

INVESTIGATION OF MODELING ELEMENTS IN A
TREATMENT PROGRAM FOR ASSERTIVE TRAINING

Morrie Golden

A Thesis

in

The Department

of

Psychology

Presented in Partial Fulfillment of the Requirement
for the degree of Master of Arts at
Concordia University
Montreal, Quebec, Canada

June, 1975



Morrie Golden 1975

ABSTRACT

MORRIE GOLDEN

INVESTIGATION OF MODELING ELEMENTS IN A TREATMENT PROGRAM FOR ASSERTIVE TRAINING

Empirical evidence suggests that the most effective treatment package for assertive training consists of behavior rehearsal, some form of instructions, and modeling. The present study investigated the therapeutic impact of this approach when the modeling element is varied. Twenty-seven unassertive college students were exposed to either a self-modeling condition, external "coping" models, or models not relevant to assertion situations. No significant differences in improvement were found between group conditions on behavioral laboratory and self-report measures. Significant changes did occur, however, on self-report and most behavioral variables for each of the self-modeling and external coping model groups. The nonrelevant model condition did not produce significant improvement on any measure. Clinical implications would tend to favor the use of relevant model demonstrations in a treatment program for assertive training.

Acknowledgements

I sincerely thank Dr. Z. Amit for his support, advice, and encouragement throughout the course of this thesis.

I also express my appreciation to Mr. Don Kelly, who most skillfully role-played interactions with all subjects, and to Mrs. Gretchen Martin and Mr. John Gainer, who showed much patience and interest in rating the behavioral assessment tests.

TABLE OF CONTENTS

	<u>Page</u>
Introduction.....	1
Method.....	22
Results.....	31
Discussion.....	40
References.....	47
Appendix	
A. Rathus Assertiveness Schedule.....	56
B. Subject Information Sheet.....	59

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1. Pearson Product-Moment Correlation Coefficients for Interrater Reliability on Behavioral Measures.	32
2. Mean Difference Scores for each Group in Trained and Untrained Scenes.	36
3. Correlated <u>t</u> test Values (Pre vs. Post-Treatment Scores) for each Group in Trained and Untrained Scenes.	38
4. Standard Deviations of Change Scores for each Group in Trained and Untrained Scenes.	39

LIST OF FIGURES

Figure

Page

1. Group mean difference scores on Rathus Assertiveness Schedule from pretreatment to posttreatment (SM=Self-modeling; EM=External modeling; NRM=Nonrelevant modeling). 35

It has been suggested that successful treatment in most schools of therapy is often characterized by an improvement in the client's ability to protect his own rights, be more outspoken and less emotionally inhibited (Lazarus, 1971). The significance of this statement is especially well illustrated by the numerous cases frequently seeking help for physical or psychological complaints, the basis of which is actually a deficiency or disturbance in interpersonal functioning (DeLo, 1973).

Lazarus (1971) contends that truly monosymptomatic fears and phobias account for only a very small percentage of clients in therapy. He feels that usually underlying situational fears are interpersonal fears, so that a basic sensitivity to a particular person, place, or thing is often accompanied by irrational social attitudes and feelings and a poor self-concept. Thus, in many cases, maximizing therapeutic gains often necessitates giving due attention in both the assessment and treatment phases to interpersonal sources of distress.

The present discussion focuses on one type of disturbance in interpersonal functioning--nonassertive behavior. Consideration is given to its nature and treatment, with particular emphasis in the latter on experimental modification within a behavioral framework.

Many individuals who are timid and unassertive commonly are hindered in their attempts to defend their rights and to

freely and honestly express their feelings. Psychotherapists generally agree with the legitimacy of a client's desire to initiate assertive patterns of behavior, but there is considerable disagreement regarding the nature of methods that will most likely succeed.

Psychoanalysis commonly views conflictual feelings like guilt, hostility, aggressiveness arising out of early repressed learning experiences as the underlying determinant of timid behavior and social anxiety. Therapy would involve an insight-oriented approach with the client reliving stressful events and feelings so as to alleviate the conflicts and hence become more assertive. The Rogerian therapist usually regards parental conditional acceptance as the source of unassertive patterns of behavior. Thus he will attempt to provide unconditional positive regard for the client in a permissive atmosphere that will facilitate self-actualization. The behavior therapist, according to Rathus (1973a), typically treats nonassertive behavior as the product of previous maladaptive habit formation. The client manifests anxiety-response habits in interpersonal situations, and the anxiety inhibits the expression of appropriate feelings and the performance of adaptive behaviors. In this vein, therapeutic intervention might be characterized by attempts to strengthen the inhibited responses, with the expectation that repeated enactments will reciprocally inhibit the anxiety and consequently weaken the maladaptive habit. (Rathus, 1973a).

The behavioral school has been virtually unique in its treatment of unassertiveness as a target problem in social functioning. For well over a decade behavior therapists have been modifying interpersonal anxieties and submissive and aggressive behaviors directly by a number of techniques collectively known as "assertive training". Alberti and Emmons (1974) define assertiveness as "behavior which enables a person to act in his own best interests, or stand up for himself without undue anxiety, to express his rights without denying the rights of others" (p.2). The basic assumption in assertion training is that people indeed have certain personal and social rights which they are freely entitled to exercise and protect, and that in fact healthy, adaptive adjustment requires this exercise. When a person is incapable of assertive behavior in interpersonal relationships, there usually are undesirable consequences, most often marked by a failure to achieve or even seek personal social rewards. Wolpe and Lazarus (1966) consider that unexpressed emotions accumulate within the individual and may leave him in a state of distress. In many cases there arise somatic symptoms and pathological changes in body organs. (Wolpe & Lazarus, 1966).

The most common class of assertive responses stressed in therapeutic programs is the expression of negative feelings such as anger and resentment. However, the term assertive behavior is actually employed in a broad sense to include all socially acceptable expressions of personal

feelings and rights. Wolpe (1969) in fact states that appropriate assertiveness denotes "the outward expression of practically all feelings other than anxiety" (p.61). Thus, for the purpose of this thesis, I would consider an assertive individual as one who not only can exclaim disgust and refuse unreasonable requests, but also is able to genuinely express praise and appreciation, joy and adulation, endearment and love.

Wolpe (1969), in his clinical practice and teaching, distinguishes between "Hostile" Assertive Statements (e.g. "This is a line. Your place is at the back") and "Commendatory" Assertive Statements (e.g. "That was brilliantly worked out") (Pp.66-67). However, in general, the behavior therapy literature does not devote nearly enough attention to the examination of potentially effective methods for helping the client express his positive feelings (Hersen, Eisler, & Miller, 1973). Lazarus (1971) in particular feels that many people are able to criticize, attack, and defend, but are unable to offer the healthy positive emotions in social interactions. The issue becomes very significant when it is considered that the unassertive client undergoing training, for example, in anger expression, often overreacts initially and asserts himself disproportionately to a life situation. Emphasis in treatment solely on the expression of such negative feelings may thus lead to further deterioration in the quality of his social behavior.

A review of the literature reveals a relatively meagre

amount of empirical research regarding the efficacy of assertive training and its component techniques. Reasons for the paucity of experimental investigations are not entirely clear, but several factors probably enter into consideration. First, the class of behaviors labelled as assertive or unassertive lacks the specificity of other behaviors like phobias, which are more easily defined and examined. It is difficult to adequately identify and accurately represent in the laboratory the stimulus context of the deficient assertive behaviors and the topography of the desired alternative behaviors. Second, there is a problem with the measurement of behavior change, since assertiveness is often so loosely defined. Third, in an assertive training treatment a wide variety of techniques are typically used (Hersen, Eisler, & Miller, 1973) and in relatively complex and unstandardized ways. For example, when employing assertive training procedures (Alberti & Emmons, 1974; Bloomfield, 1973; Galassi, DeLo, Galassi, & Litz, 1973; Wolpe & Lazarus, 1966), combinations of such variables may be involved--different stimulus contexts, operant shaping, constructive criticism and therapist exhortation, behavior rehearsal or response practice, modeling and role reversal, audiotape and videotape feedback of responses, relaxation, and systematic desensitization (McFall & Marston, 1970).

The vast majority of reports published on assertive training consist mainly of clinical case-studies and anecdotal

accounts (e.g. Edwards, 1972; Eisler & Hersen, 1972; Goldstein, Serber, & Piaget, 1970; MacPherson, 1972; Nydegger, 1972; Roback, Frayn, Gunby, & Tuters, 1972).

However, although such studies are useful in outlining the scope or potential of a treatment program, they are notably lacking in scientific validation. In order to evaluate the impact of assertive training and its component techniques, systematic experimentation with proper control groups and defined target behaviors is necessary.

Empirical Studies on Assertive Training

Rathus (1972) compared assertive training, a discussion procedure, and no treatment with unassertive college females using a group treatment approach. Subjects selected in the experimental investigation were those expressing a desire to be bolder, more aggressive and outgoing in social interactions, or less fearful of interpersonal confrontations. Seven sessions of treatment were administered in each of the assertive training and discussion groups. In the former, subjects practised positive and negative assertive responses and were instructed about the nature and usefulness of assertive behavior. In addition, assignments were given to carry out a number of assertive tasks between sessions. This "homework" was then reviewed with the experimenter in the meetings. In the discussion group treatment subjects met with the experimenter and discussed the topics of fear (nature, acquisition, and elimination) and child-rearing practices

that produce guilt feelings and dependency. Comparisons between groups were made on an overt behavioral test as well as on pre-post scores of a fear inventory and self-report Rathus Assertiveness Schedule. The results of the study in general demonstrated that assertive training was significantly superior to no treatment, and showed a tendency to be more effective than a discussion procedure. In this research investigation, however, there are several methodological problems which necessarily limit the conclusions drawn. For example, the experimenter selected subjects from his own classes and he administered all the treatments himself. Thus the impact of experimental demand and experimenter bias may have been considerable. Furthermore, participation in the study by any student provided an exemption from certain required academic work. Hence it is suspect whether all selected subjects were actually unassertive to begin with.

Lomont, Gilner, Spector, and Skinner (1969) compared group assertive training and group insight therapy with hospitalized psychiatric patients. Each group met with a different but equally experienced therapist, and sessions were conducted each weekday over the course of 6 weeks. Assertive training consisted primarily of role-playing various situations from a prepared script. The therapist served as a teacher-coach. Data were obtained in the weeks immediately preceding and following the treatment period. The results revealed that the assertion group

had a significantly greater total reduction on the clinical scales of the MMPI, and significant decreases on the D and Pt scales. There were no significant test changes for the insight therapy group.

In general, probably the main treatment strategy used during a typical program of assertive training is behavior rehearsal. This procedure, in clinical practice, involves the client engaging in the role-playing of anxiety-provoking interpersonal situations under the guidance of the therapist. The technique provides the individual with the opportunity to practise social responses in a nonthreatening, controlled setting.

Although role-playing procedures have been used for many years in psychotherapeutic attempts to modify cognitive and emotional processes (Brown, 1952; Corsini, 1966; Moreno, 1946), it is more recently that specific techniques have been proposed to change overt behavior within the framework of learning theory principles (Lazarus, 1966; Sturm, 1965; Wolpe, 1958).

Lazarus (1966) studied the efficacy of behavior rehearsal relative to direct advice and nondirective therapy in clients with interpersonal difficulties. Each treatment condition was administered by the author in four 30-minute sessions. The criteria of change consisted of rather global objective evidence concerning the client's behavior in initial problem areas. For example, a shy girl who was beginning to go on more dates would be

9

considered as improved. Lazarus found that the behavior rehearsal approach resulted in the greatest changes, and that this technique was significantly more effective in resolving social and interpersonal problems than direct advice or nondirective therapy. The fact, however, that the author treated all three groups in addition to making evaluations of success suggests possibly much experimenter bias regarding the outcome of the research. Lazarus acknowledges this, but argues in any case that the superiority of behavior rehearsal is predicted in that it provides the closest approximation to real-life interactional situations and behavior cues.

McFall and Marston (1970) investigated the relative impact of behavior rehearsal in assertive training with college students. The authors were particularly interested as well in studying the therapeutic effect of introducing feedback of subject's performance into the rehearsal procedure. In the analogue experiment comparisons were made between two groups of behavior rehearsal, one with and one without response feedback, a placebo-insight group, and a no treatment control condition. Non-assertive rehearsal subjects received four sessions of training on several interpersonal situations presented on audiotape. Subjects were encouraged to respond as assertively as possible, and their overt responses to the stimulus situations were audiotaped. Depending on the group they were in (i.e. feedback or no feedback),

subjects either listened to replays of their responses, or spent an equivalent amount of time just reflecting on what they had said. All rehearsal subjects then made verbal evaluations of their responses and proceeded to practise the particular situation again. Data obtained in the study revealed that both rehearsal groups together showed significantly more improvement than the combined placebo and no treatment groups on behavioral laboratory, self-report, and psychophysiological (pulse rate) measures of assertion. There were no significant differences between either of the experimental (rehearsal) or control (placebo, no treatment) conditions. An important point to consider in this study, however, is whether the non-feedback rehearsal subjects actually received no feedback. It might not be unreasonable to assume that their "time of reflection" constituted a covert playback of responses. In this vein, the results of the present experiment would suggest first that behavior rehearsal with performance feedback per se is an effective means of modifying unassertiveness, and second that overt feedback has a tendency to be more powerful than covert feedback.

In a later study, McFall and Lillesand (1971) examined the effects of an assertive training procedure in which symbolic (i.e. non-live) modeling and therapist coaching were added to behavior rehearsal with response feedback. The authors specifically focused on a limited subclass of assertive behavior--the ability to refuse unreasonable

requests. Three groups of subjects were assessed before and after treatment on self-report and behavioral laboratory measures. Subjects in two of the groups subsequently practised, either overtly or covertly, brief one statement refusal responses to stimulus situations. Overt responses were tape recorded. Between successive practices, the following sequence occurred: audiotaped model demonstrations were given, then coaching as to the appropriate and desirable features of the models' behavior, and finally either a replay of, or silent reflection on, the previous responses. Results showed no significant pre-post differences between the two groups on any of the dependent measures. Both treatments did, however, produce significantly greater improvement than a placebo condition in which subjects merely received the assessment "package".

Friedman (1971) conducted an analogue study to investigate the relative effectiveness of several procedures in increasing subjects' ability to protect and exercise their social rights. He compared modeling, directed role-playing, improvised role-playing, modeling plus directed role-playing, assertive script, and non-assertive script conditions. Each subject received 8-10 minutes of treatment. Modeling subjects viewed live models performing the desired assertive behaviors. In the directed role-playing condition subjects overtly rehearsed assertive responses from a prepared script. Improvised role-playing subjects were told to make up and practise their own

assertive remarks. Depending on the group, subjects in the assertive and nonassertive script conditions silently read either the same assertive responses used for directed role-playing subjects, or material of neutral content. Friedman found no significant differences among the six groups on self-report measures of assertiveness or anxiety. However, on a behavioral task, the modeling plus directed role-playing treatment produced significantly greater improvement than all other procedures with the exception of improvised role-playing. This result indicates the potential impact of a condition in which subjects develop and practise their own strategies. The author speculates that the most effective method of assertion training might be a combination of this improvised role-playing condition with a modeling demonstration of more extensive auditory, gestural, and visual assertive cues. He also suggests that a longer duration of treatment may facilitate the generalization of behavioral changes to a self-report questionnaire.

Rathus (1973a) investigated the impact of training assertive responses through the observation of videotape-mediated assertive models. He compared this procedure with placebo and no treatment control groups. In seven weekly 1-hour meetings the assertive model group viewed models discussing and demonstrating several types of positive and negative assertive behaviors. Subjects were also requested to practise such behaviors between sessions.

The placebo group had seven treatment sessions in which subjects observed videotapes concerning the systematic desensitization of fears. Rathus found that assertive model subjects showed significantly greater gains on the Rathus Assertiveness Schedule than those in the placebo and no treatment conditions. As well, the superiority of the assertive model group was confirmed by independent ratings of subjects' overall assertiveness, based on audiotaped question and answer sessions.

Although the efficacy of particular assertive training techniques has been shown in the aforementioned studies, the dependent measures on which behavior changes have been judged are, in most cases, vague or non-specific. Ratings of general overall assertiveness or of the global quality of refusal statements can basically only provide suggestive evidence regarding the status of assertion. Eisler and his colleagues (Eisler, Miller, & Hersen, 1973), however, identified several specific verbal and nonverbal behavioral elements of assertiveness, hence allowing for a much more precise evaluation of treatment procedures and programs.

Eisler, Hersen, and Miller (1973) compared modeling, practice (rehearsal) control and test-retest control groups on overall assertiveness, and as well on the following seven assertion dimensions: duration of time subject looked at interpersonal partner; latency and duration of reply or response; affect; loudness of subject's speech;

occurrence or nonoccurrence of "giving in" to and of requesting new behavior from the interpersonal partner. Pre-post differences were found in psychiatric subjects by videotaping their responses to several standard interpersonal situations requiring assertive behavior. This behavior was essentially defined as standing up for one's rights and demanding respect from others. The modeling condition subjects practised responding after viewing a videotaped model who demonstrated appropriate verbal and nonverbal responses in the selected interactional scenes. Rehearsal or practice subjects received an equal number of trials but did not observe a model. Results indicated that on overall assertiveness and on all but two of the seven specific behavioral components, the modeling treatment produced significantly greater pre-post changes than the practice or test-retest controls. These latter two groups did not improve on any of the dependent measures, leading the authors to conclude that in cases where actual deficiencies in assertive responses occur in one's behavioral repertoire, the mere repeated exposure to a difficult situation does not alter performance. They hence suggest combining rehearsal with performance feedback or direct instructions (coaching) regarding how and what to improve in assertive behavior. Such procedures have in fact been shown above by McFall and his colleagues (McFall & Lillesand, 1971; McFall & Marston, 1970) to be highly efficacious.

In subsequent research Hersen, Eisler, Miller,

Johnson, and Pinkston (1973) studied pre-post differences in the same (Eisler, Hersen, & Miller, 1973) situations for the following treatment conditions: test-retest, practice control, instructions, modeling, modeling plus instructions. Except for the deletion of the latency of response measure, the dependent variables in this study were identical to those used by Eisler, Hersen, and Miller (1973). Results showed that there were no differences between the practice and test-retest control groups. However, when practice or rehearsal was combined with modeling and instructions (i.e., modeling plus instructions group), it produced the most significant changes both in overall assertiveness and in four of six behavioral component measures. Furthermore, this treatment procedure was not, in a statistical sense, significantly less effective than those methods (modeling alone and instructions alone) which led to greatest improvements in the remaining two components. In sum, the comprehensive work of Hersen, Eisler, Miller, Johnson, and Pinkston indicates that a treatment package consisting of behavior rehearsal, modeling, and therapeutic instructions seems to hold the most promise for successful modification of unassertive patterns of behavior.

Issues in Modeling Treatment

For the most part, the behavioral literature on modeling describes the use of fully competent or mastery models from whom the subject learns appropriate, desired responses.

This is certainly true for the above-noted research investigations on assertiveness and assertive training. As well, in studying the modification of phobic avoidance responses, Bandura and his colleagues (e.g. Bandura, Blanchard, & Ritter, 1969; Bandura, Grusec, & Menlove, 1967; Bandura & Menlove, 1968) have employed models who fearlessly demonstrate approach behavior and physical contact with the feared stimulus.

The use of a mastery model receives support from the work of Berger (1962) and Bandura and Rosenthal (1966) on vicarious emotional conditioning, in which it is shown that negative affective expressions by fearful models can represent powerful arousal cues and interfere with subjects' performance. Bandura (1968) has suggested that positive affective expressions by models should result in less anxiety arousal and hence faster extinction of avoidance behavior, rather than if negative or fearful reactions were displayed during the models' performance of approach responses.

In a recent study, however, Jaffe and Carlson (1972) found that test-anxious college students showed greatest improvement following exposure to anxious models and/or models experiencing negative consequences of their behavior. Sarason (1971) suggests that the observation of calm models may perhaps further enhance inadequacy feelings in test-anxious individuals and thus be detrimental to optimal performance. This argument may in fact explain a previous

finding by Geer and Turteltaub (1967) that some snake phobic subjects increased their approach behavior after viewing fearful models.

According to social comparison theory (Festinger, 1954), persons tend to select models who are similar in ability, and to reject those who are too divergent from themselves. An individual whose performance is relatively low and rather discrepant from that of a model may view the comparison person as too divergent in ability to represent a meaningful reference for self-evaluation. Flanders (1968) and Rosekrans (1967) feel that facilitation of imitative behavior is achieved by increasing the perceived similarity between the observer and the model. Numerous studies indeed support this position (Bandura, Ross, & Ross, 1963; Blanchard, 1970; Burstein, Stotland, & Zander, 1961; Ross, 1970; Stotland, Zander, & Natsoulas, 1961).

Blanchard (1970), for example, reported that an important factor in the successful treatment of snake phobias was the subject's knowledge that the model was also fearful of snakes. Ross (1970) found that a model who was inept at games served to focus young retarded children's attention on the game situation and caused them to engage spontaneously in considerable overt and covert rehearsal of more correct responses.

Meichenbaum (1971b) suggests the use of models who initially demonstrate fearful responses and gradually become more and more proficient until they attain in the

end the mastery of a situation. The sequence of such "coping" models would indeed seem to parallel the ultimate conquest of fears or the development of appropriate skills by clients and selected experimental subjects.

Kazdin (1973, 1974b) provided corroborative evidence for the therapeutic impact of coping models, and emphasized (1974a) the importance of further similarity of such models to subjects along the dimensions of age and sex.

In a number of studies, Meichenbaum (e.g. 1971a, 1971b) has also shown that teaching individuals to generate self-instructions for coping with fears and superimposing the use of this strategy on a modeling procedure results in a highly efficient technique for modifying maladaptive behavior. Geer and Turteltaub (1967), in general, have hypothesized that a possible mechanism of behavior change produced by modeling is the observer's self-instruction, "If the other subject could do it, so can I". In other contexts, investigators such as Davison (1968) and Valins and Ray (1967) have attempted to eliminate avoidance responses through systematic desensitization and altering cognitive processes regarding internal reactions, and they likewise suggest that the subject's self-instructions mediated the behavioral change.

In view of the above observations concerning the importance of self-instructions in overcoming maladaptive behavior, a number of researchers (e.g. Goldfried & D'Zurilla, 1969; Roosa, 1973) have attempted to enhance

the development of this cognitive strategy through the teaching of problem-solving skills in difficult situations. In problem-solving procedures the emphasis typically is on a four-fold process: defining and delineating the problem situation; outlining the possible options available for solution; determining the real-life consequences of these options; and finally, deciding on the best course of action on the basis of the most reasonable and favorable option.

Hedquist and Weinhold (1970) found that employing a method of problem-solving was effective in the treatment of socially anxious and unassertive college students. Loo (1971), in an assertion training paradigm, investigated the effects of telling subjects what they might expect to occur as a positive consequence of particular behaviors demonstrated by models. His results provided suggestive evidence that subjects exposed to these "projected" consequences tended to improve more than subjects who were only coached regarding the nature of the immediate modeled responses. McFall and Twentyman (1973) incorporated Loo's (1971) finding in their analogue study on assertion training by extending the antagonist-model role-playing interactions so as to include dramatized portrayals of the antagonists' probable reactions to the models' assertive responses. They found highly favorable results on questionnaire and behavioral laboratory measures. In addition, there was a significant transfer effect of

assertiveness as evidenced by an unobtrusive follow-up consisting of a telephone call which made an unreasonable request from the subject. The authors point out that this "telephone assessment" failed to conclusively show extralaboratory generalization of assertive behavior in all previous studies by their research team not containing extended role-playing interactions or consideration of projected consequences of the models' behavior.

A logical extension of the attempts to further develop and improve the basic modeling paradigm may be the development of a "self-modeling" technique, in which the individual can observe his behavior, generate cognitive and overt motor strategies, and view playbacks of changes arising out of the use of such procedures. Sutherland and Amit (1973) have also referred to self-modeling as a video feedback technique. The idea of self-modeling is certainly not new. "If you could only see yourself" is a commonly heard phrase which implies (a) that a non-participant observer can more realistically evaluate the process and consequences of a behavior, and (b) that recognition of changes necessary to make the behavior more adaptive can often be facilitated when an objective view is taken.

Traditional therapies, whatever their theoretical basis or methodological approach, attempt to achieve just such a situation; i.e., one in which objective self-observation becomes possible. A basic problem, however, in this

situation is how to maximize the self-viewing potential while minimizing the therapist's involvement in the interaction. Self-modeling, a technique in which the subject acts as if he were his own model, would seem to fulfill both these aims and also to include response practice and the development of self-instructions and cognitive strategies discussed above as important factors in an overall modeling treatment. (Sutherland & Amit, 1973).

The present research was designed as a theoretical evaluative study of the effectiveness of a self-modeling procedure in the modification of unassertive behavior. Comparisons were made between this procedure, one in which external coping models were observed, and a treatment group receiving no exposure to assertion-relevant models.

The separate therapeutic impact of each of these three treatment conditions was examined as well. For purposes of this study assertive behavior was defined as the ability to express positive feelings and to stand up for one's personal and social rights.

Method

Subjects

Subjects were 27 undergraduate psychology students at Concordia University (9 male and 18 female), recruited from various classes visited by the experimenter and selected from a pool of volunteers obtaining low scores on the Rathus Assertiveness Schedule. Those scoring at or above the mean value (0) were eliminated from the study. In all, selected subjects represented 18% of the total pool of volunteers.

Rathus Assertiveness Schedule. This is a 30-item inventory which empirical evidence (Rathus, 1973b) suggests is the most valuable self-report instrument developed to date to measure positive and negative assertiveness.

For example, a significant test-retest reliability coefficient of .78 was reported for college students over a 2-month interval. Also, validation support comes from both an overt behavioral test of assertiveness (question and answer session requiring assertive behavior) and ratings on a modified semantic differential scale of relevant personality traits in known individuals. The internal consistency of the Rathus Assertiveness Schedule is significant ($r = .77$, $p < .01$), and an item analysis indicates that individual items are representative of the total score. Scoring is on a 6-point scale, ranging from -3 (very uncharacteristic of subject) to +3 (very characteristic of subject), with no 0 point.

Procedure

Initial contact. All students in the visited classes received and were asked to complete the Rathus Assertiveness Schedule. They were told that an experiment was being conducted on improving college students' behavior in certain interpersonal situations requiring the ability to express positive feelings and to stand up for one's personal and social rights. Those students who felt the need and desire to increase their ability in these areas were asked as well to complete a separate form appended to the Rathus Assertiveness Schedule, giving particulars like name and phone number for future contact by the experimenter.

Selected subjects were then called to one of several general orientation meetings at which various topics were discussed, such as the duration of the study (2 weeks), as well as its basic format, without going into detail about the specific treatment methods. Mention was made that all treatments had shown promise in earlier research, but that more information was desired regarding their effectiveness in improving assertive behavior.

Subjects were matched on the basis of sex and initial self-reported assertiveness and were then randomly assigned to one of three treatment package conditions, with nine subjects in each group: 1) Self-modeling, self-instructions, behavior rehearsal; 2) External coping model, self-instructions, behavior rehearsal; 3) Nonrelevant model, self-instructions, behavior rehearsal.

General experimental format. All subjects received individually three sessions in a double-room laboratory separated by a one-way mirror. Sessions involved role-playing interactional situations in a seated position face-to-face with a male interpersonal partner of college age. Subjects were informed only that their partner was a college age experimental assistant. Each plot ran approximately 2 minutes, so that several responses were emitted by the subject in this "extended interaction". These responses were prompted by the partner through the use of standard lines. Descriptions of the scenes were presented to each subject by the experimenter via audiotape from the adjacent room.

The first and third sessions comprised a behavioral pre- and posttest respectively for all subjects. These were videotaped on a Sony AV-3400 portable record/playback Videocorder for subsequent rating on measures of assertiveness. The particular treatment conditions were applied in the second session, which was not videotaped. The assessment sessions lasted about 30 minutes each, and occurred 1 week apart. The training session was of 45 minutes duration and was administered approximately 3 days between the "test" meetings. Following the posttreatment assessment test, subjects completed the Rathus Assertiveness Schedule once again.

Role-playing interactional situations. The following two situations were used in the treatment session:

1. You are with a friend who in the past has done a lot for you in many ways--academic, social, personal, and so on. You have tickets for some good entertainment show--perhaps a good hockey game, or the theatre--but it is impossible for you to go that night. You decide to give the tickets to your friend. You want to give them to this friend because you appreciate him and you want to please him. Now go ahead.
2. You are sitting in a restaurant. It is not busy. The waiter sees you but takes his time, talking to the other waiters. He finally comes over to you and you order your meal. After a long while he serves you the food which is not to your specifications.

What do you say?

The assessment sessions contained the above situations, and in addition two other scenes so as to test for generalization effects of the treatment conditions. These untrained scenes were:

3. You are sitting in the cafeteria with a classmate just following a lecture. In the lecture he has made a presentation or presented a seminar which was exceptionally good. You were very impressed and want to express your feelings to him. What do you say?
4. You have bought a record album. Upon playing it at home you notice that it skips, which is very

disturbing for you. You try another record, thinking that it might be the record-player, but you find nothing wrong. You go back to the store and see the clerk. Now go ahead.

All situations were adapted from items in the Rathus Assertiveness Schedule. They were selected from among those instances of positive and negative assertiveness found by Rathus (1973b) to correlate relatively highly with total scores on the questionnaire.

Treatment conditions

Group 1: Self-modeling package. Subjects in this condition received the following sequence once for each of the two training situations: rehearsal of the particular interpersonal scene; viewing twice the videotaped playback of their performance; responding to a series of audiotaped questions designed to help generate self-instructions and cognitive strategies for improving their performance; rehearsing the particular interpersonal situation again. Subjects received the directions about their treatment condition via audiotape as the session progressed. It was emphasized that an important phase of learning is to observe one's own mistakes and to try and correct them. Subjects were asked to focus on the aspects that they felt were particularly conducive or non-conducive to a positive result. They were told that many people find it initially uncomfortable to see themselves on television, and are surprised at what they do and say. However, they were

to consider it as a learning experience, with errors being expected in the process. Subjects were told that discomfort should diminish as they concentrate on behaviors to be modified and recognize ways to improve their performance. The questions employed for the development of self-instructions in the modeling procedure were:

1. How was your eye contact in the situation? Was it appropriate? If not, what needs to be done, and how would this change your performance?
2. Were your responses too long or too short? In what way, if any, do you think you should change this in a subsequent practice?
3. Was your tone of voice appropriate for the situation?
4. Considering the way your partner responded to you, what do you think would have happened in the situation if the interaction continued?
5. Overall, do you think your responses were appropriate and credible? If not, what might you do next time?

Group 2: External coping model package. Subjects in this condition followed the same sequence as self-modeling subjects, except that instead of viewing their own responses they saw on videotape those of one male and one female coping model of college age. The models interacted individually with the same partner as the subjects, and they showed improvement in verbal and nonverbal aspects of their performance as the interpersonal situation went on. The questions to generate self-instructions were

posed to subjects in reference to the models' responses. Description of the treatment was presented via audiotape. In particular, subjects were told that the observation of the models' behavior would help them improve their own performance.

Group 3: Nonrelevant model package. This group was included to control for the relevance of the modeling element to assertion in the context of the present experimental sequence (i.e. groups 1 and 2). Between subsequent practices of a particular interpersonal situation subjects in this condition observed neither their own responses, nor those of relevant models. Instead they saw on videotape the same models as external coping model subjects discussing topics of vacation spots and job possibilities. The questions were posed to subjects on the basis of this videotaped performance. Subjects were told via audiotape that sometimes just taking note of other people's behavior will help them improve their own relationships.

Measurement of Changes in Assertive Behavior

Changes in assertiveness were determined in all subjects by means of the Rathus Assertiveness Schedule and by judgemental ratings of the videotaped role-playing assessment situations. The ratings were made on verbal and nonverbal components of assertive behavior derived or modified from the work of Eisler, Miller, and Hersen (1973). The behavioral components were defined as:

1. Eye contact: Percentage of time in the interaction that subject looked at the interpersonal partner. This measure was expressed on a 7-point scale, from 1 (0% of the time) to 7 (100% of the time).

2. Duration of reply: Length of time that subject spoke in the role-playing context. If subject paused for longer than 3 seconds, timing was stopped until subject began talking again.

3. Affect: Subject's tone of voice was rated on a 7-point scale, from 1 (inappropriate, unemotional, flat) to 7 (full, appropriate).

4. Overall assertiveness or expression of feeling: Verbal content encompassing the subject's stating of his position in each scene and insistence that this position is accepted by the interpersonal partner. Particular attention was paid to the appropriateness and credibility of the subject's responses, as well as to his flexibility in meeting the partner's counterresponses. Rating of this component was on a 7-point scale, from 1 (very unassertive) to 7 (very assertive).

Two judges "blind" as to the experimental condition for each subject rated independently and in a random order the videotapes and the specific components of assertive behavior. The judges were one female graduate in education and one male in honors undergraduate psychology. They were trained for the experiment and familiarized themselves

with the topics of assertiveness and assertive training through selected readings in Alberti and Emmons (1974), Lazarus (1971), and Wolpe (1969).

Results

For all behavioral components, subjects' scores allocated by each rater were averaged separately over the two trained and two untrained scenes. Final scores were then obtained by taking the mean value of the two judges' ratings.

Interrater reliabilities were computed for all components of assertiveness judged on the role-playing test (pre and post). Correlation coefficients are presented in Table 1. It may be noted that the duration of reply variable, which was evaluated most objectively, resulted in extremely high values whereas the other three measures, which were more subjectively derived, resulted in moderate reliabilities. Nevertheless all coefficients reached significance at the .01 level of confidence.

Treatment effects for the three groups were examined using pre to post change scores on the Rathus Assertiveness Schedule and the behavioral assessment test. Although the variables of affect, eye contact, and overall assertiveness were rated by independent judges on assumedly ordinal scales, analyses were made using parametric tests for significance. This is justified by evidence provided in a comprehensive report by Baker, Hardyck, and Petrinovich (1966). These investigators assessed the accuracy of probabilities obtained when t (and therefore F) tests are applied to data of ordinal strength. Their findings showed

Table 1

Pearson Product-Moment Correlation Coefficients
for Interrater Reliability on Behavioral Measures

Measure	Pretest r	Posttest r
Duration of reply		
Trained	.95	.98
Untrained	.99	.97
Eye contact		
Trained	.54	.66
Untrained	.68	.68
Affect		
Trained	.56	.54
Untrained	.73	.72
Overall assertiveness		
Trained	.63	.57
Untrained	.68	.75

that such data are amenable to parametric analysis provided that equal sample sizes are used and that nondirectional tests of the null hypothesis are employed. In the present study both conditions were fulfilled.

Since groups were matched for initial low scores on the self-report assertiveness questionnaire, there were no differences among experimental conditions on this variable prior to administration of the respective treatment packages. The mean pretreatment questionnaire score for each group, in fact, was about -21. In order to determine whether groups differed from one another prior to treatment on any of the behavioral components of assertion (trained and untrained scenes), one-way fixed design analyses of variance were performed. No significant differences were obtained in all cases, indicating initial comparability of groups. Subsequent analyses of change scores through treatment were conducted using one-way fixed design analyses of variance techniques as well. Pre to post difference scores on the Rathus Assertiveness Schedule as a function of the treatments were evaluated statistically by means of a one-way treatment-by-subjects analysis of variance for a matched group design. For both self-report and behavioral laboratory measures, post-hoc comparisons were made where necessary with the Tukey test.

Rathus Assertiveness Schedule

No significant differences on change scores were

obtained between the experimental groups, $F(2,16) = .372$, $p > .05$. However, consideration of within group mean differences from before to after treatment revealed some significant changes (Fig. 1).

Significant improvement occurred in both groups receiving treatment packages where the modeling components were relevant to assertion situations. This was indicated by t -tests for differences between single mean difference scores and 0. Significance was reached for the self-modeling group, $t(8) = 2.97$, and the external modeling group, $t(8) = 4.18$, at the .05 level of confidence.

No significant change occurred in the condition where the modeling component was not directly relevant to assertiveness, $t(8) = 2.28$, $p > .05$.

Behavioral Assessment Test

Mean difference scores in each experimental group were determined on the behavioral components of assertiveness for both trained and untrained scenes. These difference scores appear in Table 2.

There were no significant differences between groups on the following components for either trained or untrained plots: duration of reply, affect, and overall assertiveness. For eye contact judged on situations used in treatment there were also no significant differences found in the mean difference scores across the three conditions. In the untrained role-playing scenes the analysis of variance

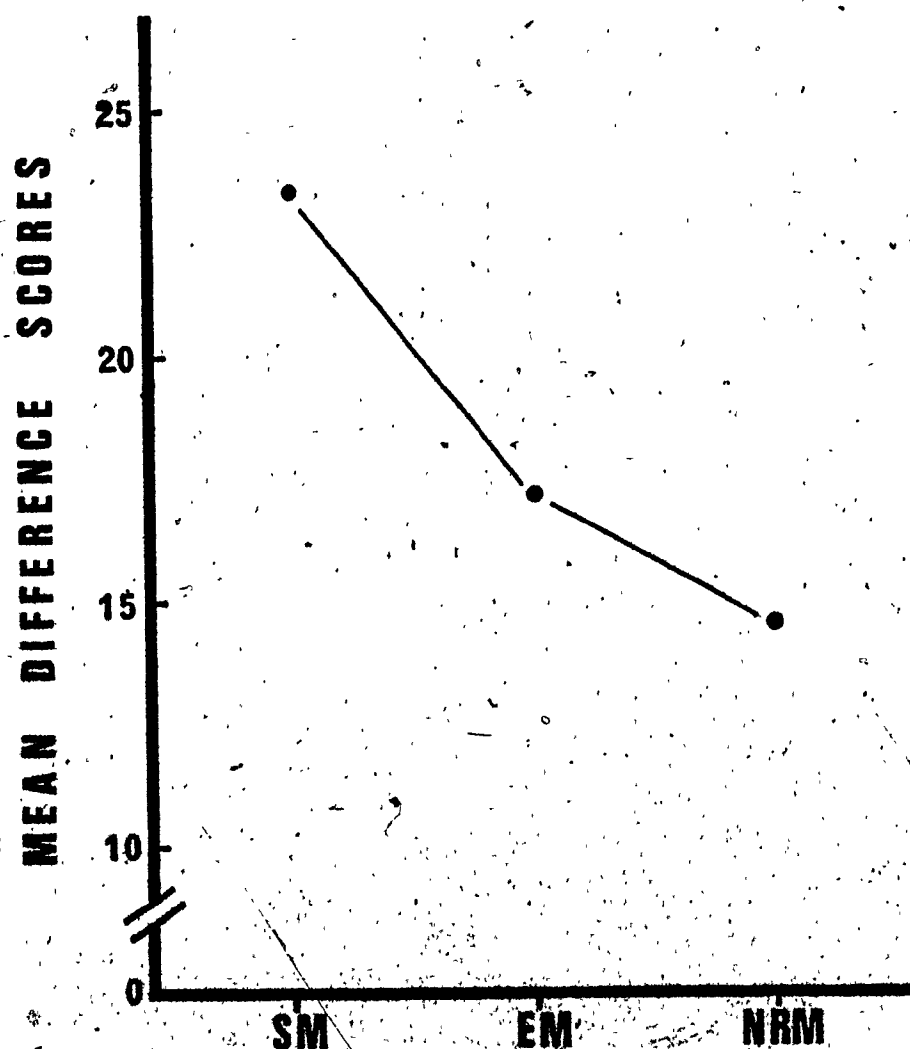


Figure 1. Group mean difference scores on Rathus Assertiveness Schedule from pretreatment to posttreatment (SM=Self-modeling; EM=External modeling; NRM=Nonrelevant modeling).

Table 2

Mean Difference Scores for each Group
in Trained and Untrained Scenes

Measure	Self Modeling	External Modeling	Nonrelevant Modeling	F(2,24)
Duration of reply				
Trained	.36	8.17	4.39	1.26
Untrained	-1.86	7.58	7.00	2.34
Eye contact				
Trained	.78	1.06	.28	1.87
Untrained	.92	.89	-.11	3.50*
Affect				
Trained	1.31	1.17	.78	.52
Untrained	.75	.83	.42	.98
Overall assertiveness				
Trained	1.33	1.44	.69	.67
Untrained	.61	1.08	.28	1.95

*p < .05

F value for eye contact did reach significance at the .05 level. Application of the Tukey test, however, failed to locate significant group comparisons. In this case, the significant F value perhaps reflects a type I error, and lack of significance with the conservative Tukey test should be believed.

Within group correlated t tests were performed on component measures judged before and after treatment. Results are shown in Table 3. Except for the duration of reply category, significant increases in all other behavioral components obtained on trained and untrained situations for the external modeling and self-modeling groups. In no cases did the group exposed to a non-relevant model performance improve significantly.

Standard deviations of pre to post change scores for each group are presented in Table 4. It is indeed apparent that in general, subject variability in response to treatment was a prominent feature.

Table 3

Correlated t Test Values (Pre- vs. Posttreatment Scores) for each Group in Trained and Untrained Scenes

Measure	Self Modeling	External Modeling	Nonrelevant Modeling
Duration of reply			
Trained	.10	2.10	1.57
Untrained	.66	1.97	1.93
Eye contact			
Trained	3.50*	2.97*	1.02
Untrained	2.73*	2.45*	.50
Affect			
Trained	3.31*	2.81*	1.42
Untrained	3.29*	2.92*	2.01
Overall assertiveness			
Trained	2.83*	2.61*	1.51
Untrained	2.48*	2.74*	1.47

* $p < .05$

Table 4

Standard Deviations of Change Scores for each Group
in Trained and Untrained Scenes

Measures	Self Modeling	External Modeling	Nonrelevant Modeling
Duration of reply (seconds)			
Trained	10.89	11.68	8.41
Untrained	8.42	11.57	10.88
Eye Contact (scale score)			
Trained	.67	1.07	.81
Untrained	1.01	1.09	.66
Affect (scale score)			
Trained	1.18	1.24	.96
Untrained	.68	.86	.38
Overall assertiveness (scale score)			
Trained	1.41	1.66	1.38
Untrained	.74	1.19	.57

Discussion

The results of the present study would at first suggest that self-modeling and task-relevant modeling are not important in assertive training. This notion is predicated by the fact that no significant differences were found between experimental groups on self-report and behavioral measures of assertion. Such an outcome statistically would be due to the fact that indeed group improvements were not substantially different and/or that subject variability in response to treatment was large.

In the present study it was indeed apparent that variability was an important factor. The highlighting of intersubject differences within groups may have been due to several reasons. Firstly, the sample size was limited and one may speculate that using more individuals in each group might have decreased overall variability in each condition. Second, only one treatment session was administered, and perhaps more training is required to produce changes. Third, it is possible that the separate components of the treatment packages do indeed have differential impact on different subjects.

With regard to brevity of treatment, the present study employed 45 minutes of training in assertion. This is comparable to that offered by McFall and his colleagues (McFall & Lillesand, 1971; McFall & Twentyman, 1973). However, these researchers divided treatment time into two

sessions. The fact that they did obtain differences between specific treatments may indicate that number of contacts with a therapist is important in effecting changes with distinct procedures. On the other hand, Friedman (1971) obtained differential effects of treatment in only one 8-10 minute therapeutic exposure. Thus the issue is as yet unclear and perhaps future research might provide more conclusive answers.

The possibility that subjects in the present study were effected differentially when given the same treatment package warrants some discussion. For self-modeling subjects, seeing videotaped segments of their behavior may indeed elicit different responses from different individuals. Empirical evidence suggests that in some cases there is a detrimental effect of self-observation. For example, Schaefer, Sobell, and Mills (1971) found that alcoholics tended to remain sober less as a result of seeing themselves in a state of inebriation. Alkire and Brunse (1974) have reported deterioration in marital units when spouses were shown their behavior in role-playing problem situations. On the other hand, other studies reveal beneficial effects of videotape feedback. Viewing one's own behavior has been found, for example, to lead to changes such as increased self-acceptance (Boyd & Sisney, 1967), more realistic self-appraisal (Geertsmā & Reivich, 1965), and increased task-oriented verbal interactions among psychiatric patients

(Muzekari & Kamis, 1973). As well, studies of counseling supervision (Kagan, Krathwohl, & Farquhar, 1965) and psychotherapy (Bailey & Sowder, 1970; Robinson & Jacobs, 1970) have emphasized the importance of videotape feedback in modifying behavior. In any case, as Griffiths (1974) has stressed, individual differences in response to feedback must be carefully considered.

The use of self-instructional training in treatment packages may also have differential impacts on subjects. All subjects in the present study received this element and from verbal reports at least it was apparent that some were able to generate cognitive strategies better than others. Meichenbaum (1975) reports that he found differences in children, for example, in the quality of development and the nature of self-instructions. More cognitively reflective children used self-instructions in a more instrumental, self-guiding fashion than impulsive children. Thus personality differences may play a role in how individuals use self-instructions and self-instructional training. In a more general vein, such differences may be important determinants of how subjects respond to any particular treatment procedure. Eysenck (1960) has certainly stressed the role of personality factors in learning and behavior change.

Aside from the issue of variability in the present study, some interesting findings were obtained when the individual groups were considered in terms of their separate

pretreatment to posttreatment changes in assertiveness. These findings, however, should be interpreted with the recognition that in making a highly exploratory statistical analysis of the data, employment of numerous t tests increases the risk of spuriously rejecting the null hypothesis. Nevertheless, in any case, results do point to important directions of therapeutic change for experimental conditions. Both groups receiving exposure to model performances relevant to assertive tasks evidenced significant improvement on self-report and behavioral measures. In the latter case both gained on the same components of assertion. On the other hand, the group which observed models performing in situations not directly relevant to positive and negative assertiveness did not improve significantly on any measure at all. Clinically this has important implications in that we might assume that model relevance is important in assertive training but that differences are not apparent when self- or external modeling is used in relevant task performances.

Results of the present research also raise questions about the importance of certain behavioral components of assertiveness. Although the groups which improved significantly in the nature of their assertive verbal content also improved significantly in eye contact and

affect, both showed no significant changes in the duration of their responses. Eisler, Miller, and Hersen (1973) found this variable to be a valid element of assertiveness. They report that more assertive subjects give longer replies in interactions. However, their research employed interactions consisting of only one response on the part of subjects. Galassi, Galassi, and Litz (in press) found that relative to a nontreatment control group, assertive training subjects who improved in assertive content produced briefer responses overall in interactions where several responses were required. The results of the present study do not provide conclusive evidence regarding the duration of reply necessary for assertive behavior.

Notwithstanding the duration of reply measure, on all other behavioral components both relevant modeling groups showed significant changes not only in situations trained in treatment, but also in those for which no treatment was given. Thus some evidence of generalization of training was seen in the present study. The nonrelevant modeling group package showed no generalization effects, which is understandable since it did not produce significant change even on trained situations. McFall and Twentyman (1973) and Goldsmith and McFall (1975) also found transfer of training when relevant model performances, behavior rehearsal, and instructions which perhaps generated cognitive strategies were combined in a treatment package. The present research was undertaken as a theoretical

evaluative study of modeling elements in assertion training. Generalization was not a major consideration of treatment impact. Further work might involve untrained assessment situations more remote from the trained ones, or perhaps extralaboratory tests of transfer of training.

The use of self-report measures in clinical settings is certainly a widespread practice because of their time-saving feature in assessment, and findings from the present research reveal important information regarding the utility of the Rathus Assertiveness Schedule as a device to select subjects and measure changes in assertiveness. Pretreatment data indicated that subjects scoring low on the questionnaire also manifested deficits in behavioral components of assertion. Further, it was seen that experimental groups which made significant gains in overt assertive performance also made significant gains on the self-report inventory. Thus the validity of the Rathus Assertiveness Schedule is indicated.

In view of the above discussion we must return to the basic issue of lack of significant differences between treatment packages on the particular dependent measures employed in the present study. Replication of the procedure might be undertaken with a larger sample size. It might also be useful to screen subjects on personality measures so as to possibly reduce or control variability in response to treatment. The fact that the order of role-playing assessment scenes was fixed in the present research may suggest that

treatment might have produced a different outcome had the order been randomized. Future research could be designed with this in mind. Avenues of further investigation may as well involve the use of longer and more numerous treatment sessions, greater flexibility of training program content in that difficult situations for individuals be determined and treated, and pacing of treatment according to the needs of each subject. These latter two suggestions are shared as well by Goldsmith and McFall (1975), the rationale being that the effectiveness of skill-training programs is maximally assessed when their content is most relevant for the individual subject.

The present study, in sum, substantiates the efficacy of a treatment package consisting of behavior rehearsal, relevant modeling, and the generation of self-instructions to improve assertiveness. It answers some questions and provides many leads for continued exploration of techniques in overcoming the specific interpersonal problem of unassertive behavior.

References

- Alberti, R.E., & Emmons, M.L. Your perfect right: A guide to assertive behavior (2nd ed.). San Luis Obispo, Calif.: Impact, 1974.
- Alkire, A.A., & Brunse, A.J. Impact and possible casualty from videotape feedback in marital therapy. Journal of Consulting and Clinical Psychology, 1974, 42, 203-210.
- Bailey, K.G., & Sowder, T.W. Audiotape and videotape self-confrontation in psychotherapy. Psychological Bulletin, 1970, 74, 127-137.
- Baker, B.O., Hardyck, C.D., & Petrinovich, L.F. Weak measurements vs. strong statistics: An empirical critique of S.S. Stevens' proscriptions on statistics. Educational and Psychological Measurement, 1966, 26, 291-309.
- Bandura, A. Modeling approaches to the modification of phobic disorders. Ciba Foundation symposium: The role of learning in psychotherapy. London: Churchill, 1968.
- Bandura, A., Blanchard, E.B., & Ritter, B. Relative efficacy of desensitization and modeling approaches for inducing behavioral, affective, and attitudinal changes. Journal of Personality and Social Psychology, 1969, 13, 173-199.
- Bandura, A., Grusec, J.E., & Menlove, F.L. Vicarious extinction of avoidance behavior. Journal of Personality and Social Psychology, 1967, 5, 16-23.

- Bandura, A., & Menlove, F.L. Factors determining vicarious extinction of avoidance behavior through symbolic modeling. Journal of Personality and Social Psychology, 1968, 8, 99-108.
- Bandura, A., & Rosenthal, T.L. Vicarious classical conditioning as a function of arousal level. Journal of Personality and Social Psychology, 1966, 3, 54-62.
- Bandura, A., Ross, D., & Ross, S.A. Imitation of film-mediated aggressive models. Journal of Abnormal and Social Psychology, 1963, 66, 3-11.
- Berger, S.M. Conditioning through vicarious instigation. Psychological Review, 1962, 69, 450-466.
- Blanchard, E.B. The generalization of vicarious extinction effects. Behaviour Research and Therapy, 1970, 8, 323-330.
- Bloomfield, H.H. Assertive training in an outpatient group of chronic schizophrenics: A preliminary report. Behavior Therapy, 1973, 4, 277-281.
- Boyd, H.S., & Sisney, V.V. Immediate self-image confrontation and changes in self-concept. Journal of Consulting Psychology, 1967, 31, 291-294.
- Brown, J.C. An experiment in role taking. American Sociological Review, 1952, 17, 587-597.
- Burstein, E., Stotland, E., & Zander, A. Similarity to a model and self-evaluation. Journal of Abnormal and Social Psychology, 1961, 62, 257-264.
- Corsini, R.J. Roleplaying in psychotherapy: A manual. Chicago: Aldine Publishing Company, 1966.

Davison, G. Systematic desensitization as a counter-conditioning process. Journal of Abnormal Psychology, 1968, 73, 91-99.

DeLo, J.S. Relevance of assertive training to student development and outreach programs. Paper presented at the meeting of the American Psychological Association, Montreal, 1973.

Edwards, N. Case conference: Assertive training in a case of homosexual pedophilia. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 55-63.

Eisler, R.M., & Hersen, M. Some considerations in the measurement and modification of marital interaction. Paper presented at the meeting of the Association for the Advancement of Behavior Therapy, New York, 1972.

Eisler, R.M., Hersen, M., & Miller, P.M. Effects of modeling on components of assertive behavior. Journal of Behavior Therapy and Experimental Psychiatry, 1973, 4, 1-6.

Eisler, R.M., Miller, P.M., & Hersen, M. Components of assertive behavior. Journal of Clinical Psychology, 1973, 29, 295-299.

Eysenck, H.J. A rational system of diagnosis and therapy in mental illness. In L.E. Abt & B.F. Riess (Eds.), Progress in clinical psychology, (Vol. 4). New York: Grune & Stratton, 1960.

Festinger, L. A theory of social comparison processes. Human Relations, 1954, 7, 117-140.

Flanders, J.P. A review of research on imitative behavior.

Psychological Bulletin, 1968, 69, 316-337.

Friedman, P.H. The effects of modeling and role-playing on assertive behavior. In R.D. Rubin, H. Fensterheim, A.A. Lazarus, & C.M. Franks (Eds.), Advances in behavior therapy. New York: Academic Press, 1971.

Galassi, J.P., DeLo, J.S., Galassi, M.D., & Litz, M.C. Reactions to an outreach program for nonassertive college students. Paper presented at the meeting of the American Psychological Association, Montreal, 1973.

Galassi, J.P., Galassi, M.D., & Litz, M.C. Assertive training in groups using video feedback. Journal of Counseling Psychology, in press.

Geer, J.H., & Turteltaub, A. Fear reduction following observation of a model. Journal of Personality and Social Psychology, 1967, 6, 327-331.

Geertsma, R.S., & Reivich, R.S. Auditory and visual dimensions of externally mediated self-observation. Journal of Nervous and Mental Disease, 1965, 148, 210-223.

Goldfried, M.R., & D'Zurilla, T.J. A behavior-analytic model for assessing competence. In C.D. Spielberger (Ed.), Current topics in clinical and community psychology (Vol. 1). New York: Academic Press, 1969.

Goldsmith, J.B., & McFall, R.M. Development and evaluation of an interpersonal skill-training program for psychiatric inpatients. Journal of Abnormal Psychology, 1975, 84, 51-58.

Goldstein, A.J., Serber, M., & Piaget, G. Induced anger as a reciprocal inhibitor of fear. Journal of Behavior Therapy and Experimental Psychiatry, 1970, 1, 67-70.

Griffiths, R.D.P. Videotape feedback as a therapeutic technique: Retrospect and prospect. Behaviour Research and Therapy, 1974, 12, 1-8.

Hedquist, F.J., & Weinhold, B.K. Behavioral group counseling with socially anxious and unassertive college students. Journal of Counseling Psychology, 1970, 17, 237-242.

Hersen, M., Eisler, R.M., & Miller, P.M. Development of assertive responses: Clinical, measurement and research considerations. Behaviour Research and Therapy, 1973, 11, 505-521.

Hersen, M., Eisler, R.M., Miller, P.M., Johnson, M.B., & Pinkston, S.G. Effects of practice, instructions, and modeling on components of assertive behavior. Behaviour Research and Therapy, 1973, 11, 443-451.

Jaffe, P.G., & Carlson, P.M. Modelling therapy for test anxiety: The role of model affect and consequences. Behaviour Research and Therapy, 1972, 10, 329-339.

Kagan, N., Krathwohl, D.R., & Farquhar, W.W. IPR-interpersonal process recall: Stimulated recall by videotape (Research Report No. 24). Bureau of Educational Research Services, Michigan State University, 1965.

Kazdin, A.E. Covert modeling and the reduction of avoidance behavior. Journal of Abnormal Psychology, 1973, 81, 87-95.

Kazdin, A.E. Covert modeling, model similarity, and reduction of avoidance behavior. Behavior Therapy, 1974, 5, 325-340. (a).

Kazdin, A.E. The effect of model identity and fear-relevant similarity on covert modeling. Behavior Therapy, 1974, 5, 624-635. (b).

Lazarus, A.A. Behaviour rehearsal vs. non-directive therapy vs. advice in effecting behaviour change. Behaviour Research and Therapy, 1966, 4, 209-212.

Lazarus, A.A. Behavior therapy and beyond. New York: McGraw-Hill, 1971.

Lomont, J.F., Gilner, F.H., Spector, N.J., & Skinner, K.K. Group assertive training and group insight therapies. Psychological Reports, 1969, 25, 463-470.

Loo, R.M.Y. The effects of projected consequences and overt behavior rehearsal on assertive behavior. Unpublished doctoral dissertation, University of Illinois, 1971.

MacPherson, E.L.R. Selective operant conditioning and deconditioning of assertive modes of behaviour. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 99-102.

McFall, R.M., & Lillesand, D.B. Behavior rehearsal with modeling and coaching in assertion training. Journal of Abnormal Psychology, 1971, 77, 313-323.

McFall, R.M., & Marston, A.R. An experimental investigation of behavior rehearsal in assertive training. Journal of Abnormal Psychology, 1970, 76, 295-303.

McFall, R.M., & Twentyman, C.T. Four experiments on the relative contributions of rehearsal, modeling, and coaching to assertion training. Journal of Abnormal Psychology, 1973, 81, 199-218.

Meichenbaum, D.H. Cognitive factors in behavior modification: Modifying what clients say to themselves. Paper presented at the meeting of the Association for the Advancement of Behavior Therapy, Washington, D.C., 1971. (a).

Meichenbaum, D.H. Examination of model characteristics in reducing avoidance behavior. Journal of Personality and Social Psychology, 1971, 17, 298-307. (b).

Meichenbaum, D.H. Theoretical and treatment implications of developmental research on verbal control of behavior. Canadian Psychological Review, 1975, 16, 22-27.

Moreno, J.L. Psychodrama: Vol. I. New York: Beacon House, 1946.

Muzekari, L.H., & Kamis, E. The effects of videotape feedback and modeling on the behavior of chronic schizophrenics. Journal of Clinical Psychology, 1973, 29, 313-316.

Nydegger, R.V. The elimination of hallucinatory and delusional behavior by verbal conditioning and assertive training: A case study. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 225-227.

Rathus, S.A. An experimental investigation of assertive training in a group setting. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 81-86.

- Rathus, S.A. Instigation of assertive behavior through videotape-mediated assertive models and directed practice. Behaviour Research and Therapy, 1973, 11, 57-65. (a).
- Rathus, S.A. A 30-item schedule for assessing assertive behavior. Behavior Therapy, 1973, 4, 398-406. (b).
- Roback, H., Frayn, D., Gunby, L., & Tuters, K. A multifactorial approach to the treatment and ward management of a self-mutilating patient. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 189-193.
- Robinson, M., & Jacobs, A. Focused videotape feedback and behavior change in group psychotherapy. Psychotherapy: Theory, Research and Practice, 1970, 7, 169-172.
- Roosa, J.B. SOCS (Situation, options, consequences, simulation). Paper presented at the meeting of the American Psychological Association, Montreal, 1973.
- Rosekrans, M. Imitation in children as a function of perceived similarity to a social model and vicarious reinforcement. Journal of Personality and Social Psychology, 1967, 7, 307-315.
- Ross, D.M. The relationship between intentional learning, incidental learning, and type of reward in preschool, educable, mental retardates. Child Development, 1970, 41, 1151-1158.
- Sarason, I.G. Experimental approaches to test anxiety: Attention and the uses of information. In C.D. Spielberger (Ed.), Anxiety and behavior (Vol. 2). New York: Academic Press, 1971.

Schaefer, H.H., Sobell, M.B., & Mills, K.C. Some

sobering data on the use of self-confrontation with alcoholics. Behavior Therapy, 1971, 2, 28-39.

Stotland, E., Zander, A., & Natsoulas, T. The generalization of interpersonal similarity. Journal of Abnormal and Social Psychology, 1961, 62, 250-256.

Sturm, I.E. The behavioristic aspect of psychodrama. Group Psychotherapy, 1965, 18, 50-64.

Sutherland, E.A., & Amit, Z. Self-modeling by a video feedback technique. Paper presented at the meeting of the Canadian Psychological Association, Victoria, B.C., 1973.

Valins, S., & Ray, A. Effects of cognitive desensitization on avoidance behavior. Journal of Personality and Social Psychology, 1967, 7, 345-350.

Wolpe, J. Psychotherapy by reciprocal inhibition.

Stanford, Calif.: Stanford University Press, 1958.

Wolpe, J. The practice of behavior therapy. New York: Pergamon Press, 1969.

Wolpe, J., & Lazarus, A.A. Behavior therapy techniques. New York: Pergamon Press, 1966.

APPENDIX A

RATHUS ASSERTIVENESS SCHEDULE

Directions: Indicate how characteristic or descriptive each of the following statements is of you by using the code given below.

- +3 very characteristic of me, extremely descriptive
- +2 rather characteristic of me, quite descriptive
- +1 somewhat characteristic of me, slightly descriptive
- 1 somewhat uncharacteristic of me, slightly nondescriptive
- 2 rather uncharacteristic of me, quite nondescriptive
- 3 very uncharacteristic of me, extremely nondescriptive.

- ___ 1. Most people seem to be more aggressive and assertive than I am.
- ___ 2. I have hesitated to make or accept dates because of "shyness".
- ___ 3. When the food served at a restaurant is not done to my satisfaction, I complain about it to the waiter or waitress.
- ___ 4. I am careful to avoid hurting other people's feelings, even when I feel that I have been injured.
- ___ 5. If a salesman has gone to considerable trouble to

show me merchandise which is not quite suitable,
I have a difficult time in saying "No".

- ___ 6. When I am asked to do something, I insist upon knowing why.
- ___ 7. There are times when I look for a good, vigorous argument.
- ___ 8. I strive to get ahead as well as most people in my position.
- ___ 9. To be honest, people often take advantage of me.
- ___ 10. I enjoy starting conversations with new acquaintances and strangers.
- ___ 11. I often don't know what to say to attractive persons of the opposite sex.
- ___ 12. I will hesitate to make phone calls to business establishments and institutions.
- ___ 13. I would rather apply for a job or for admission to a college by writing letters than by going through with personal interviews.
- ___ 14. I find it embarrassing to return merchandise.
- ___ 15. If a close and respected relative were annoying me, I would smother my feelings rather than express my annoyance.
- ___ 16. I have avoided asking questions for fear of sounding stupid.
- ___ 17. During an argument I am sometimes afraid that I will get so upset that I will shake all over.
- ___ 18. If a famed and respected lecturer makes a statement which I think is incorrect, I will have the audience

hear my point of view as well.

- ___ 19. I avoid arguing over prices with clerks and salesmen.
- ___ 20. When I have done something important or worthwhile,
I manage to let others know about it.
- ___ 21. I am open and frank about my feelings.
- ___ 22. If someone has been spreading false and bad
stories about me, I see him (her) as soon as
possible to "have a talk" about it.
- ___ 23. I often have a hard time saying "No".
- ___ 24. I tend to bottle up my emotions rather than make
a scene.
- ___ 25. I complain about poor service in a restaurant
and elsewhere.
- ___ 26. When I am given a compliment, I sometimes just
don't know what to say.
- ___ 27. If a couple near me in a theatre or at a lecture
were conversing rather loudly, I would ask them
to be quiet or to take their conversation elsewhere.
- ___ 28. Anyone attempting to push ahead of me in a line
is in for a good battle.
- ___ 29. I am quick to express an opinion.
- ___ 30. There are times when I just can't say anything.

APPENDIX B

SUBJECT INFORMATION SHEET

NAME: _____ MARITAL STATUS: _____
ADDRESS: _____ NO. OF DEPENDENTS: _____
_____ YEARS OF EDUCATION: _____
TELEPHONE NUMBER: _____
AGE: _____
TODAY'S DATE: _____

What times are convenient for you to come to Sir
George Williams University?

	<u>MON</u>	<u>TUES</u>	<u>WED</u>	<u>THURS</u>	<u>FRI</u>
MORNING	_____	_____	_____	_____	_____
AFTERNOON	_____	_____	_____	_____	_____
EVENING	_____	_____	_____	_____	_____