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A Comparison of Two Treatment Procedures on Assertive Training in Female Adults

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**A COMPARISON OF TWO TREATMENT PROCEDURES ON
ASSERTIVE TRAINING IN FEMALE ADULTS**

by

Sandra K. Beaty

**A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment
of the
Degree of Master of Arts**

**Western Michigan University
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Sandra K. Beaty

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CHAPTER I

INTRODUCTION

Assertive training is emerging as a valuable method of teaching individuals more effective ways of dealing with conflicts encountered in daily living. Prevalent problems dealt with in clinical settings, such as frustration, maladaptive anxiety responses, and a sense of personal powerlessness felt by individuals, can be alleviated through assertive training. As yet, no single treatment modality has been proven most effective in teaching assertion; consequently, the literature on assertive training spans several treatment modalities, e.g., behavioral, cognitive, and experiential. Based on clinical experience and a review of the research in this area, this experimenter favors the efficacy of an approach to assertive training that deals directly with changing the individual's behavior rather than an approach that focuses on exploring the cognitive-affective variables that are related to assertion.

The efficacy of a behavioral approach can be posited in regard to both pragmatic and methodological considerations. In a behavioral approach, emphasis is placed on the active participation by the subject, and thus it is more closely related to the theory of behavior change. As a consequence of the subject's active participation in the treatment

program, the length of time spent in treatment is often greatly reduced as compared with the more traditional approaches. The present study assesses the efficacy of a specific behavioral technique in regard to assertive training, that is, behavior rehearsal.

Assertiveness is defined by Jakubowski-Spector (1973) as the direct, honest, and appropriate expression of one's feelings and opinions. It is the ability of an individual to seek the actualization of his/her basic rights without violating the rights of others. This is a standard definition of assertiveness and will be used in the present paper. Assertive training has been developed as a treatment technique for individuals who experience difficulty in expressing their rights and feelings toward others (Wolpe, 1969).

Although group treatment offers the expanded potential for interaction with other individuals, assertive training is generally conducted in clinical settings with individual clients, often with no direct measures of the effectiveness of treatment being obtained (Wolpe, 1970). Studies of assertive training with individual clients generally show positive results; however, the amount of time spent in treatment is generally greater than in group therapy. Alberti and Emmons (1970, 1975) suggest several additional advantages to learning assertiveness in a group setting: the group provides (1) a base for social modeling, (2) increased opportunities for feedback from both the group members and the

therapist, and (3) a powerful source of reinforcement for each of its members. In discussing different types of behavior therapy groups, Fensterheim (1972) notes some characteristics, common to successful groups, that transcend treatment modality. Groups containing these characteristics are highly structured, goal oriented, and organized on the basis that a common treatment modality is applicable to all members.

Assertive training incorporates a diversity of treatment techniques. Among these techniques, behavior rehearsal is often utilized, either separately or in conjunction with other techniques. Behavior rehearsal has also been called behavioristic psychodrama, role-playing, and play-acting. This experimenter concurs with Lazarus (1966) in the preference of the term "behavior rehearsal," in that it suggests both the content and intent of the actual procedure. In regard to assertive training, behavior rehearsal is the practice of assertive behavior in simulated life situations. This rehearsal serves to shape and strengthen assertive behavior not previously in the individual's repertoire. In the literature on assertive training, however, there is a sparseness of research data dealing with the utilization of behavior rehearsal techniques. The body of assertive training literature deals primarily with a broadly defined cognitive approach.

The effects of assertive training and its component

techniques have been examined in a number of clinical outcome studies. Lazarus (1966) conducted the first study in which the effects of behavior rehearsal, nondirective therapy, and direct advice were compared with respect to improved ability to manage interpersonal difficulties. Single subjects were exposed to one of the three treatment conditions for four 30-minute sessions. The results indicated that behavior rehearsal led to the greatest change, followed by direct advice and nondirective therapy. Although specific behavioral goals were set as the criteria for the success of treatment, the author administered each treatment technique and made the evaluation of success. Thus, the possibility of experimenter bias exists. Lazarus (1966) acknowledged this possibility but argued that the superiority of behavior rehearsal is predicted on a theoretical basis, that is, experimenter bias could not account for the large difference found between treatment techniques; behavior rehearsal was assessed as four times more effective than the other techniques employed.

Piaget and Lazarus (1969) developed a technique termed "rehearsal-desensitization," in which behavior rehearsal and systematic desensitization components were incorporated as a treatment for unassertive individuals. In this single subject design, the individual proceeds through a hierarchical presentation of role-playing situations. This technique is administered in cases where role-playing of interpersonal

situations generates anxiety to the extent that it inhibits or disrupts the acquisition of assertive responses. Although the authors reported success using rehearsal-desensitization in six out of seven cases, as yet there have been no additional research studies conducted to subsequently support the efficacy of this mode of treatment.

Hedquist and Weinhold (1970) compared the effectiveness of two behavior group counseling approaches for socially anxious and unassertive college students. Subjects in one treatment group engaged in behavior rehearsal, which was paired with modeling and coaching on the part of the therapist. The second group engaged in social learning via a therapist who modeled a method for problem-solving. The third group, a control condition, engaged in group discussions centered on teaching and interpersonal process. Results of the study, based on the subjects' self-reports of initiating assertive responses, indicated that the two treatment groups produced significantly more assertive responses than did the control group. Differences between the two treatment groups were not significant, however, and a 2-week follow-up failed to show a significant difference in response frequencies between the different groups.

A study supporting the efficacy of behavior rehearsal was conducted by McFall and Marston (1970). A standardized, semiautomated, behavior-rehearsal treatment procedure was developed. Two variations of this procedure--one with

performance feedback, one without--were compared with two control procedures within a single subject design. The results indicated that the two behavior rehearsal procedures resulted in significantly greater changes in assertive behavior than did the control procedures on behavioral, self-report, psychophysiological, and in vivo measures of assertion. It should be noted that significant differences were obtained on these measures only when data from the two experimental and the two control procedures were combined and then compared.

McFall and Lillesand (1971) conducted an analogue study with college students, comparing the effects of overt behavior rehearsal with modeling and coaching, covert behavior rehearsal with modeling and coaching, and an assessment placebo condition, on refusal behavior, within a single subject design. Both experimental conditions evidenced greater pre-post changes on behavioral and self-report measures than did the placebo condition. In addition, subjects in the covert rehearsal condition tended to produce the greatest improvement.

McFall and Twentyman (1973) conducted a series of four experiments assessing the contributions of behavior rehearsal, modeling, and coaching to an experimental, semiautomated, assertive group training program. The results indicated that behavior rehearsal and coaching both made significant contributions to improved assertive performance on behavioral

and self-report measures. The results also showed that the modeling component used in this study did not significantly contribute to the effects of either rehearsal alone or rehearsal plus coaching. No differences were found among the three modes of rehearsal studied: covert, overt, or a combination of both.

Rathus (1972) compared the efficacy of an assertive training group, a discussion group, and a no-treatment control group. The assertive training group utilized behavior rehearsal and specific homework assignments as the treatment procedure. The discussion group reviewed the nature, acquisition, and elimination of fear. The no-treatment control group received only the testing measures. Pre-post differences on the Rathus Assertiveness Scale indicated that assertive training subjects obtained significantly greater gains than did discussion or control group subjects. Due to the fact that all of the subjects were selected from the experimenter's classes and that the experimenter administered both treatment procedures, the issues of experimenter demand¹ and experimenter bias must be considered when interpreting the results.

In the aforementioned studies on assertive training,

¹Experimenter demand deals with the nature of the process of selection of participants involved in an experiment. In the literature on assertive training, this is considered to be a methodological issue.

several methodological issues are worthy of consideration. In addition to the previously mentioned issues of experimenter demand and experimenter bias, there is also the possibility of interaction effects due to the testing procedures employed. All of the studies reviewed utilized a pre- and posttest design. The use of a pretest restricts the external validity of the obtained results by possibly causing an interaction effect of either a dampening or sensitizing order (Campbell & Stanley, 1963). This means that the effects of the treatment procedure may be specific to groups warmed up by the pretest. Thus, the experimenter is not able to generalize the obtained results to individuals who have not been exposed to the pretest. By randomly assigning individuals to the different treatment groups, the experimenter can achieve pre-treatment equality between groups, thus eliminating the need for pretest measures.

Another issue to consider is the generalization of obtained treatment results to real-life situations. In assessing extra-laboratory behavior, one seeks to use unobtrusive measures in order to obtain the most valid sample of the real-life criterion behavior. An excellent survey of the use of unobtrusive measures can be found in Webb, Campbell, Schwartz, and Sechrest's Unobtrusive Measures (1966). Three of the previously mentioned studies employed an unobtrusive telephone measure to assess extra-laboratory behavior (McFall & Lillesand, 1971; McFall & Marston, 1970;

McFall & Twentyman, 1973). However, the results of the telephone measure indicated that treatment effects had transferred from the experimental to real-life situations in only one of the four experiments conducted by McFall and Twentyman (1971). The results of the other experimental conditions (McFall & Lillesand, 1971; McFall & Marston, 1970), although in the expected direction, were not significantly different when compared with control group results.

In studying the effectiveness of assertive training, it is clearly the case that a number of questions remain to be answered by applied researchers. The present experiment pursues this research design in the behavioral modality, using the technique of behavior rehearsal. A two-group posttest design will be used. The two treatment groups will be the same in all major respects except for the use of behavior rehearsal in Group II. This design was selected in order to separate the confounding effects incurred when behavior rehearsal is utilized in conjunction with other techniques, and to identify more clearly the variables which produce behavior change. In order to control for experimenter bias, one group will be led by the experimenter and the other will be led by a proponent of a discussion format.

Assertiveness will be assessed on several measures:

- (1) a self-report measure to identify the individual's personal perceptions of her assertiveness;
- (2) a more subtle personality factor measure to assess personality traits that

are directly related to assertiveness; (3) a depression measure to assess assertiveness along another relevant dimension, the correlation between nonassertion and depression; and (4) an unobtrusive telephone measure to assess assertive behavior in an extra-laboratory situation.

Hypothesis: Individuals trained under a behavior rehearsal procedure will demonstrate more assertive behavior than individuals trained under a cognitive-affective procedure.

CHAPTER II

METHOD

The Subjects

Eighteen female adults participated as subjects in this experiment. The experimenter recruited these subjects by posting notices at various campus locations, asking for volunteers to participate in an assertive training program. Both the experimenter's telephone number and sign-up sheets were included on the notices. There were two criteria for inclusion in the assertive training program. Interested individuals were required to either telephone the experimenter or register directly via the sign-up sheets. Secondly, individuals included in the program had to be assessed as non-assertive by the experimenter. This assessment was based on individual verbal reports, that is, a subject's statement that she could benefit from assertive training.¹

The 18 subjects who were included in the program were randomly assigned to one of two experimental conditions, referred to as treatment Group I and treatment Group II. The average age of subjects in Group I was 29.1, with a

¹Of the individuals who registered for the assertive training program, one was judged as non-appropriate based on prior exposure to assertive training. All of the other volunteers remained in the program.

range of 18 to 53 years of age. The subjects averaged 2.6 completed years of college training, which ranged from high-school completion to master's level training. The average age of subjects in Group II was 30.8, with a range of 21 to 43 years of age. The subjects in this group averaged 3.1 completed years of college training, which ranged from sophomore to master's level training. None of the individuals in either treatment group was involved in therapy during the time they served as subjects for this experiment, nor had they previously been involved in assertive training.

The Procedure

Each treatment group met once a week for a 2-hour training session, with a total of six consecutive sessions being conducted. During the initial session, the subjects were informed that they were participants in a thesis project on assertive training; however, they were not informed of the different experimental conditions between groups of the hypothesis being tested.

Treatment Group I followed a discussion group format. The subjects were assigned weekly readings from an assertive training book, Stand Up, Speak Out, Talk Back, by Alberti and Emmons (1975). During the 2-hour sessions, the group leader directed discussions based on the assigned readings. Behavior rehearsal was not incorporated into the format followed by this group.

Treatment Group II also utilized the weekly reading assignments from Alberti and Emmons' book (1975), with discussions based on the readings. However, a major part of each session was devoted to behavior rehearsal, in which each member of the group rehearsed assertive responding to various specific situations.

Behavior rehearsal concentrated on both the explicit verbal component and the para-linguistic component of assertive responding. The major goal of incorporating the non-verbal component into assertive training was to establish a unity of verbal and nonverbal behavior which would increase the effectiveness of the response. This goal was supported by Mehrabian (1968), who found that in many situations non-verbal messages are perceived as more important than the verbal message by the subject. Serber (1972) reduced the para-linguistic component into the following specifics: volume and tone of voice, response latency, eye contact, and facial expression. These specifics were emphasized during the use of behavior rehearsal in the present experiment.

Describe^d below, and listed in chronological order, are the specific situations used in the behavior rehearsal group:

Week 1.--The situation used for behavior rehearsal was the assertive introduction of group members. Each group member introduced herself, stressing personal background information and reasons for being involved in assertive training.

Week 2.--Two situations were used for behavior rehearsal during the second training session. The first situation consisted of breaking into a small group of strangers engaged in a conversation at a party. The group was divided into two subgroups, one containing five individuals and the other containing four individuals. One person from each group was selected to assertively join in the ongoing conversation of the other group members. Each member rehearsed both the role of an individual engaged in a group conversation, and an individual attempting to assertively join in an ongoing conversation.

The second situation used for behavior rehearsal was starting a conversation with a stranger and maintaining it for approximately 3 minutes. The behavior rehearsal was preceded by a discussion dealing with becoming more assertive in life situations, and the positive consequences of expressing personal feelings. During the rehearsal, the group was divided into pairs. The behavior rehearsal situation was one where two individuals had just met and each one wanted to become better acquainted with the other. After the 3-minute rehearsal, partners were changed. Behavior rehearsal continued in this manner until each individual had spoken for at least 3 minutes with each of the other individuals in the group.

The assigned reading for session 2 was chapters 1-5 of Alberti and Emmons (1975).

Week 3.--The situation used for behavior rehearsal was the refusal of requests. The discussion dealt with the individual's right to refuse requests without having to give an explanation. During the exercise, the group members were seated in a circle. One individual was selected to rehearse the assertive refusal of requests. The other group members took turns in making requests of the selected member. Each individual participated in both the refusal of requests and in making requests.

The assigned reading for session 3 was chapters 6-10 of Alberti and Emmons (1975).

Week 4.--Two situations were used for behavior rehearsal during the fourth training session. The first situation dealt with returning faulty or defective items to the store where they had been purchased. The discussion focused on ways to avoid arguing in these situations, such as the calm repetition of the desired outcome, e.g., "This merchandise is defective, I want my money back." During behavior rehearsal the group was divided into pairs, with one individual playing the role of shopkeeper and the other individual playing the role of customer. After the situation was rehearsed, the roles were reversed so that each individual played both the role of the shopkeeper and the customer.

The second situation used for behavior rehearsal was asking for a date and refusing a date. The discussion centered on the honest expression of feelings. The group was

divided into pairs, in which each individual rehearsed both roles.

The reading from the assigned text for session 4 was chapters 11-14.

Week 5.--The situation used for behavior rehearsal was the expression of positive feelings. The discussion dealt with the importance of expressing positive feelings, and with the acceptance of compliments without negating either the individual paying the compliment or the compliment itself. The group was divided into three subgroups, each subgroup containing three individuals. Each individual rehearsed paying and accepting compliments with the members of her subgroup. This exercise was divided into three parts: the first part consisted of each individual giving and accepting a compliment based on an objective characteristic, e.g., clothing, physical appearance. The second part consisted of each individual giving and accepting a compliment based on a personal variable, e.g., one's ability to listen attentively, one's carefree attitude. The third part consisted of identifying and incorporating personal information into compliments, e.g., "I like the way you listen, because it makes me feel that what I say is important."

The reading from the assigned text for session 5 was chapters 15-17.

Week 6.--The situation used for behavior rehearsal was standing up for oneself with a dominant person. This

involved an assertive approach to deal with verbal and non-verbal insults. The discussion centered on the clarification of perceived insults and the expression of personal feelings and opinions. The group was divided into pairs, with one individual playing the role of aggressor while the other individual emitted assertive responses contingent upon the aggressive responses. This exercise was structured so that each individual rehearsed all of the roles: nonverbal aggressor, verbal aggressor, and an individual who responds assertively to both aggressive types.

The reading from the assigned text for session 6 was chapters 18-20. The final hour of this session, in both groups, was utilized for testing of assertiveness.

Testing

Testing procedures were the same for both treatment groups. Testing instruments were administered which measured assertive responding in terms of specific variables: self-report, personality factor, and depression.

Personal perceptions can directly influence behavior. An individual's self-report reflecting these perceptions can be an important measure of assertiveness. An assertiveness inventory modified from Gambrill and Richey (1972) was administered to all subjects to assess the individual's self-evaluation of her assertiveness. The inventory was designed to measure varying degrees of discomfort in handling

interpersonal situations which required the individual to assert herself in some way. A scale of 1 (indicating no discomfort) to 5 (indicating maximum discomfort) was used in each of the situations. Response probability was also measured for each of the interpersonal situations, with a scale value of 1 indicating "always emitting the response" and a value of 5 indicating "never emitting the response." It is hypothesized that individuals in the behavior rehearsal group will perceive themselves as more assertive on the self-report measure than individuals in the discussion group.

When analyzing assertive behavior, it is important to include a less subjective measure of assertiveness in addition to the individual's self-report. In view of this, the present experiment measured several personality factors that are directly related to assertiveness. These included the following dichotomous personality traits: humble/assertive, shy/venturesome, self-assured/apprehensive, and relaxed/tense. The testing instrument administered to measure these personality factors was the 16 Personality Factor (PF) Test Profile, which was developed by Cattell. The personality traits measured comprised 4 of the 16 traits included in the PF Test Profile. Test-retest reliabilities for the 16 factor scales average about .75 for each form of the test. Internal construct validities average .67 for single form scales. The behavior rehearsal group is expected to be assessed as more assertive than the discussion group on the personality

factors examined.

A correlation between nonassertion and depression has been posited by Bates and Zimmerman (1971) and Beck (1967). Based on their findings, there appears to be a negative correlation between assertion and depression, that is, an individual who is assertive is not likely to be depressed. Conversely, an individual who is nonassertive is likely to also be depressed. In order to assess the assertiveness of individuals in the present experiment along an additional relevant dimension, namely, depression, Beck's Depression Index was administered to all subjects. The reliability and validity studies of the original Beck's Depression Index were on a sample of 598 patients in psychiatric and out-patient services. Split-half reliability was .93, which is highly significant. Each of the items correlated significantly with the total test score.

In addition to the testing procedures described above, an unobtrusive telephone measure was employed to assess the extra-laboratory assertive behavior of subjects in both treatment groups. Four days following the last training session, subjects were telephoned by a female confederate posing as a magazine salesperson. The confederate was blind as to the subject's treatment condition. Relying on a pre-programmed sales pitch and script of contingent counterarguments, the confederate offered two free magazine subscriptions if the subject would agree to purchase one specially

selected subscription (see Appendix for a verbatim statement of the script). The confederate attempted to persuade the subject to agree to a personal appointment with a salesperson. The confederate persisted until the subject had either acquiesced or refused five times. Immediately after the telephone call, the subject was rated on assertiveness by the confederate, using a 5-point scale, with 1 indicating nonassertiveness and 5 indicating assertiveness. In addition, the confederate used a stopwatch to time all calls, noting both the total time per call and the time elapsed until the subject's first refusal. It was expected that individuals in the behavior rehearsal group would resist the confederate's magazine sales pitch at a relatively earlier point in the call than individuals in the discussion group, and that the total time of a telephone call would be less for the behavior rehearsal group than for the discussion group.

CHAPTER III

RESULTS

The purpose of this study was to assess the efficacy of behavior rehearsal as a therapeutic technique for increasing assertion in female adults. This experimenter used a procedure in which the performance of two treatment groups was compared along four independent measures of assertion: self-report, personality factor, depression, and an unobtrusive telephone measure. The results obtained on these four indices will be examined separately.

The self-report measure, the Assertiveness Inventory, was divided into two parts, the first of which assessed the subject's self-report of anxiety in specific situations which required an assertive response. The obtained mean of treatment Group I was 60.82, with a standard deviation of 11.01. The obtained mean for treatment Group II was 47, with a standard deviation of 8.90. There are no assertive categories assigned to the raw scores; however, the higher score reflects more anxiety. The difference between treatment groups was not found to be significant at the .05 level of significance ($t = -.204$, $df = 14$).¹ The results indicated that individuals in Group I were slightly more anxious than

¹A minus numerical value obtained on the t test indicates that the higher score was in the direction of Group I.

individuals in Group II.

The second part of the Assertiveness Inventory measured the self-reported probability of emitting assertive responses in specific situations. The obtained mean for Group I was 68.25, with a standard deviation of 11.35. The mean for Group II was 47, with a standard deviation of 5.89. This difference was found to be significant ($t = .493$, $df = 14$); subjects in Group II rated themselves as more likely to emit assertive responses than did subjects in Group I.

Of the 16 primary personality factors related to assertion, 4 were examined on the 16 PF Test Profile. The individual raw scores on each factor were converted to standard ten scores (STEN). Group means were calculated and tested for significant differences with a t test. The group means indicated either a low- or high-score direction for the factors examined.

The personality traits of humble versus assertive were assessed in the present study. The mean of Group I was 5.6, with a standard deviation of 6.45. This mean fell within the range of scores obtained by normal female adults. The obtained mean for Group II was 8.16, with a standard deviation of 8.66. The mean fell in the above-average range obtained by normal female adults. The results failed to indicate that the difference was significant at the .05 level ($t = .66$, $df = 15$). However, this difference was in the predicted direction.

The personality factors of shy versus venturesome were also assessed in the present study. The obtained mean of Group I was 4.3, with a standard deviation of 5.01. This obtained mean fell just below the normal range, in the low score direction, indicating that some degree of shyness was present. The obtained mean for Group II was 6.1, with a standard deviation of 6.62. This mean fell within the normal range for female adults. A t test computed on the mean difference failed to indicate a significant difference ($t = .64$, $df = 15$), although the difference was in the expected direction.

The personality factors of self-assured versus apprehensive were also examined in the present study. The obtained mean for Group I was 7.4, with a standard deviation of 8.27. This mean fell above the average range, in the high score direction, indicating some degree of apprehension was present in these individuals. The mean for Group II was 4.7, with a standard deviation of 5.56. This mean fell within the average range obtained by female adults. Although the difference between group means was in the expected direction, the results of a t test did not indicate that the observed difference was statistically significant ($t = .803$, $df = 15$).

A final personality factor, relaxed versus tense, was examined in the present study. The obtained mean for Group I was 6.9, with a standard deviation of 7.57. The obtained mean fell in the high score direction, indicating a slightly

greater than average degree of tenseness. The mean for Group II was 5.3, with a standard deviation of 6.02. This mean value fell within the normal range for female adults. The obtained difference, although in the expected direction, was not statistically significant ($t = .436$, $df = 15$).

Beck's Depression Index was administered to all subjects in order to assess assertion along another relevant dimension that is posited to be correlated with nonassertion, namely, depression. The obtained mean of treatment Group I was 5.4, with a standard deviation of 7.11. This mean fell within the range of mild depression, as measured by the inventory. The obtained mean for treatment Group II was 4.1, with a standard deviation of 5.44. This mean fell within the range of none to minimal depression. The results of a t test failed to indicate that the obtained difference, although in the predicted direction, was statistically significant ($t = .416$, $df = 15$).

Five performance measures of the transfer of training were collected by the confederate who conducted the unobtrusive telephone measure. These were: (1) the total number of affirmative responses; (2) the total number of negative responses; (3) the time elapsed between the start of a call and the subject's first negative response; (4) the total time for a call; and (5) the confederate's subjective rating of the degree of assertion evidenced by a subject.

On the measure of the total number of affirmative

responses emitted, treatment Group I obtained a mean score of 1.13, with a standard deviation of 1.64. Treatment Group II obtained a mean score of .625, with a standard deviation of .74. The difference found between treatment groups was not significant ($t = .478$, $df = 14$), although it was in the predicted direction, i.e., subjects in Group I emitted more affirmative responses than did subjects in Group II.

On the measure of the total number of negative responses for each treatment group, Group I obtained a mean score of 1.63, with a standard deviation of .74. Group II obtained a mean score of 2.0, with a standard deviation of 1.07. This difference between treatment groups was not found to be statistically significant ($t = .81$, $df = 14$), although it was in the expected direction.

The elapsed time between the start of a call and the subject's first negative response was compared in the present study. Subjects in Group I, the discussion group, took an average of 34.38 seconds to refuse following the caller's opening request. Subjects in Group II, behavior rehearsal, had a mean refusal time of 15.88 seconds. This difference, although in the predicted direction, was not statistically significant ($t = .87$, $df = 14$).

The total time of a telephone call was also computed for each treatment group. The average of Group I was 49.13 seconds, with a standard deviation of 55.31 seconds. The

average time for Group II was 28.63 seconds, with a standard deviation of 3.85. Although this observed difference was in the predicted direction, it was not found to be statistically significant ($t = 1.05$, $df = 14$).

Individuals from both treatment groups were also subjectively rated by the confederate regarding their assertiveness in handling the telephone call. A scale of 1 (nonassertive) to 5 (assertive) was used. Based on the confederate's ratings, the mean for Group I was 3.5, with a standard deviation of 1.69. The obtained mean for Group II was 3.63, with a standard deviation of 1.51. The observed difference between treatment groups was not significant ($t = .156$, $df = 14$); in fact, the means were nearly identical.

CHAPTER IV

DISCUSSION

The hypothesis of this study was that individuals trained under a behavior rehearsal procedure would demonstrate more assertive behavior than individuals trained under a cognitive-affective procedure. To test this hypothesis, four indices of assertiveness were administered to subjects in both treatment groups. These indices were deemed appropriate and relevant to assess the degree of assertion within the two treatment modalities. The results obtained on these indices were analyzed regarding statistically significant group mean differences.

The observed differences between treatment Group I and treatment Group II on personality factor, depression, and an unobtrusive telephone measure were not found to be statistically significant, although all mean differences were in the expected direction. The one index on which there was a statistically significant difference between the two treatment groups was the self-report measure. This measure was divided into two parts. The difference in treatment group means for the first part, which assessed the subject's perceptions of anxiety in situations requiring an assertive response, was not found to be significant, although the difference was in the predicted direction; individuals in

Group I were slightly more anxious than individuals in Group II. The mean difference on the second part, a self-assessment of response probability for the specific situations, was found to be statistically significant. Thus, the behavior rehearsal group was found to be more assertive than the discussion group only on the measure of self-reported response probability.

All of the studies previously cited in the introductory section of this report, with the exception of Lazarus (1966), used behavior rehearsal in conjunction with other behavioral treatment techniques. When behavior rehearsal was combined with desensitization (Piaget & Lazarus, 1969), with modeling and coaching (Hedquist & Weinhold, 1970; McFall & Lillesand, 1971; McFall & Twentyman, 1973), with performance feedback (McFall & Marston, 1970), and with homework assignments (Rathus, 1972), the combination was found to be significantly more effective than treatment procedures not utilizing behavior rehearsal techniques.

The results of the present study indicated that behavior rehearsal, not paired with other behavioral techniques, was not significantly more effective than a discussion group on assertion, except on self-reported measures of response probability. Since the results of the present study were in the predicted direction, it can be hypothesized that behavior rehearsal is maximally effective only when paired with other standard behavioral techniques found in the literature.

The results of the present study are consistent with the results obtained by Lazarus (1966), which indicated that behavior rehearsal was a more effective treatment technique (.92 success rate) than either direct advice (.44 success rate) or reflection-interpretation (.32 success rate). The measure utilized for assessing success was the subject's self-report of anxiety in specific situations requiring an assertive response, and self-report of the emission of assertive responses. When subjects reported that they experienced anxiety in a specific situation, deep muscle relaxation was applied in conjunction with behavior rehearsal.

In the present study, the difference between treatment groups was also significant on the self-report of response probability measure. The results obtained by Lazarus (1966) are thus supported when a similar measure of assertion is utilized. However, Lazarus' results were not supported when compared with the other measures utilized in the present study (personality factor, depression, and the unobtrusive telephone measure).

This experimenter suggests two possible explanations for these apparently conflicting results. It is possible that the additional indices that were utilized in the present study to measure assertion did not possess the degree of sensitivity required to accurately assess assertiveness along the various dimensions that were examined, i.e., personality factor and depression. Secondly, it is possible that

assertiveness will increase only along the dimension that is specifically related to the treatment procedures that are employed in the treatment program; as a result of the behavior rehearsal procedure, assertiveness would increase only along a behavioral dimension.

The data obtained in the present study indicated that the behavioral rehearsal group was slightly more assertive than the discussion group on personality factor, depression, self-report of anxiety, and unobtrusive measures of assertiveness, and significantly more assertive on the self-report of response probability measure. Based on these data, it can be concluded that behavior rehearsal is, in varying degrees, more effective than a cognitive-affective approach to assertive training regardless of the measures utilized to assess assertiveness. In view of this conclusion, behavior rehearsal should be considered a preeminent technique in the teaching of assertion.

Although the primary aim of the present study was not to test the question of the correlation between treatment modalities and testing instruments, it is apparent that this is an important question. In the present study, given the research design and the obtained results, the question of the specificity of the instruments used to measure assertion appears to be a relevant issue. Thus, the results of the present study can be analyzed regarding the degree of correlation that exists between the indices used to measure

assertion and the different treatment group modalities. In view of the cognitive-affective versus behavioral orientation of the two treatment groups, it is possible to hypothesize that each group would score higher, i.e., more assertive, on measures that are directly related to each treatment group's specific orientation. Treatment Group I (discussion group format) dealt with assertion primarily on a cognitive-affective level; the emphasis was on the process of restructuring cognitive and experiential variables. Treatment Group II (behavior rehearsal format) dealt primarily with assertion on a behavioral level; emphasis was on active participation in rehearsing assertive responses to specific situations. Although discussion was included in Group II, it generally followed the established behavioral format.

It would follow that the behavior rehearsal group would be assessed as more assertive on measures that dealt specifically with behavior. The two behavioral measures utilized in the present study were the unobtrusive telephone measure and the section of the Assertiveness Inventory that assessed the subjects' self-reported assertive behavior. The behavior rehearsal group obtained results that were significantly more assertive than the discussion group on the self-report measure. The results obtained on the telephone measure, although in the expected direction, were not significantly different for the two treatment groups. Based on the content and situational focus of both these measures, this experimenter

judged them to be appropriate and sensitive measures of assertiveness.

The discussion group would be expected to score higher, i.e., more assertive, on cognitive-affective measures of assertion. The cognitive-affective measures utilized in the present study were the 16 PF Test Profile, and the section of the Assertiveness Inventory that dealt with the degree of anxiety experienced in specific situations which required an assertive response. The results obtained on these measures failed to indicate a significant difference between treatment groups, with the behavior rehearsal group obtaining slightly more assertive scores on these measures. Although the content of the PF Test Profile was deemed appropriate to assess assertiveness, it is possible that the lack of an explicit situational focus could reduce the instrument's sensitivity when assessing assertion.

The measure that was the least related to the specific group treatment techniques was Beck's Depression Index. Although a correlation between nonassertion and depression has been posited (Bates & Zimmerman, 1971; Beck, 1967), in the present study the area of depression was not dealt with specifically in either treatment group. It would follow that the range of scores obtained on the Depression Index would be more nearly identical for both treatment groups than on the other measures of assertion that were utilized. The mean of Group I was 5.4, with a range of 0 (indicating no

depression) to 10 (indicating moderate depression). The mean of Group II was 4.1, with a range of 0 to 10 also. Given the research design of the present study and the data obtained in this study, this experimenter concluded that in either a behavioral or cognitive-affective modality, Beck's Depression Index did not possess the degree of sensitivity required to tap assertiveness. It is apparent that in the present study the depression measure was inappropriate as an assessment tool. It is the position of this experimenter that the instrument utilized to assess assertiveness should be closely related to the treatment modality employed.

The importance of correlating treatment modalities and the indices used to measure change is related to a hypothesis presented by Rachman and Hodgson (1974), in a study of synchrony and desynchrony in fear and avoidance. Although their hypothesis is not directly related to the design of the present study, given the findings of the present research design and the questions that are raised regarding testing, this experimenter would like to consider their hypothesis in terms of the present study. Rachman and Hodgson's hypothesis regarding the desynchrony between cognitive-affective and behavioral levels of responding in the treatment of fear and avoidance can be transposed in terms of assertion and, consequently, examined in the present study.

Rachman and Hodgson hypothesized that the degree of synchrony on cognitive-affective and behavioral levels of

responding resulting from a therapeutic intervention will be a function of the techniques employed. If the techniques employed deal with both the cognitive-affective and behavioral modes of responding, then there will be a synchrony between these modes at the termination of treatment. If, however, only one of the two modes of responding is dealt with during treatment, then there will be a desynchrony between the two modes at the termination of treatment; improvement will be observed only in the specific response modality that was focused on during the treatment procedure. However, in a longitudinal assessment, a reciprocal influence between the behavioral and cognitive modes of responding would be evidenced.

Rachman and Hodgson's hypothesis regarding the reciprocal influence between response systems is based on the data obtained from several longitudinal studies they conducted. Although they do not offer an explanation for the occurrence of reciprocal influence, this experimenter would like to suggest a possible behavioral explanation. At the termination of treatment, changes would be evidenced in the response system that was directly related to the treatment modality. These changes would no longer provide self-reinforcement for the discordant responses in the response system that was not directly related to the treatment modality. Thus, an extinction pattern would be observed in this response system, with the extinguished responses being replaced by responses that

were concordant with the changes previously evidenced in the system that was related to the treatment modality.

In terms of the present study, it would follow that the behavior rehearsal group would be more assertive in behavioral areas at the termination of treatment, and that, with the passage of time, the cognitive-affective modes of responding would increase until they were equal to the behavioral level. The discussion group at the termination of treatment would respond more assertively in cognitive-affective areas, and, with the passage of time, the behavioral mode of responding would increase until it was equal to the cognitive-affective area.

This hypothesis is plausible in that subjects who were assessed as assertive in behavioral areas at the termination of treatment could possibly show the longitudinal effects if assessed at some later date; that is, the cognitive-affective modes would increase to the current behavioral level of responding. Although in the present study the discussion group was not assessed as more assertive than the behavioral group on measures that were related to the cognitive-affective modes of responding, it can be assumed that there was some increase in assertiveness in this group, relative to the pre-treatment level of assertion. Pursuing this assumption, it is possible that a longitudinal assessment would indicate a degree of assertion in behavioral areas that would equal the present degree of assertion in cognitive-

affective areas.

Given Rachman and Hodgson's hypothesis, it would follow that a treatment program which incorporates both the behavioral and the cognitive-affective modalities would facilitate the early acquisition of assertive responding in both behavioral and cognitive-affective dimensions. Based on this hypothesis, this experimenter concludes that the discussion format cannot be rejected as an effective treatment procedure, although the results indicate that the behavior rehearsal format may be slightly more effective.

Several pragmatic conclusions can be drawn from the present study. In choosing which treatment modality to employ in assertive training, the therapist should be concerned with using testing instruments that are the most sensitive to change within the given treatment modality. The therapist should also remain open to the likelihood that assertion would be demonstrated on those dimensions not specifically dealt with in the chosen treatment modality.

APPENDIX

Unobtrusive Telephone Measure

1. Hello. May I speak to _____? My name is Mary Perls, and I represent the Bi Centennial Magazine Corporation. May I have a few minutes of your time?

Yes: Good! (Proceed to Question 2)

Maybe: This will only take a few minutes, and I'm sure you will be very interested in our offer. (Proceed to Q2)

No: This is an excellent opportunity that you should not pass up. (Proceed to Q2)

2. Through our special Bi Centennial program, I'm offering you the opportunity for great savings on several choice magazines. Would you like to hear more about this?

Yes: Good! (Proceed to Q3)

Maybe: I'm sure that you will be interested in our special offer. (Proceed to Q3)

No: I'm sure you will regret passing up this fantastic offer. (Proceed to Q3)

3. Our company is prepared to offer you your choice of 2 magazines, free of charge and obligation, when you purchase one specially selected magazine. Are you interested in hearing the description of these magazines?

Yes: This is a decision you will never regret. (Proceed to Q4)

Maybe: I'm sure you will be interested when I describe them. (Proceed to Q4)

No: (Proceed to Q4)

4. Now, let me tell you about these magazines . . . they are transmitters of great American culture and heritage. We offer a choice of over 20 excellent, quality magazines. In addition to receiving these 2 free magazines of your choice, you will have the honor of displaying in your home the most relevant magazine of our times, The American Way of Life. I'm sure you will agree that this offer is impossible to pass up. At this point, I'm asking for your permission to add your name to our list of satisfied subscribers . . . ?

Yes: (Proceed to Q5)

Maybe: (Proceed to Q5)

No: But this is a one-time offer.
(Proceed to Q5)

5. Our sales representative can come to your home any time this week that is convenient to you, to further discuss and answer any questions you may have concerning this great offer. May I give him your phone number so that he can call and schedule an appointment with you?

Yes: Thank you very much for your time.

Maybe: Thank you very much for your time.

No: Thank you very much for your time.

REFERENCES

- Alberti, R. E., & Emmons, M. L. Your perfect right: A guide to assertive behavior. San Luis Obispo, Calif.: Impact, 1970.
- Alberti, R. E., & Emmons, M. L. Stand up, speak out, talk back. San Luis Obispo, Calif.: Impact, 1975.
- Bates, H. D., & Zimmerman, S. F. Toward the development of a screening scale for assertive training. Psychological Reports, 1971, 28, 99-107.
- Beck, A. Depression: Causes and treatment. Philadelphia: University of Pennsylvania Press, 1967.
- Campbell, D. T., & Stanley, J. C. Experimental and quasi-experimental designs for research. Chicago: Rand McNally, 1963.
- Cattell, R. 16 personality factor test profile. Champaign, Ill.: Institute for Personality and Ability Testing, 1962.
- Fensterheim, H. Behavior therapy: Assertive training in groups. In Sager & Kaplan (Eds.), Progress in group and family therapy. New York: Brunner/Mazel, 1972.
- Gambrill, E. D., & Richey, C. A. Assertiveness inventory (Unpublished research). Western Michigan University, Susan B. Anthony Center, 1972.
- Hedquist, F. J., & Weinhold, B. K. Behavioral group counseling with socially anxious and unassertive college students. Journal of Counseling Psychology, 1970, 17(3), 237-242.
- Jakubowski-Spector, P. Facilitating the growth of women through assertive training. The Counseling Psychologist, 1973, 4(1), 75-86.
- Lazarus, A. A. Behaviour rehearsal vs. non-directive therapy vs. advice in effecting behaviour change. Behavior Research & Therapy, 1966, 4, 209-212.
- McFall, R. M., & Lillesand, D. B. Behavior rehearsal with modeling and coaching in assertion training. Journal of Abnormal Psychology, 1971, 77(3), 313-323.

- McFall, R. M., & Marston, A. R. An experimental investigation of behavior rehearsal in assertive training. Journal of Abnormal Psychology, 1970, 76(2), 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(3), 199-218.
- Mehrabian, A. Silent messages. Belmont, Calif.: Wadsworth, 1968.
- Piaget, G. W., & Lazarus, A. A. The use of rehearsal-desensitization. Psychotherapy: Theory, Research and Practice, 1969, 6(4), 264-266.
- Rachman, S., & Hodgson, R. Synchrony and desynchrony in fear and avoidance. Behavior Research and Therapy, 1974, 12, 311-318.
- Rathus, S. A. An experimental investigation of assertive training in a group setting. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 81-86.
- Serber, M. Teaching the nonverbal components of assertive training. Journal of Behavior Therapy and Experimental Psychiatry, 1972, 3, 179-183.
- Webb, E. J., Campbell, D. T., Schwartz, R. D., & Sechrest, L. Unobtrusive measures: Nonreactive research in the social sciences. Chicago: Rand McNally, 1966.
- Wolpe, J. The practice of behavior therapy. New York: Pergamon Press, 1969.
- Wolpe, J. The instigation of assertive behavior: Transcripts from two cases. Journal of Behavior Therapy and Experimental Psychiatry, 1970, 1, 145-151.