the self-acceptance scale of the California Psychological Inventory.

In summary, the assertiveness training research literature has failed to provide consistent support for hypothesized changes in certain cognitive variables. Conflicting data have been reported concerning changes in measures of subjectively experienced anxiety following training (16, 26, 29, 30).
Although very little research has been reported on the effects of assertiveness training on self-concept, the data available lend support to the contention made by several authors that increases in levels of assertive behavior are accompanied by positive change in attitudes toward self (29, 30).

Limitations of the Study

The study was limited to North Texas State University students who volunteered to participate in the study during the summer semesters of 1976, and cannot be generalized to other populations. Experimental evaluation of the assertiveness training procedure may have been limited by the training stimuli and method of assessment in that assertive behavior has not been demonstrated to be widely generalizable to diverse idiosyncratic interpersonal situations (19).

Basic Assumptions

It was assumed that the instruments used in this study were sufficiently valid and reliable for the purpose of the study. It was assumed that subjects responded honestly to the various self-report measures. It was further assumed that the subjects in the experimental group did not discuss their experiences with subjects in the placebo group. It was assumed that no extraneous variables unrelated to the nature of the study affected the dependent variables in any systematic way.
CHAPTER BIBLIOGRAPHY


CHAPTER II

REVIEW OF THE LITERATURE

In a recent review of the literature, Cotler and Guerra (19) state that over the past fifteen years assertiveness training has received relatively little attention in comparison to other behavioral procedures. This situation is rapidly changing. Morrow (91) reported only fifty-three references on assertiveness training between 1950 and 1969. Shoemaker and Paulson (120) found sixty-two references in the literature, fifty-one of which had been published since 1965. Jacobs (60), in a critical review paper, cited thirty-one studies on assertiveness training reported after 1969. Cotler (18) points out that merely tabulating the number of articles listed under the general term assertiveness training may be misleading because many of the component training procedures, such as modeling, relaxation training, behavior rehearsal, and systematic desensitization, have been researched separately. In any event, these reviews reflect the growing popularity of assertiveness training as a behavior change modality.

The review of literature relevant to the present investigation is presented in six sections: (1) History and Development of Assertiveness Training, (2) Component Techniques

History and Development of Assertiveness Training

One of the earliest studies reported in the literature on assertiveness training is a study by Chittenden (15), published in 1942. In this article, the author distinguishes among three kinds of behavior in children: domination, cooperation, and non-assertion. Chittenden's classification of interpersonal behavior into these three categories serves as an early forerunner of Alberti and Emmons' (4) later classificatory system in which behavior is categorized as being aggressive, assertive, or non-assertive. Chittenden's study demonstrated the efficacy of symbolic modeling as a method for overcoming behavioral deficits. Excessively domineering and hyperaggressive children showed a decrease in domination as well as an increase in cooperativeness following a symbolic modeling procedure which incorporated the use of dolls as models. A group of no-treatment aggressive children displayed no change in behavior (15).

Andrew Salter is generally recognized as the originator of assertiveness training in that many procedures used in current assertiveness training approaches can be found in his book *Conditioned Reflex Therapy* (115) first published in 1949.
He did not use the term assertive behavior, but described six "excitatory reflexes." These reflexes include "feeling talk" or saying what one feels, "facial talk" which refers to the non-verbal expression of feelings, "contradict and attack" which refers to the externalization of feeling and disagreement, "deliberate use of the word I as much as possible," "expressing agreement when you are praised," and "improvisation" or being spontaneously expressive (115, pp. 97-100). Salter stressed the importance of practice in developing these responses. His book contains fifty-seven clinical case studies which demonstrate the usefulness of applying these "excitatory reflexes" to modify such behaviors as claustrophobia, depression, inadequate social skills, sexual dysfunctions, alcohol addiction, stuttering, and various psychosomatic disorders. Salter's "excitatory reflexes" have been equated with component assertive behaviors; however, Salter has recently stated that his theory of excitatory behavior is much more global and that "assertion training is merely a wart on the pickle of excitation" (114).

Joseph Wolpe first introduced the term "assertive training" into the clinical literature in 1958 in his book Psychotherapy by Reciprocal Inhibition (132). Wolpe's rationale for the use of assertiveness training as a therapeutic procedure is his hypothesis that assertive behavior reciprocally inhibits maladaptive interpersonal anxiety responses. Thus, as a
person learns to be assertive his anxiety is inhibited and eventually eliminated.

Wolpe and Lazarus' book *Behavior Therapy Techniques* (133) published in 1966 provides a rather detailed chapter on assertiveness training rationale and techniques. Wolpe and Lazarus state that people have certain basic rights which they are fully entitled to exercise. Failure to exercise these rights may result in such symptoms as anxiety, various somatic complaints, such as asthma, migraine headaches, ulcers, and hypertension, and even pathological changes in predisposed organs. The authors also describe in detail various components of assertiveness training, including relaxation training, the hierarchial presentation of stimulus situations, use of successive approximation techniques, behavioral rehearsal, audio feedback, modeling, and homework assignments. The authors point out that the interpersonal anxiety non-assertive persons experience typically is limited to specific situations or the presence of specific people. They also state that an additional benefit of assertiveness training is a change in self-concept as a result of more adequate behavior (133, pp. 38-53).

The same year Lazarus (73) reported what he claims is the first objective study of behavioral rehearsal. Behavioral rehearsal, according to Lazarus, is a technique in which the person practices (via role-playing, under the direct supervision of the therapist) those interpersonal situations which
are causing him dissatisfaction until he is able to behave more effectively and efficiently (75). Lazarus compared behavioral rehearsal to "direct advice and non-directive therapies" in training clients to behave more assertively. He found that behavioral rehearsal was effective with 86 per cent of his clients, while direct advice and non-directive techniques were effective with 44 per cent and 32 per cent, respectively. However, his procedures were vaguely presented. Research on behavior rehearsal as a component of assertiveness training will be discussed in greater detail in the following section.

In 1968 Lazarus (75) published an article which provides one of the first detailed descriptions of group assertiveness training. Lazarus describes the use of such procedures as audio feedback, behavioral rehearsal, direct feedback, trainer reinforcement, relaxation training, and discussions about anxiety.

Krum Boltz and Thoresen published their book Behavioral Counseling: Cases and Techniques (70) in 1969. An article in the book by Neuman (92) illustrates the use of such assertiveness training techniques as specifying target behaviors, the use of successive approximation procedures, social modeling, behavioral rehearsal, and behavior monitoring. A case study is presented which includes transcript segments from three counseling sessions in which a young college male
learns to increase heterosexual dating behavior and speak out to his father. Another article in the book (59) demonstrates the use of behavioral rehearsal and social modeling via videotape to increase the frequency of participating in classroom discussions. Geisinger (46) contributed an article dealing with a case study of a young woman who was extremely sensitive to criticism, lacked social assertiveness, and experienced undue sexual anxiety. He presents a description of the use of assertiveness training, including such procedures as behavioral rehearsal, modeling, and homework assignments.

In a fourth assertiveness training article, Varenhorst (126) presents a case study involving the use of behavioral rehearsal and trainer feedback in facilitating the development of classroom participation with a shy adolescent girl.

In 1969 Wolpe published *The Practice of Behavior Therapy* (131). He defines assertive behavior as "the proper expression of any emotion other than anxiety towards another person (131, p. 81)." He presents a chapter dealing with specific techniques of assertiveness training, and stresses the appropriateness of assertiveness training for patients with difficulty in interpersonal relationships. He provides a list of assertive, hostile, and commendatory statements for clients to practice. Included in the chapter are transcripts from four therapy sessions demonstrating Wolpe's approach to doing assertiveness training on an individual basis (131, pp. 80-94).
It was in this book that Wolpe introduced the term "behavioral rehearsal" and described it as a more appropriate label than his original "behavioristic psychodrama." In behavior rehearsal, the therapist takes the role of a person towards whom the patient has a neurotic anxiety reaction and instructs him to express his ordinarily inhibited feelings towards that person. Particular attention is given to the emotion infused into the words. The voice must be firm, and suitably modulated. The patient is made to repeat each statement again and again, being constantly corrected until the utterance is in every way satisfactory. The aim of rehearsal is, of course, to make it possible for him to express himself with his real "adversary" so that the anxiety the latter evokes may be reciprocally inhibited, and the motor assertive habit established (131, p. 68).

Behavior rehearsal is used in assertiveness training to countercondition anxiety and operantly condition overt assertive behavior. Wolpe also first described his "lifemanship" techniques in this book. Lifemanship is essentially a passive-aggressive technique designed to put the assertor in control and the recipient at a disadvantage (131, pp. 61-71). Several authors, most notably Lazarus (74, 76) and Alberti and Emmons (4), have expressed disagreement with Wolpe regarding the appropriateness of including such techniques within the purview of assertiveness training.

In 1970 Alberti and Emmons published their book *Your Perfect Right: A Guide to Assertive Behavior* (4), which has become a standard reference in the field of assertiveness training. Although the authors cite little experimental data,
the book does provide a comprehensive rationale for the use of assertiveness training. Their approach provides a humanistic, philosophical basis for the use of assertiveness training and is based on an expansion of Wolpe and Lazarus' (133) concept of basic rights. The authors define assertive behavior as "behavior which enables a person to act in his own best interests, to stand up for himself without undue anxiety, to express his honest feelings comfortably, or to exercise his own rights without denying the rights of others" (4, p. 2). Alberti and Emmons distinguish among three types of interpersonal behavior: aggressive, assertive, and non-assertive. They also state that aggression and non-assertion may be either situational or generalized. In the latter case they suggest that a qualified counselor or therapist should be consulted. The book provides a self-help procedure aimed at situationally non-assertive and aggressive behavior. Several examples of appropriate assertive behaviors in a variety of situations are provided throughout the book. The second half of the book provides the professional helper with procedures for establishing and conducting assertiveness training in groups. Advantages of group assertiveness training listed by the authors include the fact that a group represents a social environment in which a person can be accepted as he is, experiment with new behaviors, receive honest and direct feedback from multiple sources, and receive peer support. The
group setting also provides opportunities for social modeling as well as social reinforcement (4, pp. 73-74).

Assertiveness training procedures discussed by Alberti and Emmons include observation and recording of behavior, specifying target assertive behaviors, the use of non-verbal components of assertive behavior, modeling, trainer feedback, covert rehearsal (imagining oneself behaving assertively), the use of successive approximation in the development of assertive behavior, behavioral rehearsal, and social reinforcement.

The terminology used in Your Perfect Right, e.g., the use of the word "trainee" instead of patient and "facilitator" instead of therapist serves to emphasize the authors' belief that assertiveness training has wide applicability to various situational behaviors of "normal" people. In addition, it is here that the authors first contend that increasing assertiveness enhances evaluation of self-worth (4, p. 34).

In 1970 Hedquist and Weinhold (53) published a study comparing the effectiveness of group counseling approaches in increasing the frequency of verbal assertive responses with highly anxious and socially unassertive college students. Several other studies were soon reported on procedures and effects of assertiveness training in groups (12, 30, 105).

Lazarus published Behavior Therapy and Beyond (74) in 1971 in which he discusses the use of individual assertiveness
training in three case studies. He describes the technique of "rehearsal desensitization" which involves the use of a hierarchy in presenting and practicing behavioral rehearsal situations. He also discusses "training in emotional freedom" which involves the expression of both positive and negative feelings. Lazarus distinguishes between his position on assertive behavior and that of Wolpe. He stresses that being assertive involves the appropriate expression of one's feelings with respect for the other person's dignity and does not include one-upmanship and other deceptive games (74, pp. 115-140). The following year Ludwig and Lazarus (81) proposed a cognitive behavioral approach to assertiveness training by incorporating Ellis' (28) ideas on Rational-Emotive Therapy. This model was later expanded upon by Lange and Jakubowski (71) and Lazarus and Fay (77).

In 1973 Jakubowski-Spector published An Introduction to Assertion Training Procedures for Women (63) as a supplement to her assertiveness training film (61). The same year she published an article emphasizing the usefulness of assertiveness training in facilitating the personal growth of women. Her article contains an excellent description of the three types of interpersonal behavior identified by Alberti and Emmons (4). She presents a step-by-step procedure for assertiveness training and shows how assertiveness can be appropriately applied to a variety of interpersonal situations (62).
In 1974 Alberti and Emmons published an updated second edition of *Your Perfect Right* (5). They followed in 1975 with *Stand Up, Speak Out, Talk Back!* (3), a self-help book designed for the general public. Smith (122) published a book that same year as the popularity of assertiveness training was growing rapidly. Smith's book, *When I Say No, I Feel Guilty*, contains several specific assertive techniques: fogging, broken record, negative assertion, negative inquiry, and workable compromise. Contained in the book are many dialogues and case histories demonstrating the application of these techniques to a variety of interpersonal situations. Smith's book has recently been criticized by some authors (19, 71) as advocating the use of passive-aggressive techniques rather than truly assertive techniques.

Fensterheim and Baer published *Don't Say Yes When You Want to Say No* (31) in 1975. This book is another of the popular self-help type books designed to increase the assertiveness of the general reader. The authors provide an introduction to behavior therapy theory and techniques. They describe the use of such procedures as developing an awareness of the concept of personal rights, targeting specific assertive behaviors, behavioral rehearsal, relaxation training, using successive approximation in the development of assertiveness, covert rehearsal, thought stopping, and the use of homework or behavioral assignments. In addition, the book contains
separate chapters on the application of assertive techniques to expanding one's social network, improving marital relationships, improving sexual satisfaction, losing weight, and being assertive on the job.

Other books published in 1975 on assertiveness training include The Assertive Woman (102), The New Assertive Woman (11), and I Can If I Want To (75). All three of these books are designed for the general public and are presented in a step-by-step self-help format. A somewhat novel approach is taken by Lazarus and Fay in I Can If I Want To (75) which represents an attempt to apply the principles of Ellis' (28) Rational-Emotive Therapy to assertiveness training. In that same year the growing popularity of assertiveness training among professionals was further reflected by the first publication of a bi-monthly newsletter, Assert: The Newsletter of Assertive Behavior (8).

Osborn and Harris (97) published one of the first handbooks for assertiveness trainers in 1975, Assertive Training for Women. They define assertiveness training as

... a behavioral approach that teaches people how to overcome anxieties which may be interfering with the attainment of more rewarding interpersonal relationships. Specifically, assertive training involves the acquisition of skills in expressing positive and negative feelings in a direct and honest manner; complimenting others and being able to accept compliments; initiating and maintaining conversations in social settings; expressing feelings and opinions in a way that will not result in retaliation, punishment, and/or feelings of guilt; learning how to avoid being taken advantage of by others; achieving closer and more rewarding relationships; and acquiring a greater degree of self-confidence and control over one's life (97, p. 49).
The authors identify and discuss the following components of assertiveness training: relaxation training, hierarchy construction, covert behavioral rehearsal, behavioral rehearsal, modeling, coaching, videotape feedback, homework assignments, and behavior monitoring (97, p. 52).

Osborn and Harris present a five-stage model of the developmental phases of assertiveness training groups. This model is based upon the analysis of group process records over a period of three years. At each stage the authors identify specific trainer behaviors which are designed to facilitate the effectiveness of the group process. The five stages of the model are as follows:

1. Preaffiliation (orientation, milling): "closeness" of the members is the central theme of this stage. Ambivalence toward involvement is reflected in the members' vacillating responses to program activities and events. Relationships are usually non-intimate, and a good deal of use may be made of rather stereotypic activity as a means of getting acquainted;

2. Power and Control (conflict): after making the decision that the group is potentially rewarding, members move to a phase during which issues of power, control, status, skill, and decision making are the major issues. There is likely to be a testing of the leader and of the group members as well as an attempt to define a status hierarchy;

3. Intimacy (togetherness, affection, unity): a real group feeling develops and allows an honest exchange of feelings. There is growing awareness and mutual recognition of the significance of the group experience in terms of personality growth and change;

4. Differentiation (high cohesiveness, working group): in this stage, members begin to accept one another as distinct individuals and to see the group as providing a unique experience. The group experience achieves a functionally autonomous character in this stage. The group becomes its own frame of reference.
5. Separation (termination): the group experience has been completed, and the members may begin to move apart to find new resources for meeting their needs (97, p. 76).

The authors describe in detail a ten-session assertiveness training format. Included are numerous semi-structured and structured group activities designed to stimulate group member awareness and to provide opportunities for the practice of assertive skills (97, pp. 101-140).

In a discussion of the effects of assertiveness training, Osborn and Harris state that they have administered the Rosenberg Self-Esteem Scale prior to and following assertiveness training and found dramatic increases in self-esteem accompanied by increased levels of assertiveness. However, they do not cite any empirical data in support of this observation (97, p. 51).

Another assertiveness trainer's manual was made available by Cotler and Guerra in 1976 with the publication of their book Assertion Training: A Humanistic-Behavioral Guide to Self-Dignity (19). The rationale for their treatment approach is based on a philosophy of human worth which emphasizes the uniqueness and value of every individual as well as the individual's need to maintain his own dignity and self-respect. The authors identify the two major interpersonal goals of assertiveness training as being anxiety reduction and social skills training. They describe an assertive person as one who
... can establish close, interpersonal relationships; can protect himself from being taken advantage of by others; can make decisions and free choices in life; can recognize and acquire more of his interpersonal needs; and can verbally and non-verbally express a wide range of feelings and thoughts, both positive and negative. This is to be accomplished without experiencing undue amounts of anxiety or guilt and without violating the rights and dignity of others in the process (19, p. 3).

The authors discuss component techniques of assertiveness training, including a comprehensive pretraining data-gathering procedure designed to pinpoint specific areas for focus of training, behavior monitoring, coaching, behavioral rehearsal, relaxation training, and the use of videotape feedback. In addition, they provide a detailed discussion of the components of non-verbal assertive behavior and basic conversational skills along with training exercises designed to enhance the development of assertive skills in these two areas (19, pp. 51-147).

**Responsible Assertive Behavior: Cognitive/Behavioral Procedures for Trainers** (71) is another handbook for assertiveness trainers. The unique aspect of this book is that it presents an original and comprehensive integration of Ellis' (28) principles of Rational-Emotive Therapy with traditional assertiveness training procedures. According to Lange and Jakubowski, assertiveness training incorporates four basic procedures:

1. teaching people the differences between assertion and aggression and between nonassertion and politeness;
2. helping people identify and accept both their own personal rights and the rights of others;
3. reducing existing...
cognitive and affective obstacles to acting assertively, e.g., irrational thinking, excessive anxiety, guilt, and anger; and (4) developing assertive skills through active practice methods (71, p. 2).

The authors identify the component techniques of assertiveness training as including modeling, covert modeling, behavioral rehearsal, covert rehearsal, role reversal (participant assumes role of the receiver of the assertive behavior being rehearsed), trainer reinforcement, coaching, and homework assignments. In addition to these traditional components, Lange and Jakubowski also describe cognitive restructuring procedures used in their approach to assertiveness training. They define cognitive restructuring as "the process by which individuals become aware of their own thinking patterns which lead to ineffectual behaviors and change these thought processes to more productive ones" (71, p. 119).

The authors describe in detail a five-session treatment model incorporating twenty structured exercises complete with step-by-step procedures, outcome goals, and homework assignments for both participants and trainers (71, pp. 69-117). Lange and Jakubowski claim emphatically that the popularity of assertiveness training among both professionals and the lay public is not merely a fad. They contend that the interest in assertiveness training is a natural outgrowth of two major cultural changes which occurred in the Sixties. First is the increased value placed on personal relationships. According to the authors, personal relationships began to be valued as
an important source of self-worth and satisfaction in life. At the same time many people found themselves to be lacking the interpersonal skills necessary to improve their personal relationships. The second cultural change identified by Lange and Jakubowski is their observation that the range of socially acceptable behavior was widened considerably. Alternative life styles became more acceptable. However, many people found themselves lacking the requisite choice-making skills. Furthermore, they lacked the cognitive and behavioral skills needed to actualize their choices and to defend these choices against criticism and resistance by other people. The authors see assertiveness training as an appropriate way for people to learn to stand up for themselves, to utilize their abilities for personal growth, and to enhance their personal relationships (71, pp. 1-2).

Component Techniques of Assertiveness Training

One of the problems encountered in evaluating the assertiveness training research is due to the fact that a wide diversity of treatment techniques have been employed by various researchers under the general rubric of assertiveness training (37, 54). Therefore, this section focuses on a review of those studies which have attempted to empirically verify essential component techniques. For purposes of organization, the studies reviewed in this section are
discussed in four subsections based on the primary component(s) investigated in each study. The subsections are (1) Behavioral Rehearsal, (2) Modeling, (3) Video Feedback, and (4) Other Related Studies.

**Behavioral Rehearsal**

By far the most commonly used and researched assertiveness training technique is behavioral rehearsal (54). In the following reviews the terms behavior rehearsal, behavioral rehearsal, and role-playing are used synonymously.

Lazarus (73) reported the first objective study of behavioral rehearsal in which he examined the efficacy of behavioral rehearsal, direct advice, and non-directive therapy in improving the management of client interpersonal difficulties. His findings based on observation of changes in behavior indicated that the behavioral rehearsal procedure led to the greatest change followed by the direct advice and then the non-directive procedures.

McFall and Marston (86) investigated the value of behavioral rehearsal in individual assertiveness training with college students. They developed a semi-automatic, standardized behavioral rehearsal treatment procedure in which subjects responded to audiotaped interpersonal situations and either heard a taped replay of their response (behavioral rehearsal with feedback) or were instructed merely to think about their response (behavioral rehearsal without feedback). Following
this procedure, both groups were given a verbal evaluation of how they performed based on pre-established performance variables. Each subject received four hours of training with the presentation of increasingly difficult situations to which they were required to respond. Based on behavioral, self-report, and physiological measures, the behavioral rehearsal groups improved more than either placebo therapy or untreated groups. The authors reported a nonsignificant tendency for behavioral rehearsal with performance feedback to show the strongest treatment effects.

In the second of a series of studies (85, 86, 87) designed to evaluate and develop behavioral rehearsal as a therapeutic technique, McFall and Lillesand (85) investigated the use of behavioral rehearsal with modeling and coaching in individual assertiveness training. Unassertive college students received two sessions of training in refusing unreasonable requests. Training involved a standardized, semi-automated laboratory analog of behavioral rehearsal (86). One experimental group received overt behavioral rehearsal with modeling and coaching. This group responded to the taped situation, heard a playback of their responses, listened to taped responses of an assertive response, and then heard a description of what constitutes a good assertive response. The other experimental group received covert rehearsal with modeling and coaching. This group followed the same procedure except that instead of listening to a playback of their responses they reflected on them. Both
experimental groups evidenced greater improvements in their assertive-refusal behavior on self-report and behavioral measures than the control group. Covert behavioral rehearsal tended to produce greater absolute magnitude of improvement than did overt behavioral rehearsal, although the differences were not consistently statistically significant across measures. This finding prompted the authors to conclude that covert rehearsal is at least as effective as overt rehearsal, if not more so.

McFall and Twentyman (87), in the third of a series of experiments (85, 86, 87), investigated the components of assertiveness training with low-assertive college students. They found that the components of behavioral rehearsal and coaching both made significant additive contributions to improved performance on self-report and behavioral assertion measures. Symbolic modeling added little to the effects of behavioral rehearsal alone or behavioral rehearsal plus coaching, regardless of the type of model observed (abrupt or tactful) or the media employed in presenting the models (audio alone or audiovisual). The researchers also observed no differences between the experimental conditions of covert behavioral rehearsal, overt behavioral rehearsal, or a combination of the two. They found that positive treatment effects generalized from trained to untrained situations and that there was some evidence of transfer of treatment effects from the laboratory to "real-life" situations.
Longin and Rooney (79) trained thirty-eight female chronic hospitalized psychiatric patients individually with standardized, prerecorded tapes and utilized the components of coaching, modeling, and overt or covert behavioral rehearsal. They found that experimental subjects changed in the direction of greater assertiveness on trained situations compared with control subjects. Assertiveness training also generalized to untrained situations. The authors found overt behavioral rehearsal to be more effective in increasing assertive behavior than covert rehearsal.

Lawrence (72) compared group methods of modifying assertive behavior with unassertive college students. The behavioral rehearsal group (BR) was exposed to role-playing, modeling, feedback, and coaching. The logical directive group (LD) heard a prepared lecture and discussed the development and maintenance of non-assertive behavior and the disadvantages of behaving non-assertively. The attention control group (AC) was read statements on various social issues which the BR group also heard. A fourth group received no treatment. All experimental groups were rated as more assertive during the posttest and follow-up period than during the pretest in situations involving social issues for which training was given. The no-treatment group showed no change from pretest to follow-up. With respect to those social issues for which no training was given, both the BR and AC
groups showed significant increases on behavioral ratings from pretesting to posttesting. Only the BR group were rated as more assertive during the follow-up than during the pretest. The author concluded that the behavioral rehearsal procedure was the most effective procedure for modifying assertive behavior. Behavioral rehearsal resulted in greater generalization to untrained situations than the other two experimental methods.

Loo (80) investigated the effects of the addition of the component of projected consequences to overt behavioral rehearsal in assertiveness training with unassertive college students. The projected consequences treatment component consisted of in situ reactions by another person to the assertive behavior of the role player. On self-report and behavioral measures, both the overt behavioral rehearsal (OBR) and the overt behavioral rehearsal plus projected consequences (PC) groups showed significant improvements in scores over a control group. Following training the PC group scored significantly higher than the OBR group on a behavioral measure of assertiveness in the subjects' natural social environment. The PC group also scored higher on a self-report measure of assertiveness and on ratings on the adequacy of their responses than the OBR group. The differences were no longer apparent at a three-month follow-up assessment. Loo suggested that projected consequences may be a useful additional component technique in assertiveness training.
Friedman (38), in his doctoral study completed in 1968, investigated the effects of verbal modeling and behavioral rehearsal with unassertive college students using an individual training format. One group observed a model demonstrating assertive responses and engaged in behavioral rehearsal. Another group read a prepared script of assertive responses (verbal modeling) and engaged in behavioral rehearsal. A third group generated their own assertive responses and then rehearsed them. Other groups either observed a model only, read scripts only, or served as no-treatment controls. Both self-report and behavioral measures indicated a combination of live modeling and behavioral rehearsal to be the most effective technique in increasing assertive responding.

Snyder (123) investigated the efficacy of three individual training methods of eliciting assertive behavior with low-assertive female college students. He found clear superiority of all three experimental groups (role-playing, modeling, and silent reading of an assertive script) over a no-treatment control group as measured by ratings of subjects' responses to a behavioral situation. Self-report data were inconclusive.

Perkins (101) investigated the effectiveness of three individual training procedures for increasing assertiveness in low-assertive college students. One experimental group engaged in behavioral rehearsal, experienced verbal reinforcement from trainers, was exposed to the challenging of
irrational thinking (depropagandization) as it related to reported attempts at being assertive, and carried out homework assignments. The second experimental group was exposed to trainer modeling of assertive responses in a variety of situations and observed the model being verbally reinforced for assertiveness. A third experimental group received a combination of both treatments. None of the three procedures produced a change in assertiveness as measured by two self-report inventories.

Arnold, Wenrich, and Dawley (6) investigated the use of anxiety relief procedures with behavioral rehearsal in modifying the assertive behavior of unassertive college students. Following two individual treatment sessions, the combined behavioral rehearsal anxiety-relief group was rated as significantly more assertive on a behavioral test of responses to simulated conflict situations. Self-report data were inconclusive, leading the authors to conclude that only partial support for a combined therapy approach for assertiveness training was obtained.

Aiduk and Karoly (1) conducted a study designed to evaluate the contributions of self-regulatory techniques to the modification of non-assertive behavior with college students. The authors compared three experimental conditions of individualized assertiveness training, including behavioral rehearsal, behavioral rehearsal plus videotape feedback, and
behavioral rehearsal plus feedback plus self-evaluation, with a no-treatment control group. All experimental groups practiced assertive responses to a series of standardized interpersonal situations, and two groups received videotaped feedback. The self-evaluation group evaluated their videotaped performance on the following components of assertive behavior: voice level, emotional tone in voice, body gesture, eye contact, and posture. Posttraining assessment on both self-report and behavioral indices indicated that each of the behavioral rehearsal procedures was effective in reducing non-assertive behavior. Neither videotape feedback nor practice in the use of meaningful performance evaluation criteria (self-evaluation) contributed appreciably to the effects of behavioral rehearsal.

**Modeling**

Chittenden (15) employed a symbolic modeling procedure to modify the behavior of hyperaggressive and domineering children. These children watched and discussed eleven fifteen-minute plays in which dolls exhibited alternatively aggressive and cooperative responses to interpersonal conflict situations. The consequences of aggression were shown to be unpleasant while those of cooperativeness were rewarded. Compared to a no-treatment group, the children exposed to the modeling procedure exhibited a decrease in aggressiveness and
an increase in cooperativeness as measured by in vivo behavioral ratings prior to, during, and after treatment.

Eisler, Hersen, and Miller (22) investigated the effects of modeling on components of assertive behavior with thirty hospitalized male psychiatric patients. Subjects in the modeling and practice-control conditions responded to five standard interpersonal situations requiring assertive responses. Each subject in both groups responded six times to each situation. The modeling group was exposed to a highly assertive videotaped model following each trial. Significant pretest and posttest differences were obtained for the modeling condition on five of the eight components of assertiveness identified by Eisler, Miller, and Hersen (25). The authors concluded that repeated exposure (practice) alone to situations requiring assertiveness does not change the behavior.

In a related study Hersen, Eisler, Miller, Johnson, and Pinkston (56) compared pretest and posttest differences in responses to the same five interpersonal situations for five groups: test-retest, practice-control, instructions, modeling, and modeling plus instructions. Results indicated that the modeling plus instructions procedure produced results either superior to or equal to the modeling or instructions conditions on five of seven verbal and non-verbal components of assertive behavior. No differences were found between the practice-control and test-retest conditions. The authors state that the results of this study confirm the results of the Eisler et al. (22) study.
Hersen, Eisler, and Miller (55) investigated the generalization of assertiveness training with unassertive psychiatric patients. Subjects were assigned to one of five individual training groups: test-retest, practice-control, practice-control with generalization instructions, modeling and instructions, and modeling and instructions with generalization instructions. Findings indicated that the modeling (videotape) and instructions procedure effected the greatest change on measures of seven of eight behavioral components of assertiveness. Transfer of training effects were reported as minimal.

Young, Rimm, and Kennedy (134) compared the use of the components of modeling and verbal reinforcement in individual assertiveness training with forty female college students. Both a modeling-alone and a modeling-plus-reinforcement group demonstrated significantly greater improvement in assertive performance than either a placebo-therapy control group or a no-treatment control group. Contrary to the authors' expectations, the addition of verbal reinforcement to the modeling component did not augment the effect of the modeling procedure alone. The authors suggest that in order for reinforcement to be effective in modifying assertive behavior, it should be accompanied by an explanation of the specific response elements which are appropriately assertive in a particular situation.

Kazdin (67) investigated the effects of the component techniques of covert modeling and model reinforcement on
assertive behavior with non-assertive college students using an individual training approach. The covert modeling group (CM) imagined scenes in which a model behaved assertively, while the covert modeling plus reinforcement group (CMR) imagined scenes in which a model performed assertively and experienced favorable consequences following the modeling performance. The no-modeling group imagined scenes with neither an assertive model nor reinforcing consequences. Another group received no treatment. Following four treatment sessions, both covert modeling groups improved significantly on behavioral and self-report assertiveness indexes. The CMR group showed nonsignificant but greater assertiveness at posttreatment assessment and follow-up.

In a study designed to examine the effects of variations of covert modeling on assertive behavior, Kazdin (66) found that individual training in covert modeling led to significant increases in assertive behavior as indicated by self-report and behavioral measures. In addition, he found that imagining several models engaging in assertive behavior coupled with model reinforcement following model performance enhanced treatment effects. Simply imagining assertion-relevant scenes in the absence of an assertive model did not lead to consistent changes in assertiveness. The effects of this covert modeling procedure were found to generalize to untrained role-playing situations and were maintained on self-report measures at follow-up four months later.
Rathus (106) investigated the use of videotape-mediated modeling and directed practice in individual assertiveness training with low-assertive college women. The assertiveness training group viewed films of college women engaging in a variety of assertive behaviors and practiced (role-played) nine types of assertive responses identified by Rathus (105). The placebo treatment group viewed videotapes of college women discussing various fears or receiving systematic desensitization to fears. In addition, subjects in this group were given weekly assignments to construct thematic hierarchies for systematic desensitization. Subjects in the no-treatment group met for assessment only. Self-report measures and behavioral ratings showed the assertiveness training group receiving the videotape-mediated modeling and directed practice to be significantly more assertive than either the placebo or control groups. No differences were observed between these latter two groups.

**Video Feedback**

Serber (118) presented a rationale for teaching the non-verbal components of assertive behavior. He identified six components: loudness of voice, fluency of spoken words, eye contact, facial expression, body expression, and distance from the person with whom one is interacting. Serber advocates the use of audiovisual feedback in shaping non-verbal assertive behavior. The article includes a case study of a socially
inhibited twenty-one-year-old male inpatient in which Serber's procedure is demonstrated. Following treatment observations of dramatic changes in his assertive behavior were reported by the staff and other patients.

Galassi, Galassi, and Litz (42) investigated the use of video feedback in group assertiveness training with unassertive college students. They used a "total assertive training package" which included the components of videotape modeling; behavior rehearsal; video, peer, and trainer feedback; bibliotherapy; homework assignments; trainer exhortation; and peer-group support. Following eight weeks of treatment, they found significant differences between experimental and control groups on behavioral and self-report measures. The authors pointed out the contribution of video feedback and suggested that it is an important area for future research.

Gormally, Hill, Otis, and Rainey (50) investigated a microtraining approach to assertiveness training with unassertive college students. All subjects were presented with a brief rationale for assertiveness training, read written material dealing with basic assertiveness concepts, and were then videotaped for the preassessment trial. One group received individualized microtraining which included instructions, coaching, modeling, role-playing, and trainer and video feedback. A control group received insight-oriented counseling. Results indicated that both microtraining groups
increased significantly over the control group on both self-ratings and judges' ratings of assertiveness. Video feedback did not prove to be superior to trainer feedback.

Aiduk and Karoly (1) found that video feedback did not contribute appreciably to the effects of behavioral rehearsal.

Other Related Studies

Eisler, Hersen, and Miller (23) presented two single-case experiments which demonstrate the use of instructions and feedback in the rapid acquisition of assertive behavior. Following short-term treatment, both subjects were rated as more assertive on behavioral measures than they were prior to treatment.

Flowers and Guerra (35) used client coaching in assertiveness training in large groups. Twenty-seven probation officers served as subjects. In one group nine subjects behaviorally rehearsed an assertive role while being coached by a professional assertiveness trainer. In another group subjects rehearsed an assertive role while being coached by another probation officer (client-coach). Subjects in this group also coached other probation officers. In the third group subjects were coached by a fellow probation officer but had no opportunity to coach others. The dependent measures were (1) the client's later selection of the correct assertive strategy in a role-play situation and (2) the client's later performance with minimum assistance from a coach. The results
indicated that nonprofessional coaching was superior to professional coaching. Subjects coached by fellow clients were superior in later performance than subjects coached by a professional. Clients who coached learned assertive techniques better than clients who did not coach. The authors suggest that employing nonprofessional client-coaches may be a means of increasing effectiveness of the use of both professional and client time.

Holmes and Horan (58) compared standard individual assertiveness training including behavioral rehearsal and trainer modeling and reinforcement with a similar approach plus anger induction and a placebo therapy procedure. Placebo therapy consisted of client-centered counseling techniques. Results indicated that the addition of anger induction as a component of assertiveness training produced a significantly higher level of assertive behavior on one behavioral measure, and consistently higher though nonsignificant ratings on all behavioral measures when compared with the effects of standard assertiveness training and placebo therapy.

Weinman, Gelbart, Wallace, and Post (129) compared the effectiveness of socioenvironmental, desensitization, and relaxation therapies in inducing assertive behavior in chronic male schizophrenics. The socioenvironmental therapy group received "(a) a core of five weekly group activities which require social interaction; (b) informal social activities which encourage social contact; (c) a staff trained to
stimulate patient participation in the formal and informal aspects of the program" (129, p. 247). The systematic desensitization group consisted of the traditional systematic desensitization component techniques of training in deep muscle relaxation in conjunction with the presentation of a hierarchy of assertive behavior situation stimuli. A third group received deep muscle relaxation training only. Older subjects in the socioenvironmental therapy group were found to behave significantly more assertively on a behavioral measure (Behavior in Critical Situations Scale) than the other two groups combined. Younger subjects showed no treatment effects across groups on this measure. Scores on a self-report anxiety questionnaire administered pretreatment and posttreatment showed no significant changes across groups. All groups demonstrated a significant decrease in scores on the Fear Survey Schedule, a ten-item test used to measure anxiety level. The authors concluded that socioenvironmental therapy is the treatment of choice for chronic male schizophrenics.

In summary, research has provided strong empirical support for the following component techniques of assertiveness training: behavioral rehearsal, modeling (live and videotape), coaching, performance feedback, instructions, covert behavioral rehearsal, and covert modeling. The contribution of videotape feedback has not been clearly demonstrated. Other components identified
in the literature are projected consequences, anger induction techniques, and client coaching. The usefulness of these techniques remains to be empirically verified.

Effects of Assertiveness Training

For purposes of organization, the studies reviewed in this section are discussed according to the type of dependent measures employed by the researchers. The four subsections presented are (1) Behavioral and Self-Report Measures, (2) Behavioral Measures, (3) Self-Report Measures, and (4) Cognitive Variables. The fourth subsection, Cognitive Variables, includes studies which used both behavioral and self-report measures in investigating the specific effects of group assertiveness training on cognitive variables. The direct relevance of these studies to the present investigation warrants discussion under a separate subheading.

Behavioral and Self-Report Measures

In the first of a series of studies investigating the value of behavioral rehearsal in individual assertiveness training, McFall and Marston (86) found that the two behavioral rehearsal groups showed significant improvement over a placebo therapy group and a no-treatment control group in ratings on the Behavioral Role-Playing Test, a behavioral test consisting of sixteen interpersonal conflict situations in which subjects' responses are rated on a five-point scale
of assertiveness. Subjects rated their anxiety in the situation and their satisfaction with their response on each of the sixteen behavioral test items. The no-treatment control group showed significantly less increase in ratings of satisfaction than the other three groups. There were no significant differences on this measure between the placebo group and the behavioral rehearsal groups. The combined behavioral groups showed a greater reduction on the self-report anxiety measure than the combined control groups. No significant differences were found among the groups on a measure of response latency. A measure of pulse rate following the behavioral test found that the combined experimental groups evidenced a significant decrease in pulse rate, while the combined control groups showed a mean increase in pulse rate. The combined experimental groups showed a significant increase in scores on the Wolpe-Lazarus Assertive Scale (a pencil-and-paper measure of assertiveness) over the combined control groups. No differences were found among groups on either a short form of the Taylor Manifest Anxiety Scale or the Wolpe-Lang Fear Survey Schedule. In an ingenious in vivo follow-up assertiveness test, subjects were rated on their responses to a telephone call by a persuasive salesperson. The experimental subjects evidenced transfer of training by expressing resistance to the salesperson at an earlier point in the telephone interaction than did control subjects.
In the second of the series of studies, McFall and Lillesand (85) found subjects exposed to both individual covert and overt behavioral rehearsal plus modeling and coaching to improve markedly on almost every specific measure of refusal behavior. Self-report measures of refusal behavior were obtained via the development of the Conflict Resolution Inventory (CRI). The CRI consists of an eight-item face sheet (rating of problems in saying "no") and a thirty-five-item inventory of responses to specific refusal situations. The CRI yields a global self-rating of assertive-refusal problems, an assertive score, a non-assertive score, and a difference between the assertive and non-assertive score. No differences were found between groups on the global self-rating measure with each group reporting a significant decrease in the magnitude of their refusal problem following treatment. Significant differences were reported between the experimental groups and the control group on the assertive score, non-assertive score, and difference score measures. The measures assessed responses in specific refusal situations. A behavioral measure, the Behavioral Role-Playing Assessment, provided an actual sample of subjects' behavior in simulated refusal situations. The combined experimental groups showed significant increases in ratings of their performance on this measure compared to the control group. Further analysis of the data indicated that the primary treatment of effect of both behavioral rehearsal procedures was to modify response content,
i.e., what the subjects said rather than response quality or how they said it. Two other behavioral posttests, one an extended interaction with a prerecorded, persistent antagonist and the other a telephone call by a persistent salesperson, were used to further evaluate treatment effects. The experimental subjects differed significantly in ratings of their assertive-refusal behavior on the extended interaction test, while no significant differences between groups were found on the telephone follow-up measure.

McFall and Twentyman (87), in the third of the series of studies (85, 86, 87), investigated the components of individual assertiveness training with low-assertive college students. They found significant differences following treatment in Conflict Resolution Inventory scores and the Behavioral Role-Playing Test ratings. The authors observed positive treatment effects to generalize from trained to untrained situations. There was some evidence that treatment effects transferred from the laboratory to "real-life" situations.

Aiduk and Karoly (1), in a study evaluating the use of self-regulation in reducing non-assertive behavior, found that all three groups of experimental subjects reported a significant decrease on a global self-rating of "refusal problems" compared to control subjects as measured by scores on part one of the Conflict Resolution Inventory (CRI). On part two of the CRI, all experimental groups significantly reduced their ratings of non-assertiveness in specific refusal situations. On the
S-R Inventory of Anxiousness, all groups including the control group reported decrements of anxiety following treatment on five of the six situations included on the inventory. On the sixth item, a refusal situation, experimental subjects reported a significant decrease in anxiety compared to control subjects. Experimental subjects were rated as significantly more assertive on a behavioral test of assertiveness than control subjects.

Loo (80) investigated the effects of behavioral rehearsal and behavioral rehearsal plus projected consequences on assertive behavior with unassertive college students. He found that both experimental groups performed more assertively on the Behavior Role-Playing Assessment and the Extended Interaction Test than the control group following treatment. The experimental groups both had higher assertive scores on the Conflict Resolution Inventory than a control group. On another behavioral measure, the Individualized Assessment of Refusal Behavior, both the behavioral rehearsal and the projected consequences groups showed greater increases in ratings of refusal behavior and greater decreases in ratings of compliance behavior in their own, natural social environments than did the control group. Loo found a number of sex differences. Females in the pretraining assessment reported more instances of compliance than males did. Only males exhibited significant treatment effects in scores on the Conflict
Resolution Inventory. Furthermore, during the posttreatment assessment males rated themselves higher in overall assertiveness and adequacy of refusal behaviors than females.

Kazdin (67) investigated the effects of covert modeling and reinforcement on assertive behavior. He found that experimental subjects increased significantly in assertive-refusal behavior as measured by scores on the Conflict Resolution Inventory, the Wolpe-Lazarus Assertive Scale, the Action Situation Inventory (subjects select alternative reactions to assertion-relevant situations), the Willoughby Scale, and global self-ratings on the ability to say "no" compared to control subjects. All modeling groups were rated as more assertive on the Behavioral Role-Playing Test than the control group. In general, modeling subjects tended to respond more rapidly and gave longer responses to the role-playing situations than did control subjects.

Kirschner (69) investigated the generalization effects of assertiveness training. He found that experimental subjects showed significant differences compared to placebo control subjects in scores on the Wolpe-Lazarus Assertive Scale and the Lawrence Assertive Inventory. Subjects in both experimental groups showed significant improvement over control subjects in ratings on the Behavioral Role-Playing Test from preassessment to follow-up.

Lawrence (72) investigated different individual training methods of modifying assertive behavior with female college
students. The behavioral rehearsal group was rated as more assertive on a behavioral disagreement test and on global self-ratings of assertiveness compared with placebo and control groups.

Booraem and Flowers (13) compared an assertiveness training program with a "normal hospital milieu therapy program" with fourteen severely disturbed male psychiatric inpatients. After twelve sessions the experimental group showed a significant reduction in ratings on a measure of personal space and in scores on a self-reported measure of anxiety (Spielberger Self-Evaluation Questionnaire) compared to the control group.

In a study involving the use of microtraining approach to assertiveness training, Gormally, Hill, Otis, and Rainey (50) found significant differences between microtraining assertiveness subjects with and without video feedback and control subjects. Experimental subjects rated themselves as significantly more satisfied with their responses following treatment than control subjects. Objective judges rated experimental subjects as significantly different from pre-assessment to postassessment on measures of effectiveness, achievement of goals, voice modulation, "uptightness," delivery style, and congruent body movements than control subjects. No differences were found among groups on measures of voice loudness, eye contact, or self-rated "uptightness."
Young, Rimm, and Kennedy (134) found that female college students significantly improved in ratings of their performance on a behavioral role-playing test similar to McFall and Marston (86) following assertive training employing modeling procedures. Subjects in the experimental groups showed significant improvement over control subjects in scores on the female form of the Lawrence Assertive Inventory. Scores on another self-report questionnaire, the Wolpe-Lazarus Assertive Scale, showed no treatment effects. No differences were found between groups on self-ratings of assertiveness.

Hersen, Eisler, Miller, Johnson, and Pinkston (56) found that male psychiatric patients exposed to either modeling, modeling plus instructions, or instructions alone showed significant differences compared to control subjects on ratings of seven behavioral measures of assertiveness. The measures were duration of looking (eye contact), duration of reply, loudness, compliance content, requests for new behaviors, affect, and overall assertiveness. No differences among groups were found on Wolpe-Lazarus Assertive Scale scores.

Arnold, Weinrich, and Dawley (6) employed behavioral rehearsal plus an anxiety-relief procedure in an attempt to modify the behavior of low-assertive college students. The researchers found significant differences between the combined procedure group and a more traditional behavioral rehearsal group in ratings on the Behavioral Assertiveness Assessment Procedure (3AAP), a modified version of the Behavioral
Role-Playing Assertiveness Test (85). The BAAP consists of nine simulated conflict situations to which subjects respond while being observed in vivo by raters. No differences were found between the two groups on either Social Avoidance and Distress Scale scores or Wolpe-Lazarus Assertive Scale scores, both self-report measures.

Friedman (38) investigated the effects of modeling and role-playing on the assertive behavior of unassertive college students. Subjects in the modeling plus behavioral rehearsal group showed significant improvement in ratings on a behavioral task (Sum Assertion Measure) compared to subjects in other groups. Differences in scores on a self-report measure of assertiveness (Action Situation Inventory) were not significant. No significant differences were found among groups on self-reported measures of anxiety.

Rimm, Hill, Brown, and Stuart (110) applied group assertiveness training to male college students who reported a history of expressing anger in inappropriate ways. Compared to attention-placebo group subjects, the assertiveness training group subjects were objectively rated as more assertive and comfortable following treatment. Assertiveness training subjects rated themselves as significantly more improved on subjective measures of discomfort and anger than control subjects. In addition, experimental subjects showed a greater but nonsignificant increase in global assertiveness
scores compared to control subjects as measured by the Lawrence Assertive Inventory. No differences in scores were found between groups on the Internal-External Locus of Control Scale.

Snyder (123) found that experimental subjects under all three treatment conditions of role-playing, modeling, and silent script reading showed a significant superiority over control subjects on a behavioral measure involving resistance to a salesperson in a simulated situation. Changes in scores from pretreatment to posttreatment on several self-report inventories, including the Internal-External Locus of Control Scale, the Repression-Sensitization Scale, the Marlowe-Crowne Social Desirability Scale, and a short form of the Jacobs Survey of Mood and Affect, were not significant. Experimental subjects showed nonsignificant increases in self-reported feelings of assertiveness.

Rathus (105) investigated the effects of assertiveness training in a group setting. He compared three groups of socially inhibited college women: an assertiveness training (AT) group, a discussion group, and a no-treatment control group. The AT group subjects engaged in role-playing and carried out homework assignments involving nine assertive tasks. These tasks included assertive talk, feeling talk, greeting talk, disagreeing passively and actively, asking why, self-disclosure, agreeing with compliments, avoiding
justifying personal opinions, and maintaining eye contact. Particular attention was paid to tone of voice and facial expression during role-playing. Discussion group subjects heard lectures and discussed topics related to the nature, acquisition, and elimination of fear and child-rearing practices that promote feelings of guilt and dependency. Control subjects had no treatment. Rathus found that AT subjects reported significantly greater gains in assertive behavior measured by the Rathus Assertiveness Schedule (RAS), a self-report assertiveness questionnaire, than the no-treatment control group subjects. However, no significant differences were observed between the experimental group and the discussion group on the RAS, although the experimental group scored higher. No significant differences were found between the discussion group and the no-treatment control group on the RAS. Subjects in the AT group tended to exhibit more assertive behavior on ratings on a short behavioral test than did subjects in the other two groups. The AT group also showed significantly greater reduction in general fear than did the control group as measured by the Temple Fear Survey Inventory (TFSI). In addition, the AT group reported nonsignificantly greater reductions in scores on measures of fears of social criticism and social competence than either the discussion or control groups. The lack of differences between
these two groups on the latter measures suggested to the author that assertive training was the more effective of the treatments.

Rathus (106) found significant differences on measures of assertiveness for a group of college women exposed to videotape-mediated modeling and directed practice compared to placebo and control groups. Assertiveness training (AT) group subjects increased significantly in scores on the Rathus Assertiveness Schedule, while subjects in the other two groups showed no such changes and did not differ significantly from each other. Subjects in the AT group were rated as significantly more assertive than subjects in the other two groups on a five-item behavioral measure. Furthermore, AT subjects showed nonsignificantly greater reductions in general fear scores and fear of social conflicts scores on the Temple Fear Survey Inventory than placebo or control subjects. Rathus concluded that assertiveness training constitutes an effective and economical short-term (seven weeks) method for modifying behavior and reducing fears and social inhibitions.

Holmes and Horan (58) investigated the effects of the addition of an anger induction component to standard individual assertiveness training. They found that all groups, including placebo control subjects, showed significant improvements on scores on the Rathus Assertiveness Schedule. Anger induction subjects were rated as significantly more assertive than control subjects on a behavioral measure involving subject request for
the return of a four-dollar deposit. On three other behavioral measures (request from a stranger to borrow class notes, volunteer solicitation, and responses to a personal compliment) anger induction subjects were rated as having consistently displayed higher levels of assertiveness than subjects in either of the other two treatments.

Galassi, Galassi, and Litz (42) utilized a multifaceted assertiveness training group approach to modify the assertive behavior of unassertive college students. They found significant differences between experimental group and control group scores on the College Self-Expression Scale, a subjective measure of assertiveness, and scores on the Subjective Unit of Disturbance Scale, a measure of subjectively experienced anxiety. The authors also report significant differences between the groups on a behavioral measure which included length of eye contact, assertive response content, and conciseness of response. No differences were found on measures of response latency.

In another study, Galassi, Kostka, and Galassi (44) reported a one-year follow-up on the subjects in the previous study. They found that a year after training experimental and control subjects were significantly different in scores on two self-report measures, the College Self-Expression Scale and the Subjective Unit of Disturbance Scale. In addition, experimental subjects were rated as significantly different
on two behavioral measures, assertive content and conciseness of response. No differences were found between groups on measures of eye contact and response latency. This study demonstrates the long-term effects of assertiveness training.

Behavioral Measures

Chittenden (15), using a symbolic modeling procedure with hyperaggressive children, found a decrease in frequency of dominative aggressive behavior as well as an increase in frequency of cooperative behavior as measured by in vivo behavioral ratings made a nursery school before, during, and after treatment.

Johnson, Tyler, Thompson, and Jones (64) compared group desensitization procedures with group assertiveness training (speech practice) for speech-anxious eighth graders. The speech-practice group members gave short speeches, heard audio feedback immediately, and then re-presented the talk. Some information regarding speech and anxiety was provided. No significant differences were found in ratings on a behavioral speech anxiety measure between the two experimental groups. However, a significant difference was reported on this measure between the experimental groups and the control group.

Field and Test (32) investigated the effects of group assertiveness training with adult hospitalized psychiatric patients. Assertiveness training consisted of instructions, role-playing, trainer modeling and coaching, and videotaped
feedback. Following three weeks of treatment, experimental subjects showed improvement over control subjects on ratings of their responses to a behavioral role-playing test measuring compliance content. Experimental subjects improved significantly when compared with control subjects on behavioral measures of response latency and disruptive pauses in the role-playing situations.

Serber and Nelson (119) applied assertiveness training to fourteen hospitalized schizophrenic patients. Subjects received eighteen treatments in a six-week period. The authors report observation of increased assertive behavior during the treatment period (no data presented). Minimal assertiveness was reported in only two of the subjects during a six-month follow-up. The authors attribute failure of the procedure to the fact that many of the subjects were unable to project themselves as being assertive in situations where they had previously been passive. Another problem was that the subjects were frequently unable to repeat the various modeling and behavioral rehearsal procedures they had observed.

Hersen, Eisler, and Miller (55) found that psychiatric patients exposed to individual assertiveness training with videotape modeling and instructions differed significantly from control subjects on measures of seven of eight components of assertive behavior. Based on their responses to an adaptation of the Behavioral Assertiveness Test (22), modeling and
instructions subjects were rated as significantly more assertive on measures of duration of looking, loudness of voice, compliance content, affect, overall assertiveness, length of reply, and requests for new behavior.

Eisler, Hersen, and Miller (22), in a study designed to determine the effects of modeling on components of assertive behavior, obtained significant effects on measures of five of the eight components of assertive behavior (25) for the modeling group compared to two control groups. Specifically, modeling subjects showed greater changes on duration of response, number of requests for new behavior, affect, loudness of speech, and overall assertiveness than control subjects.

Galassi and Galassi (41) investigated the effects of variations of role-playing procedures on assessment of assertive behavior. They found that assertiveness training subjects exposed to live assessment stimulus situations experienced more anxiety than those exposed to taped stimulus situations. Subjects who responded once per stimulus situation had significantly longer responses than subjects required to make several responses. The authors suggested that results from studies employing different assessment procedures for both subject inclusion and evaluation of effects are not comparable.
Self-Report Measures

Lomont, Gilner, Spector, and Skinner (78) claim to have done the first experimental study on assertiveness training in groups. They compared the efficiency of group assertiveness training with that of "group insight therapies," using twelve non-psychotic inpatients in a Veteran's Administration hospital. The assertiveness group subjects engaged in behavioral rehearsal and were exposed to the modeling of numerous coping behaviors for a variety of interpersonal situations. The insight group focused on exploration and interpretation of feelings and behavior. At the end of six weeks the assertiveness group showed a greater absolute change on all clinical scales of the Minnesota Multiphasic Personality Inventory compared to the insight group. However, these changes were not statistically significant. The assertiveness group showed significant changes from pretreatment to posttreatment assessment on scales D (depression) and Pt (psychasthenia). Other scales approaching significance (p .10) were Pd (psychopathic deviate), Pa (paranoia), and Sc (schizophrenia). None of the insight group change scores approached significance. The authors reported a "nearly significant" increase on the dominance-submission dimension of the Leary Interpersonal Check List by the assertiveness group.

Hedquist and Weinhold (53) investigated the efficacy of two behavioral group counseling approaches for socially anxious
and unassertive college students. Subjects in the behavioral rehearsal group participated in role-playing of personally significant interpersonal situations, plus modeling and coaching. In the social learning group, the leader modeled a method for problem solving. The control group featured group discussions focusing on teaching and the interpersonal process. After six weeks the two behavioral groups showed a significantly higher frequency of self-reported assertive responses than the control group. Follow-up six weeks later found the differences in response frequencies to be in the predicted direction but no longer significant.

Roszell (113) compared outcome measures of two "encounter-type" group treatments applied to college students, one with and one without pretraining, and a behaviorally-oriented group treatment (assertiveness training). The pretraining group received a presentation on group phenomena, practiced facilitative responses, and observed a filmed model of a group interaction. Both the pretraining and awareness groups then engaged in a sequence of interaction experiences. The behavioral group set goals, discussed behavioral attempts outside the group, and engaged in role-playing of personally difficult assertive situations. Subjects in the awareness group, both with and without pretraining, scored higher on a measure of a sense of self-worth (Interpersonal Importance Inventory) than did subjects in the behavioral group.
Perkins (101), in a comparative study of three procedures for increasing assertiveness in low-assertive college students, found no differences in treatment effects on posttreatment measures including the Guilford-Zimmerman Temperment Survey and the Warner Index of Status Characteristics, a measure of social class position. No behavioral measures were employed in the study.

Cognitive Variables

Percell (99) reported one of the first studies in the literature designed to measure the specific effects of group assertiveness training on cognitive and affective variables. He investigated Alberti and Emmons' (4) hypothesis that increased assertiveness leads to increased feelings of self-acceptance and Wolpe and Lazarus' (133) hypothesis that assertive behavior inhibits anxiety responses. Two groups of psychiatric patients were exposed to eight weeks of training. Both groups discussed the advantages of being assertive, explored the various situational determinants of non-assertive behavior, and received advice on how to behave more effectively and solve problems. However, in contrast to the relationship-control therapy group, only the assertiveness training group incorporated the technique of behavior rehearsal. Subjects were administered three self-report inventories and were rated on dimensions of assertiveness by blind observers prior to and following treatment. Experimental subjects significantly
increased their self-reported assertiveness scores compared to control subjects on a modified version of the Lawrence Interpersonal Behavior Test. The experimental group showed a significant reduction in self-reported anxiety compared to the control group as measured by scores on the Taylor Manifest Anxiety Scale. In addition, the assertiveness training group showed significantly higher increases in scores of self-acceptance on the Berger Self-Acceptance Scale than the control group. On the behavioral rating scale, assertiveness training subjects, in contrast to control subjects, were rated significantly more assertive, aggressive, spontaneous, empathic, outgoing, confrontive, and less anxious.

Burtle, Whitlock, and Franks (14) conducted a pilot study involving an attempt to modify the self-esteem of hospitalized alcoholic women via a behavior modification program employing assertiveness training as one of the behavioral techniques. Results of pretreatment and posttreatment assessment indicate the treatment was successful in significantly reducing subjectively reported levels of anxiety as measured by scores on the Taylor Manifest Anxiety Scale. This reduction was maintained at follow-up sixteen weeks after subjects had returned to the community. Changes in scores on the Internal-External Locus of Control Scale were not significant. Subjects increased their self-reported assertiveness as measured by scores on the Self Assertion Scale, a modified form of the Wolpe-Lazarus
Assertive Scale. However, this increase was not apparent at follow-up. Subjects also showed significant gains at post-assessment in five subscale scores on the Tennessee Self-Concept Scale, including total positive (general self-esteem), identity, self-satisfaction, moral-ethical self, and behavior. Changes on the family self subscale scores were not significant immediately following treatment but attained significance at follow-up. The results of this study are limited by size of the sample (N=16) and the lack of a control group. Furthermore, the effects of assertiveness training can not be isolated from other treatment procedures.

In summary, research on the effects of assertiveness training on behavioral measures indicates that subjects exposed to assertiveness training generally exhibit an increase on objectively-rated measures of assertive behavior. Those studies which investigated the effects of assertiveness training on various self-report measures including measures of self-reported assertiveness and measures of self-reported anxiety levels have provided conflicting findings. Thus, it appears that the data from research on the effects of assertiveness training on various self-report measures are inconclusive.

Two studies (14, 99) have been reported which were designed to investigate the effects of group assertiveness training on specific cognitive variables. These investigations found support for a reduction in self-reported anxiety, increased self-acceptance (99), and increased general self-esteem (14) following assertiveness training. The Burtle, Whitlock, and
Franks study (14) was a pilot study rather than true experimental research, thus only one experimental study has formally investigated the effects of assertiveness training on various research.

Generalization of Results

There are two basic differing views concerning the nature of assertiveness, both of which lead to a different expectancy regarding the generalizability of assertiveness training effects. Salter (115) conceptualized assertiveness (excitation) as a global, pervasive trait. Thus, he expected that increased assertiveness in specific interpersonal situations would naturally generalize to other situations. On the other hand, Wolpe (131, 132), Wolpe and Lazarus (133), and Lazarus (74, 76) have pointed out that assertive behavior is situation specific and have predicted little generalization of training. Wolpe and Lazarus strongly recommend that clients learn to assert themselves in the specific areas in which they experience difficulty. The issues of generalization of training has received little attention in the research literature (54, 69).

Lawrence (72) found that training in expressing disagreement did generalize to untrained disagreement situations. However, training did not significantly increase subjects' ability to express agreement when appropriate.

McFall and Marston (86) reported that positive transfer of training did occur to new stimulus situations as measured on a behavioral role-playing test employing situations on which subjects had received no previous specific training. The
Researchers also found some evidence of generalization of assertiveness training to "real-life" situations on a telephone follow-up assessment. However, the significance of their results have been questioned by Kirschner (69).

McFall and Lillesand (85) found that the results of assertiveness training focusing on refusal situations generalized to untrained refusal situations. However, no treatment effects were observed to generalize to non-refusal situations either in the laboratory (behavioral role-playing test) or "real-life" (telephone follow-up). The authors report that the results of their research support the specificity of the treatment effects.

Hersen, Eisler, and Miller (55) found that assertiveness training did facilitate subjects' assertive performance in situations very similar to training situations. No evidence of generalization was obtained in an in vivo assertive situation even though it resembled the training situation. In addition, they found that the use of instructions specifically geared to facilitate generalization was ineffective.

Young, Rimm, and Kennedy (135) report meager evidence for transfer of training of untrained situations. Their findings support "the stimulus specific conception of assertiveness expressed by Wolpe and Lazarus (1966) (135, p. 319)."

Kazdin (66) found evidence of transfer of training within the laboratory setting to novel situations on a behavioral role-play test. However, his study provides no evidence for
generalization of treatment effects to situations outside of the treatment setting.

Kirschner (69) conducted a study designed to assess directly the generalization effects of a multifaceted assertiveness training program. He found that training effects transferred only to behavioral situations highly similar to the training situations employed. This generalization was not maintained for the three-week follow-up period. Furthermore, an attempt to facilitate generalizability by extensive training in additional areas of assertiveness other than those identified as difficult by the subjects proved ineffective.

In summary, the research cited here provides support for the specificity view of assertiveness. The implications are that in order for assertiveness training to be most effective, trainees must learn to be assertive in specific, personally relevant interpersonal situations.

Behavioral and Self-Report Correlates of Assertive Behavior

A large number of studies have dealt with techniques used to increase assertiveness; however, relatively little attention has been directed toward specifying the components of assertive behavior (37, 25) or describing the characteristics of low-assertive persons (52).

Eisler, Miller, and Hersen (37) administered a series of fourteen standard interpersonal situations to thirty hospitalized male psychiatric patients. Subjects were rated on nine behavioral components of assertiveness compiled from
a list of specific behaviors judged to be related to assertiveness by experienced clinicians. Subjects were dichotomized into high-assertive and low-assertive groups on the basis of rater judgments of overall assertiveness. High-assertive subjects were differentiated from low-assertive subjects on five specific behavioral measures. Those subjects rated as being assertive tended to respond to interpersonal conflict situations quickly and in a firm tone of voice with marked intonation. High-assertive subjects did not automatically accede to demands placed on them by others and were more likely to request that the partner in the interaction change his behavior. The authors reported that scores on the Wolpe-Lazarus Assertive Scale significantly differentiated high-assertive from low-assertive subjects.

In a validation study of the College Self-Expression Scale, a pencil-and-paper assertiveness questionnaire, Galassi, DeLo, Galassi, and Bastien (39) compared high and low scoring college student subjects. They found that high-assertive and moderate-assertive subjects were differentiated from low-assertive subjects on behavioral measures of eye contact and assertive content of verbal responses as well as subjectively experienced anxiety. The authors found no significant differences on a measure of response latency. This finding is consistent with the results of other studies of assertiveness training (42, 85, 86).
Galassi, Hollandsworth, Radecki, Gay, Howe, and Evans (43) found significant positive correlations between high scores on the College Self-Expression Scale and the Adjective Check List (ACL) scales. The authors describe the assertive person as expressive, spontaneous, self-confident, and able to influence and lead others. Significant negative correlations on various scales of the ACL indicated that non-assertive persons have an inadequate and negative self-concept, feel inferior, tend to be over solicitous of support from others, and experience excessive interpersonal anxiety.

Galassi and Galassi (40) correlated subjects' scores on their College Self-Expression Scale with scores made on the Buss-Durkee Inventory, a self-report inventory of aggression. For females, they found a significant positive relationship between the assertiveness scale and the verbal aggression subscale. They also found significant inverse relationships between the assertiveness scale scores and the subscale scores of irritability and resentment. The authors reported a curvilinear relationship between assertiveness and suspicion and resentment for males. Low-assertive males scored high on resentment and suspicion. As scores on assertiveness increased, scores on resentment and suspicion decreased.

Hartsook, Olch, and de Wolf (52) compared the personality characteristics of participants in a women's assertiveness training group with a control group of vocational counselees.
Scores on the Edwards Personal Preference Schedule suggest that college women seeking assertiveness training tend to be overly concerned with winning the approval of others and are moderately inhibited in expressing their emotions. The authors also report that in general these women are "integrated and autonomous."

Percell, Berwick, and Beigel (100) administered the Lawrence Interpersonal Behavior Test (a self-report assertive measure), the self-acceptance scale of the California Psychological Inventory, and the Taylor Manifest Anxiety Scale to one hundred outpatient psychiatric patients. Correlations among the various scales indicated that assertiveness is positively related to self-acceptance. The authors also reported that there was a significant positive relationship between the measures of assertiveness and the anxiety scale scores for women only. Percell et al. attribute this "surprising finding" to societal expectations regarding the inappropriateness of assertiveness for women.

Orenstein, Orenstein, and Carr (96) investigated the relationship between measures of assertiveness and anxiety. They found scores on the Rathus Assertiveness Schedule to be inversely related to a measure of trait anxiety for both men and women. They also reported a significant positive relationship between non-assertiveness scores and neuroticism scores suggesting that the application of assertiveness
training to neurotic disorders may be very appropriate. Assertiveness scores were also found to be inversely related to trait or generalized anxiety scores and especially strongly related to a measure of interpersonal fears. These findings support Wolpe's contention that assertiveness is inversely related to anxiety (132).

Bates and Zimmerman (10) developed a screening scale for assertiveness training. They found a relationship between "constriction" (non-assertiveness) and the neuroticism, fear, and introversion scales of the Eysenck Personality Inventory. Correlations with Adjective Check List (ACL) scales suggested that low-assertive subjects tend to be modest and shun attention. Other ACL scales that were found to be related to low assertiveness are dominance and autonomy (inversely) and deference and abasement.

Gay, Hollandsworth, and Galassi (45) developed the Adult Self-Expression Scale, a self-report measure of assertiveness in a broad range of situations. They found that high-assertive subjects described themselves in a more positive way on the Adjective Check List and reported being more spontaneous and self-confident than low-assertive subjects. High-assertive subjects tended to be more achievement oriented, more apt to assume leadership roles in groups and influence others in individual realtionships, highly motivated to seek the company of others, and tended to derive satisfaction from interpersonal
relationships. They also were inclined to be more attention seeking, independent, and open to new experiences than low-assertive subjects. Furthermore, high-assertive subjects were less likely to solicit emotional support from others, and to be self-critical and deferential in relationships with others. Measures of self-confidence and anxiety clearly differentiated low-assertive from high-assertive subjects.

In summary, research investigating the behavioral and self-report correlates of assertive behavior provides supportive evidence for the application of assertiveness training to socially inhibited, anxious individuals (132). There is also evidence to support the position taken in several clinical and research reports that assertiveness training involves teaching basic verbal and non-verbal interpersonal responses that have previously not been acquired (54).

Areas of Application of Assertiveness Training

Assertiveness training, originally designed as a method for treating patients with an "inhibitory personality" (Salter) or those who experience "unadaptive anxiety responses" (Wolpe) in interpersonal situations, has been extended to a wide variety of settings with a number of different treatment populations (18).

In the earliest reported study on assertiveness training in the research literature, Chittenden (15) reported using symbolic modeling to increase assertive behavior with
hyperaggressive children. Gittelman (48) used group assertiveness training to modify aggressive behavior with adolescent boys. Rathus and Ruppert (107) described training procedures designed for secondary school students. Other areas of applications of assertiveness training to children are found in studies by Keat (68) with a disturbed eleven-year-old boy with severe interpersonal deficits; Johnson, Tyler, Thompson, and Jones (64) with speech-anxious middle school students; Patterson (98) in a case study of a dependent child with chronic crying spells; Clement (16) with a seven-year-old sleepwalker; Ross, Ross, and Evans (112) with an extremely withdrawn six-year-old boy; and O'Conner (95) with severely socially withdrawn nursery school children.

One of the most frequently researched populations reported in the assertiveness training literature is that of college students. The following authors have applied assertiveness training on an individual basis to unassertive college students: Kazdin (66, 67); Aiduk and Karoly (1); Gormally, Hill, Otis, and Rainey (50); Young, Rimm, and Kennedy (135); Arnold, Wenrich, and Dawley (6); McFall and Twentyman (87); Snyder (123); Rathus (106); Perkins (101); Holmes and Horan (58); Loo (80); McFall and Lillesand (85); McFall and Marston (86); Lawrence (72); Galassi and Galassi (41); Kirschner (69); and Friedman (38). Other researchers have reported the application of assertiveness training to unassertive college students using
a group format. These researchers include Galassi, Kostka, and Galassi (44); Galassi, Galassi, and Litz (42); Wasserman, McFarthy, and Ferree (128); Sansbury (116); Rimm, Hill, Brown, and Stuart (110); Rathus and Ruppert (107); Rathus (105); Roszell (113); Hedquist and Weinhold (53); and Hartsook, Olch, and de Wolf (52).

In addition to use in college populations, assertiveness training procedures have been applied to the aged (17) and other groups of "normal" adults including school administrators (121) and mental health paraprofessionals (34, 35, 128) and professionals (33). Assertiveness training has recently been used as a method for teaching job interviewing skills (88).

Assertiveness training has been applied as a therapeutic treatment technique to a wide variety of clinical settings and cases. It has been used with hospitalized psychiatric patients (13, 14, 20, 22, 23, 24, 32, 51, 56, 78, 79, 83, 93, 119, 129) as well as in outpatient psychiatric settings (7, 9, 12, 100). Clinical case studies have been reported incorporating the use of assertiveness training in treating depression (103, 117), habitual crying spells (109), chronic passivity (65), alcoholism (84), snake phobia (111), child abuse (104), Gilles de la Tourette's syndrome (125), migraine headaches (90), violently aggressive behavior (36, 127), and the inappropriate expression of anger (23, 57). Other areas of application include marriage counseling (2, 26, 29, 82), sexual dysfunctions (27, 49, 94, 130), and sexual deviations (21, 89, 108, 124).
In summary, this section documents the phenomenal growth in the area of applications of assertiveness training. It has been applied in a variety of clinical as well as non-clinical research settings with subjects ranging from hospitalized chronic psychiatric patients to normal college students. Assertiveness training has been practiced both individually and in groups as the primary behavioral intervention strategy or in combination with other techniques. The assertiveness training literature has experienced a rapid period of growth from its meager beginnings as a chapter in Wolpe and Lazarus' book (133) to its present state.
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CHAPTER III

METHODS AND PROCEDURES

The purpose of this investigation was to determine whether certain cognitive and attitudinal changes covaried with changes in behavior as a result of group assertiveness training. This chapter provides a description of the methods and procedures used to achieve the purposes of the study.

Description of Subjects

Subjects for the investigation were thirty-two graduate and undergraduate students attending North Texas State University during both summer semesters of 1976. Subjects were solicited from campus newspaper and radio advertisements as well as posters placed in every classroom building on campus offering free assertiveness training. Participation in the study was strictly voluntary with no inducements offered to participants other than free training.

Forty-seven students responded to the advertisements; five of these respondents were eliminated from participation in the study because of time conflicts. The remaining forty-two volunteers were randomly assigned to either the experimental or placebo group. Thirty-two subjects completed the eight weeks of training. The remaining ten subjects, five from
each group dropped out of the experiment during the course of training. None of the thirty-two subjects had previous assertiveness training.

The experimental group met on Wednesday evening from five-thirty to seven o'clock for eight consecutive weeks. This group consisted of ten females and six males with an average age of 28.37 years. The youngest subject was twenty-two years old and the oldest was forty-five years old.

The placebo group met on Thursday evening from six o'clock to seven-thirty for eight consecutive weeks. This group consisted of eleven females and five males with an average age of 29.06 years. The youngest subject in the placebo group was twenty-one years old and the oldest was fifty years old.

Instruments

The Tennessee Self-Concept Scale (Counseling Form) (6) is a self-administered self-report scale consisting of 100 self-descriptive statements. The subject portrays a picture of himself by rating each statement on a five-point scale ranging from completely false (one) to completely true (five). The scale provides an overall self-esteem score plus a complex self-concept profile (6, p. 2). Robinson and Shaver (17, p. 68) report test-retest reliability of .92 for the total positive score which reflects the overall level of self-esteem. Test-retest reliability of various subscales range from .70 to .90.
Reported convergent validity data include a correlation of the scale of -.61 with the Butler-Haigh Q-sort, a measure of the discrepancy between self and ideal self (11) and a correlation of -.70 with the Taylor Manifest Anxiety Scale (6, p. 27).

Berger's Expressed Acceptance of Self Scale (3) is a self-administered thirty-six-item scale which taps self-acceptance, especially in social contexts (4). Each item is rated on a five-point scale ranging from not true at all (one) to true (five). Robinson and Shaver report Spearman-Brown estimates of reliability to be .75 or above on several samples (17, p. 107). Omwake found a correlation of .73 between this scale and the Phillips Self-Acceptance Scale. She also obtained a correlation of .49 between this scale and the Bills self-acceptance scales (14).

The Adjective Check List (7) is a list of 300 adjectives which is used to obtain several aspects of self-esteem. The person taking this test checks those adjectives which are considered to be self-descriptive. This instrument was chosen for use in this study because it yields an index of self-confidence. Test-retest reliability is reported in the manual for the self-confidence scale to range from .63 to .73 (7, p. 16). Convergent validity data provided by Spitzer et al. (21) reports correlations between this scale and the Bills self-acceptance scales to range from .40 to .50.
Rotter's Internal-External Locus of Control Scale (18) provides a measure of the degree to which the individual perceives that reward is contingent upon his own behavior or attributes versus the degree to which he feels the reward is controlled by forces outside himself. The scale consists of twenty-three question pairs, and uses a forced-choice format, plus six filler questions. Subjects indicate which one of the question pair statements they believe to be true. Rotter reports an internal consistency coefficient (Kuder-Richardson) of .70. He also reports test-retest reliabilities ranging from .55 to .72. Discriminant validity data provided by Rotter reports correlations between this scale and the Marlow-Crowne Social Desirability Scale range from -.07 to -.35 (18).

The Taylor Manifest Anxiety Scale (22) yields a measure of internal anxiety or emotionality. The scale consists of fifty statements which the subject responds to as either true or false. Taylor reports test-retest reliability of .80 (22). Haywood and Spielberger (8) found a consistent relationship between scores on this scale and measures on palmar sweat in terms of identifying high-anxious and low-anxious subjects. In a validation study, Hoyt and Magoon (9) found "highly reliable" differences between scores made on this scale by subjects rated as high-anxious and low-anxious based on counselor judgment. The researchers reported a validity coefficient of .47.
The Rathus Assertiveness Schedule (16) is a self-report measure of assertiveness or social boldness. The scale consists of thirty items which the subject rates as being from very characteristic of self (plus three) to very uncharacteristic of self (minus three). Rathus reports test-retest reliability of subjects' pretest and posttest scores of .78. A measure of internal consistency (split-half reliability) yielded a correlation of .77. Validity data were obtained by Rathus by correlating scores on the scale with raters' impressions of respondents' behavior. A correlation of .70 between scale scores and behavior was found (16).

The Behavioral Assertiveness Assessment Procedure (Appendix A) is a test of assertive behavior in which the subject responds to nine standard interpersonal situations, and his performance is rated by judges according to preestablished criteria (2). This experimental instrument is a modification of the Behavioral Role-Play Assessment Test (12). The differences between the two instruments are in the instructions given the subject and the scoring procedure. In the Behavioral Assertiveness Assessment Procedure subjects are instructed to face a one-way mirror and respond to each of the taped situations exactly as they would in a real interpersonal situation. The subject's actual behavior is rated by judges behind the mirror. The in vivo rating criteria include more than simply a rating of the audiotaped verbal response as does the Behavioral Role-Play Assessment. Included
in the modified version are: conciseness of statement, voice intonation, voice inflection, appropriate affect, and non-verbal gestures (2, 19). Arnold et al. (2) report pretest and posttest interrater reliabilities of .86 and .78, respectively.

Procedure for Collecting Data

During the week immediately prior to the first meeting of the training groups, all subjects were required to participate in a preassessment interview with the experimenter and to complete the pretreatment assessment package. The interview and pretesting were done at the North Texas State University Counseling and Testing Center. During the interview subjects were given a brief description of assertiveness training rationale, i.e., an explanation that the training is designed for men and women who are interested in standing up for personal rights and expressing feelings, thoughts, and beliefs in direct, honest, and appropriate ways which respect the rights of other people. All subjects were informed that they were participating in a research project and that their participation was strictly voluntary. Each of the six points of the Form 2 Use of Human Subjects Informed Consent as set forth by the Use of Human Subjects Committee at North Texas State University (Appendix B) was explained to the subject and any relevant questions answered before subjects signed the informed consent form. Subjects were then given a pretest packet consisting of a biographical data sheet and the following self-report
inventories: the Tennessee Self-Concept Scale (Counseling Form), the Expressed Acceptance of Self Scale, the Adjective Check List, the Internal-External Locus of Control Scale, the Taylor Manifest Anxiety Scale, and the Rathus Assertiveness Schedule. This packet was completed in the group testing room at the Counseling and Testing Center.

The self-report posttreatment data were gathered between the seventh and eighth week of training. Subjects came to the Counseling and Testing Center and completed a packet identical to the pretreatment assessment packet. This packet was filled out in the group testing room at the Center.

The Behavioral Assertiveness Assessment Procedure posttreatment data were gathered during the final meeting of both groups. Subjects were called out of the group session individually and administered the BAAP. Subjects were seated in a classroom facing a large one-way mirror. A tape recorder which contained the BAAP tape was setting on a desk close by to the left of the subject. Each subject was told that he would hear a taped series of nine moderate conflict interpersonal situations to which the subject was to respond exactly as he would in a real interpersonal situation. After seating the subject and giving brief instructions, the experimenter turned on the recorder and left the room. The subject then heard standardized instructions plus an example of how he was to respond (Appendix A). Subjects' responses to nine
interpersonal situations were rated in vivo by two blind raters, seated behind the one-way mirror, who were unaware of which group they were rating. One subject from each group was unavailable for the BAAP.

Description of Raters

The two raters, a male and a female, were both advanced doctoral students in Counselor Education. Neither rater was involved in training the groups in any manner and neither was familiar with the specific purpose of the investigation. Raters did not know which group they were rating. During the week immediately prior to the actual rating, the raters were exposed to three hours of training concerning how to rate the BAAP conducted by the experimenter. Each rater was provided with a copy of the BAAP, a combination rating sheet and rating manual (13), and a BAAP Rating Manual Supplement (2; Appendix A). The rating material was discussed in detail and then the first of three simulated rating sessions took place. First, the experimenter responded to each taped situation with predetermined, previously-rated responses, and then the raters independently rated the response. After rating each response, the raters discussed their ratings and received feedback from the experimenter. An additional two trials were conducted to obtain a previously-established training criterion of less than 10 per cent error between the total rating scores. On trial two, the experimenter responded to
the nine taped situations with responses he had previously rated and then the raters independently judged his response. The resulting total rating scores for the two raters were identical. In addition, both raters' total scores were identical to that of the experimenter. In the next phase of training, trial three, a female associate of the experimenter's responded to the nine taped situations with responses previously rated by the experimenter. Again the raters independently rated her responses. The total rating scores of the two raters differed by two points, well within the 10 per cent error range. One rater's total rating score was identical to the experimenter's total score. Discrepancies between ratings were discussed and the entire rating procedure was reviewed.

Description of Trainers

Both the experimental group and the placebo group were co-trained by the same two trainers. One of the trainers, a female, was a master's level counselor with two years experience as an assertiveness training group leader. The other trainer, a male, was an advanced doctoral student from the Counselor Education program at North Texas State University. He had approximately three years experience in behavioral counseling including individual assertiveness training.

Description of Treatment Conditions

At the initial group meeting, subjects in both the experimental and placebo groups were instructed not to discuss
their experiences in their respective groups with subjects in the other group. They were also instructed not to read any of the currently popular books on assertiveness training until after the completion of the experiment. Furthermore, subjects were informed that following the completion of the study, all training procedures would be made available to any subject expressing a desire for further training. Four subjects from the placebo group requested further training and received two additional sessions following the study by the experimenter incorporating procedures used in the experimental group.

In order to ensure that the placebo group was not exposed to experimental conditions, each of the sessions of both groups were tape recorded. The experimenter reviewed the taped group sessions. No contamination of experimental conditions was observed by the experimenter.

**Experimental Condition**

Subjects in the experimental group received a combination of the following assertiveness training component techniques identified in previous research: behavioral rehearsal, covert rehearsal, coaching (12, 13), and modeling plus instructions (5).

**Session One.**—An introduction to the basic concepts of assertiveness was presented in lecture form by the trainers. Included in the lecture was a definition of assertive behavior.
and a brief introduction to the concept of human rights (1). Following a brief discussion, subjects engaged in the "Yes-No exercise" (10, p. 76), a structured exercise in which subjects in dyads practiced saying yes and no while varying the level of loudness of their voices. The purpose of this exercise was to demonstrate to the subjects the wide range of volume levels available to them. A brief discussion followed in which subjects explored their reactions to the exercise.

**Session Two.**--A lecture was presented which clearly defined and compared the three types of interpersonal behavior: aggression, non-assertion, and assertion (1). The focus of the lecture was on how to recognize and distinguish among these three types of behaviors. Following the lecture and discussion, subjects were divided into groups of three. Each group was presented with a structured stimulus situation, e.g.,

You have just been served a steak which you ordered to be cooked medium rare. You cut into the steak and discover it is well done. Your response is . . . .

Each group was instructed to generate three responses, each representing one of the three kinds of behavior previously discussed. Each group then role-played its situations and responses in front of the whole group. Each response was identified by the group as being assertive, non-assertive, or aggressive. Each presentation was followed by discussion with emphasis on how to identify each type of behavior. Following this exercise, subjects were given deep muscle relaxation
training. Near the end of the relaxation exercise, subjects were trained in the procedure of covert rehearsal, i.e., while relaxed they vividly imagined themselves being assertive in a personally meaningful situation.

**Session Three.**--A lecture was presented on the non-verbal components of assertive behavior (19). Following the lecture and brief discussion, trainers modeled two interpersonal situations in which they demonstrated non-verbal assertive behaviors. Subjects were then divided into groups of threes and given stimulus cards containing structured interpersonal situations. The groups were instructed to demonstrate an assertive response to the situation focusing on specific non-verbal behaviors. Each group's performance was critiqued by trainers and other group members, and a general discussion followed.

**Session Four.**--A brief lecture was presented concerning the expression of positive feelings as appropriate assertive behavior. Subjects practiced giving and receiving compliments assertively. A discussion followed which explored subjects' reactions to giving and receiving positive comments. Subjects were then given a list of "I-statements" which they practiced saying to each other (15, pp. 111-113). A discussion followed in which subjects explored their positive and negative reactions to using specific "I-statements."
Session Five.--A lecture was presented on how to express negative emotions assertively. Trainers modeled five situations in which anger was assertively expressed. A brief discussion followed. Subjects were then given the opportunity to rehearse behaviorally a personally meaningful situation involving the expression of negative feelings. Feedback, instructions, and coaching were provided by the trainers and group members. Trainers then modeled the techniques of fogging (20, p. 97) and broken record (20, p. 68). These two techniques are used to deal with manipulative and persistent persons. Following trainer modeling of these skills, subjects rehearsed them in groups of three, with one person serving as the assertor, one as the recipient, and one as a coach. Trainers supervised and provided feedback on subjects' use of these skills. Subjects then were given a relaxation training exercise and engaged in covert rehearsal.

Session Six.--A brief lecture was presented concerning how to handle criticism assertively. Trainers modeled interpersonal situations in which criticism was given and received assertively. Subjects then behaviorally rehearsed personally meaningful criticism-related interpersonal situations. Instructions, feedback, and coaching were provided by trainers and other group members. The assertive skill of negative
assertion (20, p. 107) was introduced and modeled by the trainers. Subjects then practiced this skill in small groups of three.

Session even.--A brief lecture was presented focusing on being assertive in close interpersonal relationships. Trainers modeled the assertive skill of workable compromise (20, p. 78). Subjects behaviorally rehearsed the skill of workable compromise. The remainder of the session was used for behavioral rehearsal of various interpersonal situations identified as personally relevant by the subjects.

Session ight.--A general overview of the basic concepts of assertiveness was presented. Questions were answered by trainers. Subjects engaged in behavioral rehearsal of situations in which they desired to be more assertive. Subjects were called out of the group session individually for the behavioral assertiveness measure. A brief discussion followed in which subjects evaluated their experience.

Placebo Condition

Essentially the placebo group received the same lectures, although somewhat expanded, and information as the experimental group. Trainers encouraged discussion and exploration of feelings by placebo group members. In contrast to the experimental group, the placebo group was not exposed to the experimental conditions of behavioral rehearsal, covert rehearsal, coaching, and modeling plus instructions.
Session one.--A lecture describing the basic concepts of assertiveness was presented by the trainers (1). A long, detailed lecture and discussion on the concept of human rights followed. Subjects discussed how the abstract concept of human rights could be translated into concrete rights in current interpersonal interactions.

Session two.--A lecture which defined assertion, aggression, and non-assertion was presented by the trainers. These three types of behaviors were compared and contrasted based on the concept of human rights (1). A discussion followed in which subjects' questions and comments were encouraged.

Session three.--A lecture was presented by the trainers which went into great detail describing the non-verbal components of assertiveness (19). A discussion and question-and-answer period followed.

Session four.--Subjects heard a lecture on the value of communication between people focusing on expressing positive emotions. A discussion period followed. Subjects then engaged in a deep muscle relaxation training exercise.

Session five.--A lecture was presented concerning the expression of negative emotions. A discussion period followed in which subjects explored their feelings associated with expressing negative emotions, such as anger or disapproval.
Session six.--Subjects heard a lecture on how to handle criticism assertively. General guidelines were presented. Subjects then discussed and explored their emotional reactions to giving and receiving criticism. Subjects then engaged in a deep muscle relaxation exercise.

Session seven.--A lecture was presented that focused on the value of open, honest communication in intimate interpersonal situations. A discussion period followed during which subjects explored their feelings regarding being assertive with intimates.

Session eight.--A brief lecture on the advantages of being assertive was presented. A general discussion followed during which subjects asked questions and evaluated their group training experience. Subjects were called out of the session individually for the behavioral assessment measure.

Treatment of Data

The research hypotheses were converted to the null hypotheses for statistical treatment. Data obtained from pretests and posttests on all self-report measures (for Hypotheses II through VII) were treated statistically for significance of difference between group means using analysis of covariance (23). The covariate measure in each analysis was the pretest score for each of the six measures. The F-ratio was computed for the comparison of mean scores for
all six measures for the experimental group and the placebo group. Data obtained on the behavioral measure (Hypothesis I) were treated statistically for significance of difference between means using a one-tailed \( t \)-test for independent samples (23). Following examination of the analysis of covariance data results, a one-tailed \( t \)-test for correlated means (23) was applied to each pair of the self-report pretest and posttest means of combined groups in order to test for significance of difference between means. A significance level of .05 was required for rejection of the null hypothesis for all computations. All statistical computations were completed at the Computing Center of North Texas State University using an IBM 360 Model 50 computer.
CHAPTER BIBLIOGRAPHY


CHAPTER IV

RESULTS AND DISCUSSION

The purpose of this investigation was to determine whether certain cognitive and attitudinal changes covaried with changes in behavior as a result of group assertiveness training. The findings of this investigation are presented, analyzed, and discussed in this chapter. The data are examined as they relate to each hypothesis. Additional statistical data are also presented.

Results

For testing purposes the research hypotheses stated in Chapter I were restated in the null form. Null Hypothesis I was: Following the training period, subjects in the experimental group will not exhibit significantly different levels of assertive behavior, as measured by the Behavioral Assertiveness Assessment Procedure (BAAP), than subjects in the placebo group.

Interrater reliability on the BAAP ratings was determined based on the average ratings obtained for each subject by each rater. The BAAP scoring procedure is based on a five-point rating scale ranging from passive (one) to assertive (five). Each subject's performance was rated from one to five on each
of nine interpersonal conflict situations. The total score was then divided by nine to yield an average score for each subject. The product-moment correlation between raters was .985.

The means and standard deviations of the experimental group and placebo group average rating scores on the BAAP are shown in Table I. This table shows that the experimental group mean rating was 3.64 and the placebo group mean rating was 3.32. The placebo group BAAP rating standard deviation was 6.55. The experimental group BAAP rating standard deviation was 4.59.

The results of the t-test comparing the two groups on ratings of assertive behavior are presented in Table II. The obtained t-value of 1.54 shown in this table did not attain the .05 level of significance; therefore, Null Hypothesis I was retained.

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Means</th>
<th>Standard Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>15</td>
<td>3.64</td>
<td>4.59</td>
</tr>
<tr>
<td>Placebo</td>
<td>15</td>
<td>3.32</td>
<td>6.55</td>
</tr>
</tbody>
</table>
**TABLE II**

**t-TEST DATA FOR BEHAVIORAL ASSERTIVENESS ASSESSMENT PROCEDURE RATINGS FOLLOWING TREATMENT**

<table>
<thead>
<tr>
<th>Group</th>
<th>Means</th>
<th>Mean Difference</th>
<th>df</th>
<th>t-Value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>3.64</td>
<td>.32</td>
<td>28</td>
<td>1.54</td>
<td>0.1334</td>
</tr>
<tr>
<td>Placebo</td>
<td>3.32</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis II was: Following the training period, subjects in the experimental group will not exhibit significantly different levels of self-reported assertiveness, as measured by the Rathus Assertiveness Schedule (RAS), than subjects in the placebo groups.

Table III contains the means, adjusted means, and standard deviations for both groups' scores on the RAS. The

**TABLE III**

**MEANS AND STANDARD DEVIATIONS FOR RATHUS ASSERTIVENESS SCHEDULE SCORES**

<table>
<thead>
<tr>
<th>Group</th>
<th>N</th>
<th>Pre-test Means</th>
<th>Post-test Means</th>
<th>Adjusted Means</th>
<th>Standard Deviations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Pre-test</td>
<td>Post-test</td>
<td></td>
<td>Pre-test</td>
</tr>
<tr>
<td>Experimental</td>
<td>16</td>
<td>-5.1875</td>
<td>31.0000</td>
<td>29.5914</td>
<td>23.8389</td>
</tr>
<tr>
<td>Placebo</td>
<td>16</td>
<td>-10.1875</td>
<td>25.3750</td>
<td>26.7836</td>
<td>27.9051</td>
</tr>
</tbody>
</table>
experimental group pretest mean RAS score was -5.1875, with a posttest RAS mean score of 31.000. The placebo group earned a pretest RAS mean score of -10.1875 and a posttest RAS mean score of 25.3750. Pretest and posttest RAS score standard deviations of the experimental group were 23.8389 and 26.7656, respectively. The placebo group pretest and posttest RAS score standard deviations were 27.9051 and 30.0818. The adjusted mean of the experimental group scores was 29.5914. The placebo group scores adjusted mean was 26.7836.

The results of the analysis of covariance for the scores of the two groups on the RAS are presented in Table IV. The F-value of 0.1011 did not attain the .05 level of significance; therefore, Null Hypothesis II was retained.

### TABLE IV

**ANALYSIS OF COVARIANCE DATA FOR SCORES ON THE RATHUS ASSERTIVENESS SCHEDULE**

<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>62.4531</td>
<td>1</td>
<td>62.4531</td>
<td>0.1011</td>
<td>0.7527</td>
</tr>
<tr>
<td>Within</td>
<td>17905.5430</td>
<td>29</td>
<td>617.4324</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17967.9961</td>
<td>30</td>
<td>. . .</td>
<td>. .</td>
<td>. .</td>
</tr>
</tbody>
</table>

Null Hypothesis III was: Following the training period, subjects in the experimental group will not exhibit significantly
different self-reported levels of anxiety, as measured by the Taylor Manifest Anxiety Scale (TMAS), than subjects in the placebo group.

The means, adjusted means, and standard deviations for both groups' scores on the TMAS are presented in Table V.

**TABLE V**
MEANS AND STANDARD DEVIATIONS FOR TAYLOR MANIFEST ANXIETY SCALE SCORES

<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>Experimental</td>
<td>16</td>
<td>14.9375</td>
<td>8.8750</td>
<td>9.5768</td>
<td>7.0187</td>
<td>5.6554</td>
</tr>
</tbody>
</table>

The pretest mean for the experimental group scores on the TMAS was 14.9375, with a posttest TMAS mean of 8.8750. The placebo group TMAS score mean on the pretest was 18.1875. The posttest TMAS score mean for the placebo group was 13.3750. The adjusted mean of the experimental group scores was 9.5768. The placebo group adjusted mean score was 12.6732. The standard deviations of the experimental group pretest and posttest TMAS scores were 7.0187 and 5.6554, respectively. The pretest and posttest TMAS score standard deviations of the placebo group were 9.4673 and 6.5205.
The analysis of covariance for the two groups on TMAS scores is presented in Table VI. The obtained F-value of 2.9326 failed to attain significance at the .05 level; therefore, Null Hypothesis III was retained.

TABLE VI
ANALYSIS OF COVARIANCE DATA FOR SCORES ON THE TAYLOR MANIFEST ANXIETY 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>73.7126</td>
<td>1</td>
<td>73.7126</td>
<td>2.9326</td>
<td>0.0975</td>
</tr>
<tr>
<td>Within</td>
<td>728.9238</td>
<td>29</td>
<td>25.1353</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>802.6365</td>
<td>30</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Null Hypothesis IV was: Following the training period, subjects in the experimental group will not exhibit significantly different levels of self-reported internal locus of control, as measured by the Internal-External Locus of Control Scale (I-E), than subjects in the placebo group.

The means, adjusted means, and standard deviations for both groups' scores on the I-E are presented in Table VII. The mean of the experimental group pretest I-E score was 7.8750, with a posttest I-E mean score of 5.6250. The placebo group obtained a pretest I-E mean score of 8.9375. The placebo group's posttest I-E mean score was 6.5625. The adjusted mean score of the experimental group was 5.9602. The placebo group's
TABLE VII
MEANS AND STANDARD DEVIATIONS FOR INTERNAL-EXTERNAL LOCUS OF CONTROL SCALE SCORES

<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>Experimental</td>
<td>16</td>
<td>7.8750</td>
<td>5.6250</td>
<td>5.9602</td>
<td>4.2564</td>
<td>3.9979</td>
</tr>
<tr>
<td>Placebo</td>
<td>16</td>
<td>8.9375</td>
<td>6.5625</td>
<td>6.2273</td>
<td>4.7254</td>
<td>4.7042</td>
</tr>
</tbody>
</table>

adjusted mean score was 6.2273. The standard deviations of the pretest and posttest I-E scores obtained by the experimental group were 4.2564 and 3.9979, respectively. The placebo group's pretest and posttest I-E score standard deviations were 4.7254 and 4.7042.

The results of the analysis of covariance of the I-E scores of the two groups are presented in Table VIII. The obtained F-value of 0.0495 was not significant at the .05 level. Null Hypothesis IV was retained.

Null Hypothesis V was: Following the training period, the subjects in the experimental group will not exhibit significantly different levels of self-acceptance, as measured by the Expressed Acceptance of Self Scale (SA), than subjects in the placebo group.
TABLE VIII
ANALYSIS OF COVARIANCE DATA FOR SCORES ON THE INTERNAL-EXTERNAL LOCUS OF CONTROL 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>0.5623</td>
<td>1</td>
<td>0.5623</td>
<td>0.0494</td>
<td>0.8257</td>
</tr>
<tr>
<td>Within</td>
<td>330.1372</td>
<td>29</td>
<td>11.3840</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>330.6995</td>
<td>30</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
</tr>
</tbody>
</table>

Table IX shows the means, adjusted means, and standard deviations for both groups' scores on the SA. As shown in Table IX, the experimental group pretest SA mean score was 128.6250, the posttest SA mean score 152.3125. The mean of the placebo group pretest SA score was 118.3125. The placebo group posttest SA mean score was 143.6875. The experimental group's
adjusted mean score was 150.1468. The placebo group's adjusted mean score was 145.8532. The standard deviations of the experimental group's pretest and posttest SA scores were 21.6606 and 21.3095, respectively. The placebo group pretest and posttest SA score standard deviations were 26.1476 and 16.1646.

The analysis of covariance data for the two groups' scores on the SA are presented in Table X. The F-ratio of 0.5308 was not significant at the .05 level; therefore, Null Hypothesis V was retained.

Table X

<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>140.5625</td>
<td>1</td>
<td>140.5625</td>
<td>0.5308</td>
<td>0.4721</td>
</tr>
<tr>
<td>Within</td>
<td>7680.1055</td>
<td>29</td>
<td>264.8311</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>7820.6680</td>
<td>30</td>
<td>. . .</td>
<td>. . .</td>
<td>. . .</td>
</tr>
</tbody>
</table>

Null Hypothesis was: Following the training period, subjects in the experimental group will not exhibit significantly different levels of self-esteem, as measured by the total positive scores on the Tennessee Self-Concept Scale (TSCS), than subjects in the placebo group.
The means, adjusted means, and standard deviations for both groups' total positive scores on the TSCS are presented in Table XI. Upon examination of Table XI, it can be seen that the experimental group pretest TSCS mean score was 336.0000, while the posttest TSCS mean score was 366.0625. The placebo group pretest and posttest TSCS mean scores were 321.2500 and 356.5000, respectively. The experimental group's adjusted mean score was 361.7930, while that of the placebo group was 360.7668. The standard deviations of the experimental group TSCS pretest and posttest scores were 35.3930 and 33.1773, respectively. The placebo group's TSCS pretest and posttest score standard deviations were 36.9134 and 30.7007.

The analysis of covariance data for the two groups' total positive scores on the TSCS are presented in Table XII. The

<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>Experimental</td>
<td>16</td>
<td>336.0000</td>
<td>366.0625</td>
<td>361.7930</td>
<td>35.3930</td>
<td>33.1773</td>
</tr>
<tr>
<td>Placebo</td>
<td>16</td>
<td>321.2500</td>
<td>356.5000</td>
<td>360.7668</td>
<td>36.9134</td>
<td>30.7007</td>
</tr>
</tbody>
</table>
TABLE XII
ANALYSIS OF COVARIANCE DATA FOR TOTAL POSITIVE SCORES ON THE TENNESSEE SELF-CONCEPT 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>8.1015</td>
<td>1</td>
<td>8.1015</td>
<td>0.0134</td>
<td>0.9086</td>
</tr>
<tr>
<td>Within</td>
<td>17516.9766</td>
<td>29</td>
<td>604.0334</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>17525.0781</td>
<td>30</td>
<td>.</td>
<td>.</td>
<td>.</td>
</tr>
</tbody>
</table>

F-ratio of 0.0134, shown in Table XII, was not significant at the .05 level. Null Hypothesis VI was retained.

Null Hypothesis VII was: Following the training period, subjects in the experimental group will not exhibit significantly different levels of self-confidence as measured by the Adjective Check List (ACL) self-confidence scale.

Means, adjusted means, and standard deviations for both groups' scores on the ACL self-confidence scale are presented in Table XIII. The experimental group pretest ACL mean score was 7.0000. The posttest ACL mean score for the experimental group was 10.9375. The mean of the placebo group's pretest ACL scores was 8.0625, their posttest ACL score mean 11.0625. The adjusted mean of the experimental group was 11.2609, while that of the placebo group was 10.7391. The experimental group pretest and posttest ACL score standard deviations were 5.1251
TABLE XIII
MEANS AND STANDARD DEVIATIONS FOR ADJECTIVE CHECK LIST SELF-CONFIDENCE SCALE SCORES

<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</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental</td>
<td>16</td>
<td>7.0000</td>
<td>10.9375</td>
</tr>
<tr>
<td>Placebo</td>
<td>16</td>
<td>8.0625</td>
<td>11.0625</td>
</tr>
</tbody>
</table>

and 4.9862, respectively. The placebo group pretest and post-test ACL score standard deviations were 6.0934 and 5.6151.

The analysis of covariance data for both group's scores on the self-confidence scale of the ACL are presented in Table XIV. The F-ratio of 0.1268 did not attain significance at the .05 level. Null Hypothesis VII was retained.

TABLE XIV
ANALYSIS OF COVARIANCE DATA FOR ADJECTIVE CHECK LIST SELF-CONFIDENCE SCALE SCORES

<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>2.1582</td>
<td>1</td>
<td>2.1582</td>
<td>0.1268</td>
<td>0.7243</td>
</tr>
<tr>
<td>Within</td>
<td>493.4138</td>
<td>29</td>
<td>17.0143</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>495.5720</td>
<td>30</td>
<td>. . . .</td>
<td>. . . .</td>
<td>. . . .</td>
</tr>
</tbody>
</table>
The analysis of covariance data clearly indicate that there were no significant differences between the experimental group and the placebo group on any of the six cognitive variable self-report measures (Tables IV, VI, VIII, X, XII, and XIV). Examination of the means of the pretest and posttest scores (Tables III, V, VII, IX, XI, and XIII) revealed increases for both groups on each of the six measures in the direction predicted for the experimental group. In order to ascertain the statistical significance of these differences in means, the data from the combined groups pretest scores, and the combined groups posttest scores on each self-report variable were treated statistically using a one-tailed $t$-test for correlated means. The $t$-test data obtained on the pretest and posttest self-report score means for the combined groups are presented in Table XV.

Upon examination of the $t$-test data presented in Table XV, it can be clearly be seen that both groups exhibited a significant change in self-report score means from pretest to posttest. On each variable, these changes were in the direction predicted for the experimental group.

Discussion

Hypothesis I, which predicted that the experimental group subjects would exhibit higher levels of assertive behavior than placebo group subjects following training, was rejected. No significant difference was found between the groups on the
TABLE XV

T-TEST DATA OBTAINED ON THE PRETEST AND POSTTEST SELF-REPORT SCORES MEANS FOR THE COMBINED GROUPS

<table>
<thead>
<tr>
<th>Measure</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Difference</th>
<th>t</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rathus Assertiveness Schedule</td>
<td>-7.6875</td>
<td>28.1875</td>
<td>35.8750</td>
<td>7.6599</td>
<td>0.0000</td>
</tr>
<tr>
<td>Taylor Manifest Anxiety Scale</td>
<td>16.5625</td>
<td>11.1250</td>
<td>5.4375</td>
<td>4.5546</td>
<td>0.0001</td>
</tr>
<tr>
<td>Internal-External Locus of Control</td>
<td>8.4063</td>
<td>6.0938</td>
<td>2.3125</td>
<td>3.5845</td>
<td>0.0011</td>
</tr>
<tr>
<td>Expressed Acceptance of Self Scale</td>
<td>123.4688</td>
<td>148.0000</td>
<td>24.5313</td>
<td>6.6449</td>
<td>0.0000</td>
</tr>
<tr>
<td>Tennessee Self-Concept Scale</td>
<td>328.6250</td>
<td>361.2813</td>
<td>32.6563</td>
<td>6.5446</td>
<td>0.0000</td>
</tr>
<tr>
<td>Adjective Check List</td>
<td>7.5313</td>
<td>11.0000</td>
<td>3.4688</td>
<td>4.2986</td>
<td>0.0002</td>
</tr>
</tbody>
</table>

posttreatment Behavioral Assertiveness Assessment Procedure ratings. Lawrence (12) reported similar findings using a different behavioral outcome measure. This finding is
inconsistent with previous research which employed the BAAP (2) or its parent instrument, the Behavioral Role-Play Assessment Test (13, 14, 15). However, the lack of consistency between this study and other research could have been due to instrument failure, the treatment manipulations employed in this study, or both.

The failure to find a significant difference between groups may have been a function of the Behavioral Assertiveness Assessment Procedure (BAAP) used to assess posttreatment assertive behavior. This instrument measures refusal behavior on eight of its nine items (Appendix A). Subjects in both groups were exposed to a global training approach involving a wide range of assertive behaviors; e.g., expressing both positive and negative feelings, giving and receiving criticism, and being assertive in intimate interpersonal relationships. The BAAP primarily samples a restricted class of assertive responses, refusal behaviors, which constitutes only a narrow segment of the training approach used in this study. In view of the research supporting the "situation specific" nature of assertiveness training (4, 5, 11, 13, 18, 20, 21), an instrument measuring performance in more general and/or training-related situations may have been a more appropriate dependent measure. Furthermore, the BAAP includes a sample response (Appendix A) which demonstrates how each subject is to respond. This sample response may have constituted a one-trial modeling
procedure and thus may have contaminated the placebo group with one of the experimental treatment components.

In addition, a major weakness of this study was that no measure of pretest to posttest behavioral change was available. The rationale for designing the study with a behavioral posttest measure only was based on the recommendation from previous research (6) that a behavioral pretest may constitute a brief exposure to the experimental condition of behavior rehearsal. It now appears that a more effective design would have incorporated unobtrusive in vivo pretreatment and posttreatment measures such as the one described by Aiduk and Karoly (1) in which the subject's behavior is rated in response to various situations posed by the experimenter. Subjects remain unaware that they are being rated and no behavioral rehearsal takes place in the form of responding to standardized simulated interpersonal situations under laboratory conditions.

This study differs from previous research on the effects of group assertiveness training which used a college student population and employed a placebo group (7, 17, 18). Rathus (17), in an investigation of assertiveness training in a group setting, used a placebo group which discussed the acquisition and elimination of fear. Hedquist and Weinhold (7) investigated the effects of group assertiveness training on the behavior of unassertive college students. The researchers compared a behavioral rehearsal group (assertiveness training)
with a placebo group which focused on problem solving. In contrast to those studies, the present investigation utilized a placebo group which received and discussed detailed assertiveness-related information. Percell (16) used an apparently similar placebo group with outpatient psychiatric patients in a study which was designed to investigate the effects of group assertiveness training on self-concept. The results of the present study are inconsistent with Percell's findings that the experimental group was rated as significantly more assertive than the placebo group following assertiveness training.

Failure to confirm Hypothesis I precluded investigation of whether cognitive variables covaried with changes in behavior as stated in the purpose of this study.

Hypothesis II, which predicted that subjects in the experimental group would show significantly greater gains in self-reported assertiveness following treatment than placebo subjects, was rejected. These findings are consistent with some previous research (2, 5, 9, 11, 13, 17, 21).

Hypothesis III, which predicted that experimental group subjects would report significantly larger decreases in levels of anxiety following treatment than placebo group subjects, was rejected. McFall and Marston (14) reported similar findings.
Hypothesis IV predicted that experimental group subjects would report a significantly greater shift toward internal control following treatment than placebo group subjects. This hypothesis was rejected. Previous research reported by Burtle, Whitlock, and Franks (3), Rimmy, Hill, Brown, and Stuart (18), and Snyder (19) supports these findings.

Hypothesis V stated that following treatment experimental group subjects would report higher levels of self-acceptance than placebo group subjects. Hypothesis V was rejected. These findings are inconsistent with previous research (16).

Hypothesis VI, which predicted that following treatment experimental group subjects would report significantly higher levels of self-esteem than placebo group subjects, was rejected. These findings are in contrast to those of a pilot study done without control or placebo groups (3).

Hypothesis VII predicted that experimental group subjects would report significantly higher levels of self-confidence than placebo group subjects following treatment. This hypothesis was rejected. No previous research has been reported which investigated this specific variable.

It is of interest to note that the lack of significant differences on each of the six cognitive variables was not due to the fact that any changes failed to occur on these variables in either the placebo group or the experimental group from pretest to posttest. Rather, both groups showed
statistically significant pretest and posttest changes on all six variables. The experimental conditions of behavioral rehearsal, covert rehearsal, coaching, and modeling plus instructions failed to effect differential changes on cognitive variables compared to the placebo condition.

In summary, this investigation failed to provide evidence of significance effects of group assertiveness training, as defined in this study, on selected cognitive variables. The experimental conditions of behavioral rehearsal, covert rehearsal, coaching, and modeling plus instructions failed to effect observable differences between the overt behavior of experimental and placebo subjects. Thus, the purpose of this study, which was to determine whether certain cognitive and attitudinal changes covaried with changes in behavior, could not be investigated.
CHAPTER BIBLIOGRAPHY


CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Assertiveness training has been established as an effective treatment approach for a wide range of problem behaviors characterized by moderate to severe interpersonal skill deficits (3). Consistent with the behavioral theoretical basis of assertiveness training, the bulk of the related research literature has focused on overt behavior as the appropriate dependent variable. However, a number of theorists (1, 7, 9) have stated that changes in assertive behavior are accompanied by changes in various aspects of self-concept. These claims have been formally addressed by only two studies reported in the literature (2, 8). These investigations found support for a reduction in self-reported anxiety, increased self-report assertiveness (2, 8), increased self-acceptance (8), and increased general self-esteem (2) following assertiveness training. The Burtle, Whitlock, and Franks study (2) was a pilot study rather than true experimental research, thus only one experimental study has specifically investigated the effects of assertiveness training on various aspects of self-concept termed cognitive variables in this research.
The basic problem of this study was to determine the effects of group assertiveness training on specific cognitive variables, including level of subjectively experienced anxiety, internal-external locus of control, self-acceptance, self-esteem, self-confidence, and self-reported assertiveness. The study was designed to determine whether these cognitive variables covaried with changes in behavior as postulated by various assertiveness training theorists and practitioners.

It was hypothesized that following training experimental group subjects would exhibit significantly higher levels of objectively-rated assertive behavior, self-reported assertiveness, self-acceptance, self-esteem, and self-confidence than placebo group subjects. It was further hypothesized that experimental group subjects would exhibit a significantly greater shift toward self-reported internal locus of control than placebo group subjects. It was also hypothesized that experimental group subjects would report significantly larger decreases in anxiety than subjects in the placebo group.

The population for this study consisted of forty-two college students who volunteered for participation in response to advertisements for free assertiveness training. These subjects had not had any previous exposure to formal assertiveness training procedures. The subjects were randomly assigned to either the experimental group or the placebo discussion group. Ten subjects, five from each group, withdrew
from the study, leaving thirty-two subjects, sixteen in each group, who completed training.

Subjects in both treatment conditions participated in eight weekly ninety-minute group training sessions. Both groups were exposed to verbal presentations of information concerning assertive behavior. The placebo group participated in in-depth discussions and question-and-answer periods regarding assertiveness-related material. Emphasis was placed on exploring and discussing feelings regarding being assertive in a variety of situations. The experimental group was presented with the same lecture material; however, in contrast to the placebo group, they participated in overt and covert behavioral rehearsal and were exposed to coaching (5, 6), and modeling plus instructions (behavioral performance feedback) (4).

Pretests of the Rathus Assertiveness Schedule, the Taylor Manifest Anxiety Scale, the Internal-External Locus of Control Scale, the Expressed Acceptance of Self Scale, the Tennessee Self-Concept Scale, and the Adjective Check List were administered to both groups during the week prior to the first group meetings. Posttests of these instruments were administered after seven weeks of training. A behavioral measure, the Behavioral Assertiveness Assessment Procedure, was administered to both groups during the eighth training session.
Data obtained from the pretests and posttests on all self-report measures were treated statistically for significance of difference between means, using analysis of covariance. Data obtained from the posttreatment behavioral ratings were treated statistically for significance of difference between means using a one-tailed t-test for independent samples. A significance level of .05 was required for rejection of the null hypothesis for all computations.

Statistical analysis of the data did not support any of the hypotheses. No significant differences were found between the groups on any of the self-report measures or the behavioral ratings, although experimental group subjects consistently scored higher (in the predicted direction) on all self-report measures or were rated higher than placebo group subjects. The hypotheses that experimental group subjects would exhibit significantly higher levels of self-reported assertiveness, self-acceptance, self-esteem, and self-confidence than placebo group subjects were rejected. The hypothesis that the experimental group would exhibit a significantly greater shift toward self-reported internal locus of control than the placebo group was rejected. The hypothesis that the experimental group would exhibit significantly larger decreases in levels of self-reported anxiety than the placebo group was also rejected. Furthermore, no support was found for the hypothesis that experimental group subjects would exhibit significantly higher levels of objectively-rated assertive behavior than placebo
group subjects. An examination of the data revealed substantial improvements on each of the six self-report measures for subjects in both groups. These data were treated statistically with a one-tailed t-test for correlated means. The t-test data indicated that both groups improved significantly on all cognitive variable measures from pretest to posttest.

Conclusions

1. Assertiveness training, as used in this study, is not more effective than listening to lectures on assertiveness-relevant concepts and discussion in facilitating the acquisition of assertive behavior.

2. Assertiveness training, as used in this study, is not more effective than listening to lectures on assertiveness-relevant concepts and discussions in facilitating changes in specific cognitive variables, including self-reported assertiveness, subjectively perceived anxiety, self-reported internal locus of control, self-acceptance, general self-esteem, and self-confidence.

Recommendations

The following recommendations for further research are offered on the basis of findings of this study.

1. In further research, a no-treatment control group should be added to the basic design of this study in order to control for the effects of maturation, testing, and history. These variables were uncontrolled in the present investigation.
2. In further research, an attention-control group should be added to or used to replace the placebo-discussion group as used in this study. Such a group would control for the effects of the presentation and discussion of detailed assertiveness-related information or determine the effects of this variable compared to a group which received less specific information.

3. In further research, a behavioral pretest should be added to the basic design of this study. This behavioral measure should be an unobtrusive one which would sample behavior in response to standardized in vivo situations. Caution should be taken such that the behavioral measure does not constitute a one-trial behavioral rehearsal exposure.

4. In further research, the behavioral measure used in this investigation, The Behavioral Assertiveness Assessment Procedure, should be replaced with a measure that samples a wider range of assertiveness-relevant situations if the training approach taken is a general one.
CHAPTER BIBLIOGRAPHY


APPENDIX A

BEHAVIORAL ASSERTIVENESS ASSESSMENT PROCEDURE (BAAP)

Instructions:

The purpose of this session is to see how you respond to situations in which you are faced with an interpersonal conflict to resolve. Try to imagine each scene as clearly as possible as it is being presented. And, when you hear a bell, you should make an appropriate response. In other words, upon hearing the bell you should attempt to make a response which would be equivalent to how you would actually react in a real-life situation such as the one being described to you. To illustrate, please listen carefully to the following sample situation and the example of how you are to respond.

Sample Scene A:

Imagine that you arrive late to a Friday night concert. When you locate your seat, for which you have a reserved ticket, you find another person sitting there. (Bell)

S responds: "Excuse me, but I have a ticket for this seat. Would you please move."

Scene:

1. Suppose you want to sell a book for five dollars. A mere acquaintance of yours says that he really needs the book, can't find it anywhere, but can only pay three dollars for it. You are sure that you can easily get five dollars for it. (Bell)

2. Suppose a mere acquaintance of yours asks you to go with her to get something to eat. You know that she will not go if you refuse to accompany her, but you just finished eating. (Bell)

3. Suppose a close friend of yours is going to fly home over the weekend and will have to miss a class on Friday. Even though you are not enrolled in that class, she asks as a favor that you go to the class and take notes on Friday. You are somewhat pressed for study time since you have an exam on Friday. (Bell)
4. Suppose your roommate is the chairman of the dorm's fund-raising campaign. She asks you to help out by soliciting, room to room, for about three hours right when you should be studying for an exam. (Bell)

5. A friend in one of your classes borrowed your class notes several weeks ago, then failed to return them at the next class, thus forcing you to take notes on scrap paper. Now he is asking to borrow your notes again. (Bell)

6. A person you do not know very well is going home for the weekend. She has some books which are due at the library and she asks if you would take them back for her, so they won't be overdue. From where you live it is a twenty-five minute walk to the library. The books are heavy, and you hadn't planned on going near the library that weekend. (Bell)

7. You have volunteered to help someone whom you hardly know to do some charity work. She really needs your help, but when this person calls to arrange a time, it turns out that you are in the middle of exams. (Bell)

8. Suppose you worked part-time in an office in the afternoon. At four-thirty one afternoon, as you were looking forward to going home and anticipating your evening out at a concert with some friends, your boss asks you if you would mind working overtime that night. (Bell)

9. Suppose the landlord of your apartment promised you, when you signed the lease, that he would make certain repairs. Over two months later he still has not made these repairs. As you leave your apartment one morning, you meet him at the door. You decide to speak to him about the repairs. (Bell)

That completes this part of the experiment. Just sit quietly.

We'll be with you in a moment.
Behavioral Assertiveness Assessment Procedure

Subject No. __________  Mean Assertiveness _________
Rater ________________
Date ________________

Rating Manual:

Please consider the following behavioral variables when evaluating the subject's response:

1. Was the subject's response stated directly and to the point?
2. Was the subject's voice intonation indicative of his control over the situation?
3. Did the inflection of the subject's voice augment the effectiveness of the response?
4. Did the subject appropriately communicate affect in the response?
5. Did the subject's non-verbal expressions aid in his communication?

Rating Scale:

<table>
<thead>
<tr>
<th>Passive Response</th>
<th>Equivocal Response</th>
<th>Assertive Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

N.R. When no response is given, or the response is initiated more than ten seconds after the bell has sounded, a score of "1" should be given for that item.

Scene: Rating:  Scene: Rating:
1 __________  6 __________
2 __________  7 __________
3 __________  8 __________
4 __________  9 __________
5 __________
Passive Response: Agrees to the request without expressing much resistance. Examples: "Yes, I'd be glad to."
   "I guess so."
   "Well, I don't see why not."

"2": Agrees to request, but implies or states reluctance to comply with the whole request. Examples:
   "Sure, I'll help, but only for an hour."
   "I'm really busy . . . but I guess I can do it."

Equivocal Response: Acceptance or refusal is left uncertain; fails to decide either way or leaves the decision to the person making the request. Examples:
   "Well . . . I don't know."
   "It depends on how important it is."
   "Can't you find someone else?"

"4": Refuses, but does so in a round-about manner. Suggests an alternative or compromise which denies the original request but agrees to the request under reasonable conditions; sets his own terms for acceptance. Examples:
   "I can't do it now, but if you need help after exams I'd be glad to help then."
   "No, I can't. But if you want me to come in to work early tomorrow I'd be glad to."

Assertive Response: Refuses, without or without stating reasons, but does not indicate willingness to comply with the request. Examples:
   "Sorry, I'm too busy."
   "I can't."
   "I have to study."

APPENDIX B

FORM 2
USE OF HUMAN SUBJECTS
INFORMED CONSENT

NAME OF SUBJECT:

1. I hereby give consent to Dale W. Williams to perform or supervise the following investigational procedure or treatment:

   ASSERTIVE TRAINING RESEARCH

2. I have (been, heard) a clear explanation and understand the nature and purpose of the procedure or treatment; possible appropriate alternative procedures that would be advantageous to me (him, her); and the attendant discomforts or risks involved and the possibility of complications which might arise. I have (been, heard) a clear explanation and understand the benefits to be expected. I understand that the procedure or treatment to be performed is investigational and that I may withdraw my consent for my (his, her) status. With my understanding of this, having received this information and satisfactory answers to the questions I have asked, I voluntarily consent to the procedure or treatment designated in Paragraph 1 above.

   Date

SIGNED: ____________________________ SIGNED: ____________________________

   Witness                      Subject or

SIGNED: ____________________________ SIGNED: ____________________________

   Witness                      Person Responsible

Instructions to persons authorized to sign:
If the subject is not competent, the person responsible shall be the legally appointed guardian or legally authorized representative. If the subject is a minor under 18 years of age, the person responsible is the mother or father or legally appointed guardian. If the subject is unable to write his name, the following is legally acceptable: John H (His X Mark) Doe and two (2) witnesses.
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Film