The Effect of Assertiveness Training on Assertive Behavior and Corresponding Self-Descriptive Statements

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Western Michigan University

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THE EFFECT OF ASSERTIVENESS TRAINING
ON ASSERTIVE BEHAVIOR AND CORRESPONDING
SELF-DESCRRIPTIVE STATEMENTS

by

James Scott Boland

A Thesis
Submitted to the
Faculty of The Graduate College
in partial fulfillment of the
requirements for the
Degree of Master of Arts
Department of Psychology

Western Michigan University
Kalamazoo, Michigan
April 1987
THE EFFECT OF ASSERTIVENESS TRAINING ON ASSERTIVE BEHAVIOR AND CORRESPONDING SELF-DESCRITIVE STATEMENTS

James Scott Boland, M.A.
Western Michigan University, 1987

This study examines the changes in subjects' assertive behavior and corresponding changes in self-perceptions/cognitions after assertiveness training. Based on the findings from cognitive dissonance studies, it is suggested that nonassertive subjects would begin to evidence assertive self-perceptions/cognitions if they learned to behave assertively via behavioral skill training methods. Three males and five females volunteered to undergo one session of baseline measures and four training sessions. Pre-treatment RAS, EIBS, and Baseline measures of behavior and cognitions via a post-trial form indicated all subjects were nonassertive. Training resulted in subjects behaving more assertively and expressing more assertive cognitions as measured by changes in behavioral ratings and post-trial form responses. Post-training RAS and EIBS responses were similar to those found in assertive subjects. Results were discussed in terms of Bem's (1965) classification of self-perceptions as forms of self-descriptive verbal behavior. As subjects behaved more assertively, their self-descriptions also became more assertive.
ACKNOWLEDGEMENTS

The author wishes to express his thanks to Dr. Dale Brethower for his insight, help, and guidance in the development of this study. The author also wishes to thank Dr. Malcolm Robertson and Dr. Chris Koronakos for their valuable feedback and support in helping with the completion of this thesis.

James Scott Boland
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CHAPTER I

INTRODUCTION

Several researchers have argued that an individual's low assertiveness level may not result solely from a social skills deficit, but also from his/her cognitions (attitude/belief statements, self-perceptions) which inhibit him/her from responding effectively (Alden & Cappe, 1981; Bellack, Hersen & Turak, 1979; Bordewick & Bornstein, 1980; Nietzel & Bernstein, 1976; Schwartz and Gottman, 1976). For instance, Nietzel and Bernstein (1976) demonstrated that when demands were placed on some nonassertive individuals to act assertively they were capable of behaving as requested in role-play situations, (while others were not). The authors attributed these subjects' nonassertiveness in normal situations to inhibiting factors rather than an acquisition or skills deficit cause. The authors did not elaborate as to what exactly these inhibiting factors may be or how they inhibit assertive responding (cognitive factors were implied). They did suggest, however, that individuals such as these be placed in treatment programs oriented towards the removal of these inhibiting factors.

In a study conducted by Alden & Cappe (1981) it was discovered that while nonassertive and assertive subjects
were rated as similar in competence in role-playing situations, by independent judges, nonassertive subjects rated themselves as less assertive, less effective, and more anxious than assertive subjects.

In contrast, Schwartz and Gottman (1976) found that nonassertive subjects differed significantly from assertive subjects in their ability to deliver assertive responses during role-playing assessment situations. However, on written assessments there were found to be no significant differences between these groups on their knowledge of the components of an assertive response. While knowledge of the components of a response and the skill to actually use them are different repertories, the authors found that nonassertive subjects also reported significantly more negative self-statements than assertive subjects. They therefore concluded that such statements may impede nonassertive subjects from behaving assertively.

Highly competent, assertive people evidenced more positive self-statements than negative self-statements. Schwartz and Gottman (1976) described these people as having very little doubt about the appropriateness of acting assertively. They were very confident in their responses. In contrast, low-assertive subjects were described as experiencing a conflict between positive and
negative self-statements which may result in an inability to facilitate appropriate and effective assertive behavior.

As previously stated, low-assertive subjects seemed to know the content of an assertive response but they were not able to perform assertively when confronted with real-life situations. In addition to differences in cognitions, the authors speculated that low-assertive subjects may be lacking in delivery skills as opposed to content skills. Furthermore, they found that the assessment procedure itself enhanced the performances of all groups of subjects on the role-played tests. It seems that practice in responding by itself may be beneficial without coaching or rehearsal.

While the above mentioned studies suggest that nonassertive behavior may not result solely from a lack of assertive skills but also from inhibiting self-statements there does not seem to be enough evidence to suggest treatment should be oriented solely toward changing thought processes. Some studies indicate that both behavioral and cognitive-behavioral therapies are comparable in effectiveness based on behavioral and self-report measures (Carmody, 1978; Glass, Gottman, & Shmurak, 1976; Sanchez-Craig, 1976). Finally, a variety of other studies have demonstrated the effectiveness of behavioral assertiveness training programs based on a
social skills deficit model (Hersen, Eisler, & Miller, 1974; McFall & Lillesand, 1971; McFall & Martson, 1970; McGuire & Thelen, 1983). These results seem to be at best conflicting. While there is evidence that nonassertive individuals are more self-critical and self-effacing, behavioral techniques seem to be generally as effective as cognitive therapies in developing and maintaining assertive behavior.

Not only have there been attempts to identify the cognitions that cause nonassertiveness in people or the differences between the cognitions of assertive and nonassertive people, there have been attempts to measure assertiveness as a characteristic or trait in people. In other words, subjects are asked to rate how they would normally respond to several different situations. A person's self-perceptions then determines how he/she will rate himself/herself on the schedule. In addition, comparisons between individuals' levels of assertiveness have been made based on these measures. Several self-report measures have been developed (Galassi, DeLo, Gelassi, Bastien, 1974; Gambril & Richey, 1975; Rathus, 1973; Wolpe & Lazarus, 1966). To demonstrate the validity of these measures studies were conducted for each which correlated subject self-report scores with measures of subject overt assertive behavior. If there is found to be
a significant positive correlation between the self-report scores and measures of overt behavior, the self-report measure is found to be a valid measure of assertiveness.

The issue at hand is thus the relationship between self-perceptions of assertiveness and overt assertive behavior. It may be helpful to examine two self-report devices which were used in this study in order to clarify what is being discussed. In this study the Rathus Assertiveness Schedule, RAS, (Rathus, 1973) was employed as a self-report form and a screening device (see Appendix A for an example of the RAS). The RAS is a 30-item schedule which was developed to measure a subject's level of assertiveness relative to others. A score is obtained that reflects the subject's level of assertiveness and allows for the comparison of scores between subjects. Norms have been developed for the RAS (Nevid & Rathus, 1978). The norms were based on scores reportedly collected from all regions of the USA (see Table 2, Page 19). While the RAS will be examined in greater detail in the next chapter, an important finding that resulted from one of the construct validity tests revealed that there existed a significant and positive correlation between subject RAS scores and subject performances on analogue or role-played situation tests. People who scored low on the scale were rated as nonassertive based on behavioral
observations of their performances in role-played situations. People who scored high on the test were rated as assertive based on behavioral observations of their responses (Rathus, 1973).

Alden and Safran (1978) developed a schedule that was designed to estimate the relative strengths of irrational beliefs that subjects may hold. It is called the Endorsement of Irrational Beliefs Schedule, EIBS, (Alden & Safran, 1978, see Appendix B). The EIBS is an 11-item schedule derived from the eleven irrational beliefs identified by Ellis (Ellis, 1962). It was assumed by the authors that nonassertiveness originated from a person's irrational beliefs which inhibited appropriate behavior.

The authors found that subjects who had high EIBS scores were more likely to rate themselves as nonassertive on the Gambrill-Richey Assertion Schedule (Gambrill & Richey 1975) in comparison to subjects who had low EIBS scores. In addition, subjects who had high EIBS scores were found to be rated as significantly less assertive than those with low scores on their performances during eight role-played situations assessing assertive behavior. The EIBS was used in this study as a measure of the subject's beliefs.

While both studies (Alden & Safran, 1978 and Rathus, 1973) demonstrated a relationship between self-perceptions
and assertive behavior, it does not necessarily follow that one variable causes the other variable. It can be argued that a person's nonassertive characteristics or irrational beliefs may cause nonassertive behavior but it is possible that both a person's assertive repertories and his/her self-perceptions regarding his/her assertiveness may result concurrently from that person's interaction in his/her environment. An important consideration for researchers then are the possible relationships among assertiveness measures, attitude or belief measures, and measures of behavior. Instead of examining only differences in cognitions between assertive and nonassertive individuals or only how cognitions may influence behavior, it may be more beneficial to examine the relationship between changes in assertive behavior and corresponding changes in attitude/beliefs, cognitions, and self-perceptions derived from various measures.

Maultsby (1974) suggests that when people are trying to change their own behavior patterns or develop new behaviors they will experience a phenomenon known as cognitive dissonance. The author describes dissonance as a feeling or emotional state of conflict or confusion. When a person is replacing an old behavior pattern with a new pattern, that person will experience an urge to exhibit the old behaviors in that situation which results
in feelings of confusion or frustration. The person's new behavior pattern does not correspond to his/her established self-perceptions of how he/she would normally behave. Furthermore, the way to eliminate this discrepancy is to practice the new behaviors until one no longer experiences the dissonance (Maultsby, 1974, pp. 31-37).

This view corresponds with much of the research on cognitive dissonance (Bem, 1965; Bem, 1967; Bem & McConnell, 1970; Brehm & Cohen, 1962; Festinger & Carlsmith, 1959). While there are different explanations for this phenomenon the results of the cognitive dissonance experiments are similar. Briefly, when individuals behave in a manner inconsistent with their attitudes and beliefs, and there is no apparent payoff for this behavior, those individuals will experience a shift in attitude in a direction consistent with the change in their behavior.

In one experiment (Brehm & Cohen, 1962) subjects' attitudes/beliefs about the use of excessive force (beating, brutality) by campus police to break up a recent demonstration on campus were measured. Subjects who rated themselves as strongly opposed to police brutality were selected to write an essay which justified the necessity of the police to resort to physical force to break up the
demonstration. The subjects were split into four subgroups. The subjects in the first subgroup were paid $.50 to write the essay; $1.00 was paid to the second group, $5.00 to the third; and $10.00 to the fourth. Based on post-measures, people in the $.50 and $1.00 subgroups were found to be significantly more tolerant towards the way the police acted than those subjects in the $5.00 and $10.00 subgroups.

Daryl Bem (1965) explained these results by suggesting that people perceive their own behavior in a manner similar to the way they perceive other peoples' behavior. If we know someone received a significant reward for writing an essay on a controversial topic, we could not accurately judge that person's true attitude/beliefs about the topic based on what that person wrote. In other words, we would probably say that the person could have written the article only for the money, not necessarily because that is what he/she believes in. However, if we knew that person did not receive a substantial reward, e.g., $.50 and $1.00 for writing the essay, the attitudes and beliefs expressed are probably an accurate reflection of that person's true attitude/beliefs. One would probably conclude that person wrote the essay because it is what he/she believed in since that person did not receive what seemed to be an
adequate amount of pay for the task.

Bem suggests that we perceive or explain our own behavior in a similar manner. If a person has strong beliefs about a certain topic, then writes an essay in favor of the opposite point of view under the guise of participating in an experiment, that person's self-perceptions will change in a direction towards the opposite point of view if there is no significant payoff for this new behavior. A person's self-perceptions and attitude/belief statements will then change based on his/her own behavior and its consequences. Bem categorizes attitude/belief statements and self-perceptions as forms of self-descriptive verbal behavior.

In general, if people exhibit a behavior that contrasts with their attitude/beliefs or self-perceptions and there is not a significant reward for this behavior they will exhibit a change in their attitudes regarding this behavior. In a similar manner, nonassertive people who also believe themselves to be nonassertive may experience a change in their attitudes and beliefs if they were taught both to behave assertively and were provided with descriptive feedback concerning the appropriateness of their behavior.
This study examines the relationship between the subjects' belief/attitude statements, self-perceptions, and self-evaluations regarding their own behavior and their actual behavior as they progress through an assertiveness training program. Training methods followed a behavior modification orientation of providing instructions and modeling appropriate responses, practicing responses, and providing performance feedback. There was no attempt to directly manipulate the subjects' attitude/belief statements, or self-perceptions about their assertive behavior during the training program. It was expected that as subjects progressed through training their self-descriptive behavior would reflect a change from nonassertive to assertive attitudes/beliefs.
CHAPTER II

METHOD

Design

Figure 1 shows the overall design of this experiment.

<table>
<thead>
<tr>
<th>Subject Selection</th>
<th>Training of Assistants</th>
<th>Training of Judges</th>
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<tbody>
<tr>
<td></td>
<td>Baseline Phase I</td>
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<tr>
<td></td>
<td>Training Phase II</td>
<td></td>
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<td></td>
<td>Training Phase III</td>
<td></td>
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<tr>
<td></td>
<td>Debriefing</td>
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</tbody>
</table>

Figure 1. Flow Chart of the Overall Design of the Experiment.

Before conducting the experiment three separate processes occurred. The first was the subject selection process which will be described in the following section. The second process involved training an assistant. The third involved training judges to rate videotapes of the

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subject's responses.

The research assistant used in this project has a bachelor's degree in psychology, had participated in several research projects as an undergraduate, and had experience in the application of behavior modification techniques to human populations. The assistant was employed for two purposes. The first purpose involved training subjects to respond assertively.

The assistant was acquainted with the overall design of the project (Figure 1, and Appendix F), then he was trained in the specifics of what constitutes an assertive response. This involved teaching him the definition of an assertive response and its components. Appendix C is an example of an analogue situation, a prompt, and four types of possible responses to the situation. Briefly, there are four ratings for the content of an assertive response: (1) compliance; (2) implies a request or refusal; (3) appropriate, polite, assertive response; and (4) aggressive, profane response. This example was also used to teach the trainer how to judge the other components.

The second purpose of the research assistant was to help in the videotaping of the subject's responses. The assistant was trained in how to set up and operate the videotape equipment.

The videotaping of a subject's response required four
steps. First, the subject was seated directly across from and facing his/her trainer, who was also seated. The videocamera stood behind the trainer, facing the subject in order to tape responses. Second, the taping equipment was started and the operator read the analogue narrative to the subject. Third, at the conclusion of the narrative the trainer delivered a prompt to which the subject was to respond. Fourth, the video equipment was stopped when the subject had completed his/her response.

Finally, two judges were employed in this study. Their purpose was to monitor and score the videotapes of the subject's responses. Both were college graduates and volunteered to help in the experiment. Judges were familiarized with examples of the various levels of the content of a response (Appendix C), the various analogue scenes that were employed in the experiment (Appendix F), and the data sheets with definitions and instructions for the scoring of the components of the subject's responses (Appendix G). Through the use of a recording of the scene (Appendix C), judges were taught to record data. When the judges had achieved 100% agreement on their observations of the training tape they were considered ready for observing experimental tapes.

After the subjects, an assistant, and two judges had been selected, the experiment was conducted. The
experiment itself was composed of four phases. The first three phases employed the use of standardized analogue situations. The last phase was the debriefing session. The first phase, baseline, lasted for one session. Phase II (training) lasted for two sessions. The basic components of an assertive response were taught to subjects. Phase III (extended-prompt training) also required two sessions. Clients were taught to make repeated assertive responses in order to enhance generalization and endurance. Both the second and third phases employed the use of the standardized analogue training scenes and the individual scenes derived from each subject. Debriefing followed the last session of the third phase. This involved explaining the purpose the experiment to the subjects as well as providing answers to questions they may have had.

Subjects

Subjects were chosen from those that responded to advertisements for this project appearing in local Kalamazoo, Michigan newspapers and announcements made in introductory psychology classes at Western Michigan University. All applicants were provided a telephone number to call in order to contact the experimenter if they were interested in participating.
A copy of the RAS (Rathus, 1973) and a copy of the EIBS (Alden et al., 1978) were sent to each applicant. Both scales were accompanied with instructions for completing them. All applicants were asked to return the completed forms to the author.

Accompanying the RAS and EIBS was a consent form (See Appendix D). This informed the subjects of the limitations and possible dangers of assertiveness training techniques, a general description of the purposes and procedures involved in this experiment, and assurances that all data would be kept confidential.

The selection of subjects was based on their RAS scores. Those subjects receiving scores in the 35th percentile or below (Table 2) were selected. While the EIBS was employed as an indicator of possible irrational beliefs the subjects may have held, it was not used as a selection instrument.

Of the applicants who responded to the announcements, ten were selected. Of this group of ten, two dropped out of participation after the first session. The remaining group of eight subjects consisted of five females and three males. All were undergraduates at Western Michigan University and all were eighteen years of age. All were receiving extra credit points in their introductory psychology courses for participating in this experiment.
Table 1 indicates each subject's pre-treatment RAS and EIBS score. A correlation coefficient between the two scores for the sample is also provided.

### Table 1

**Pre-Treatment RAS and EIBS Scores**

<table>
<thead>
<tr>
<th>Subjects</th>
<th>RAS Scores</th>
<th>EIBS Scores</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>-25</td>
<td>41</td>
</tr>
<tr>
<td>2</td>
<td>-3</td>
<td>57</td>
</tr>
<tr>
<td>3</td>
<td>-22</td>
<td>47</td>
</tr>
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<td>4</td>
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<td>53</td>
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<td>5</td>
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<td>53</td>
</tr>
<tr>
<td>6</td>
<td>-12</td>
<td>62</td>
</tr>
<tr>
<td>7</td>
<td>-29</td>
<td>60</td>
</tr>
<tr>
<td>8</td>
<td>-8</td>
<td>55</td>
</tr>
</tbody>
</table>

\[ n = 8; \bar{X} = -119; \bar{Y} = 428; R = -14.875; \bar{Y} = 53.5; s = 9.14; s = 6.4; \]

\[ \text{Range} = (-29) - (-3) \quad \text{Range} = (41) - (62) \]

\[ r = .32^* \]

*\( r \) represents the Pearson Product-Moment Correlation Coefficient
As stated in Chapter I the RAS (Rathus, 1973) was used as both a selection instrument and as a pre and post-treatment measure (see Appendix A). It is a 30-item schedule which was developed to measure a subject's level of assertiveness relative to others. This scale has a test-retest reliability of $r = .78; p < .01$. The RAS also has a split-half reliability of $r = .77; p < .01$. An item analysis of the RAS found that 27 of the 30 items on the schedule correlate significantly with the total RAS score. The three remaining items did not detract from the scores and were therefore included.

In addition to the construct validity study cited in the previous chapter, a second study found that the RAS scores correlated significantly with six factors on a 17-item semantic differential schedule assessing a variety of traits or characteristics for each subject. These six factors were boldness, outspokenness, assertiveness, aggressiveness, confidence, and niceness. Niceness produced a significantly negative correlation. The semantic-differential was completed by people who knew the respondents to the RAS well. It seems that the RAS is then a valid indicator of the respondents' assertiveness.
based on the impressions the respondents made on the judges.

**Table 2**

Normative Data for the RAS

<table>
<thead>
<tr>
<th>Women's Scores</th>
<th>%ile</th>
<th>Men's Scores</th>
<th>Women's Scores</th>
<th>%ile</th>
<th>Men's Scores</th>
</tr>
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<tbody>
<tr>
<td>55</td>
<td>99</td>
<td>65</td>
<td>6</td>
<td>45</td>
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<td>8</td>
<td>50</td>
<td>11</td>
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Table 2 provides norms which were developed for the RAS (Nevid and Rathus, 1978). The norms were based on scores reportedly collected from all regions of the USA. The derived scores are presented in percentile form. They reflect percentile ranks for male and female college students throughout the country.
The EIBS (Alden et al., 1978, Appendix B) was also described in Chapter I. The EIBS was used to estimate the relative strengths of irrational beliefs that subjects may hold. It consists of 11 statements derived from 11 irrational beliefs (Ellis, 1962). Each statement is followed by a nine-point scale representing the extent to which the subject agrees or disagrees with each as a reflection of his/her beliefs. Numbers are ordered from one to nine; one represents total disagreement, nine represents total agreement. A subject's score is derived by summing the numerical values of the endorsements for the 11 items on the scale. Alden and Safran (1978) conducted two studies comparing subjects' EIBS scores with their scores on assertiveness schedules and their performances on analogue situations. The results were discussed in Chapter I. Briefly, nonassertive subjects were found to endorse more irrational beliefs than assertive subjects. The differences between assertive and nonassertive subject's scores were found to be significant based on t-tests.

A schedule was developed, based on scales in other studies (Alden & Cappe, 1981; Bordewick & Bornstein, 1980; Gambrill & Richey, 1975; Schwartz & Gottman, 1976), to measure a variety of cognitions and feelings the subjects may experience during situations demanding an assertive
response. This form was completed by each subject after every trial. The schedule consists of six items measuring degree of discomfort in responding, assertiveness, the probability of acting assertively in similar situations, feelings of guilt, believing actions are justified, and fear of confrontation. Each item was followed by a six-point Likert type scale for scoring purposes. A "Don't Know" space had been provided next to each item in order to prevent subjects from scoring in the center of the scale if they were undecided about their responses. To reduce contamination of results by demand characteristics the subjects were instructed to respond as truthfully as possible. Instructions were printed on the form and were read aloud to the subject before the form was filled out (see Appendix E).

**Analogue Situations**

Standardized analogue situations were used during both the baseline and the training phases of this experiment. These situations were derived from those used in previous studies (Alberti & Emmons, 1970; Eisler, Hersen, Miller, & Blanchard, 1975; Eisler, Miller, & Hersen, 1973; Hersen, Eisler, & Miller, 1974; McFall & Lillesand, 1971; McFall & Martson, 1970). Five situational dimensions were represented. Analogues of
interpersonal, employment, social, consumer, and academic situations composed the dimensions.

All analogue situations and the order in which they were presented to the subjects are shown in Appendix F. The scenes, which were read aloud to the subjects as a narrative, had been worded in such a way that they were appropriate for either a male or female to respond to. During the third phase of training, subjects were required to respond to extended prompts or situations that required more than one assertive response in order to promote generalization. All the subjects were instructed to role-play or respond as if they were actually in that situation. If they began to respond objectively, e.g., "I would say this," the trial was stopped, the trainer explained that they must role-play, then the trial was repeated.

Setting And Apparatus

Sessions were conducted in a classroom at Western Michigan University. Subjects were split into two groups of four. Each group was seated in a circular pattern at opposite sides of the room.

A black and white Sony video camera, Model number AVC 4200, was used to monitor subject responses for evaluation purposes. A reel to reel, Sony, Model AV3650, video
recorder was employed to tape all evaluation responses. The subject's audio responses were recorded with a Sony microphone, Model RE19, attached to the video recorder. All responses were rated by judges viewing a Sony, Model CVM 12, monitor.

Training of Assistants, Judges, and Scoring Procedure

The background, training, and function of the experimental assistant were reviewed in the design section. In this section the definition of assertive behavior that was used in training and the specifics of training both the assistant and the judges are provided.

There seem to be two types of appropriate assertive behavior. The first type involves one person asking or requesting another person to perform a task that is benefiting to the requester. For example, if one's spouse was watching television and the volume was too loud to the point of being distracting, an appropriate assertive behavior would involve asking the spouse to turn the sound down on the television.

A second type of assertive behavior deals with noncompliance to unreasonable requests or demands from others. An assertive response employing noncompliance involves a verbal statement that is a refusal to another's request or demand. For example, if a person needed to
study for an important test and a few of his/her friends asked that they all go to a party an appropriate form of noncompliance would involve turning down the invitation and explaining why, e.g., "No thanks, I have an important test tomorrow and I have to study." The request to go to the party is unreasonable in that if the student were to comply, it would probably result in his/her failure which would be an aversive consequence.

In this study then, an assertive response will involve two types of verbal statements. The first type will be defined as a person requesting that another person act in a manner that will increase the requester's rewards, decrease the probability of an aversive consequence, or avoid the possibility of an aversive consequence. The second type of assertive behavior will be defined as noncompliance to a request or demand resulting in either an increase in rewards or decrease in aversives for the noncompliant person. Subjects were also taught that their responses should minimize the aversive consequences for the person that is being requested to act or, whose demands or requests are refused by the asserter (Eisler, Miller, & Hersen, 1973; Heimberg, Montgomery, Madsen, & Heimberg, 1977; Kern, 1982; Malott, Tillema, & Glenn, 1978; Woolfolk & Dever, 1979). In other words, an assertive response should not be rude or aggressive.
For both training and evaluation purposes a subject's response was broken down and scored on the basis of four components. The first component of an assertive response was the content of the response. The subject's response was scored by whether or not he/she requested a person to change his/her behavior or whether or not the subject refused an unreasonable request. The second component was the latency of the subject's response. The time between the end of the trainer's prompt and the first utterance of the subject's reply was recorded in seconds. The third component was the duration of the subject's response. The length of time between the subject's first verbal utterance of his/her response to his/her last verbal utterance was recorded in seconds. Duration of eye contact was a fourth component of an assertive response and was emphasized in training. Because of technical problems during the second and third phases of training, it was not possible to monitor this.

While the judges were taught to view tapes of the subjects' responses and rate his/her behavior based on the above components, the assistant was trained to teach the subjects' assertive responses which emphasized the development of these four behavioral components. Briefly, both trainers taught the subjects to make appropriate requests or noncompliance statements. The subjects were
taught to minimize the latency and duration of their responses and to maintain good eye contact while speaking.

Using the example in Appendix C to delineate the levels of content of assertive responses and the use of the analogue scenes in Appendix F the trainers practiced evaluating assertive responses based on the four components identified above. The assistant practiced providing feedback to the experimenter acting in the role of a subject. This also acquainted the assistant with the design and procedure of the experiment. The assistant was taught to provide verbal praise for appropriate assertive responses, provide constructive criticism and suggestions, e.g., "Good response, you might try looking at me while speaking, it will help emphasize what you are saying." Providing examples or models of good responses and seeking feedback from other group members was also practiced. In addition, the assistant was taught to provide a number of possible prompts to the analogue scenes for Phase III. Finally, the assistant was taught to operate the videotape equipment which was used for observation and scoring purposes.

The procedure for training the judges was reviewed in the design section; the procedure for observing and scoring responses will be reviewed here. In order to demonstrate the effectiveness of training, a random sample
from the subject population was selected to be videotaped at the conclusion of each of the three experimental phases. This occurred at the conclusion of the last training trial of each phase.

All male subjects' names were written on individual pieces of paper and placed in a small box. All female subjects' names were also written on individual pieces of paper and placed in a separate box. The names of the subjects to be videotaped were drawn at the conclusion of the last trial of each experimental phase in order to prevent trainers from knowing which subjects would be used during assessment trials. No subject was forced to be videotaped if he/she was selected. The subjects selected were videotaped responding to four analogue situations employed during that particular phase. The method of videotaping subjects has already been described.

Because of technical problems, the video portions of the tapes for the second and third phases were not obtained. However, audio data were obtained for these two phases. This enabled the judges to gather measures on the content of the subject's responses, latency of responses, and duration of responses. The effectiveness of audio-tapes for the rating of behaviors has been demonstrated by Arkowitz, H., Lichtenstein, B., McGovern, K., & Hines, P. (1975), Rathus, (1973), and Rehm & Marston (1968).
Both judges monitored videotapes of subject's responses and recorded all pertinent data. Each judge functioned independently of the other. In other words, each judge did not communicate with the other or have access to the other's data sheets during recording sessions. Each judge recorded specified data throughout the duration of a taped response. The experimenter recorded the same data that one of the two judges had been assigned to monitor for that trial. The experimenter alternated these checks between judges for each trial. The judges were not aware of what type of data the experimenter was recording.

Observer accuracy was monitored throughout the experiment. Agreement checks for three components of an assertive response were conducted: (1) Content of the subject's response, (2) latency of the response; and (3) duration of the response. Both judges rated the content of the responses. Recording of the other two components alternated between judges from trial to trial. An observation trial is considered the recording of data for a subject's response to one analogue situation. A range between 95 and 100 percent was considered as acceptable for accurate agreement scores. Appendix G is a copy of the observer instructions and data sheets used in this study.
Lines 2, 3, and 4 were used for extended prompt scenes in Phase III of the experiment. Agreement checks were conducted at the end of every observation session. Percent agreement was computed by dividing the number of agreements between judges for each component by the number of disagreements plus the number of agreements for the respective components.

Procedure

After the subjects were selected, they were scheduled to undergo baseline measures of their assertive behavior. The experimenter presented an introduction to all subjects at the beginning of the baseline session explaining that this workshop emphasizes change through practicing correct procedures and applying what is learned to real life situations. Each subject was required to respond to five analogue situations. Subjects were informed that the trainers wished to see how they normally acted under these types of conditions. After a demonstration, subjects responded to the situations provided by the trainers (Appendix F).

During this phase each trainer was assigned a group of five subjects. The trainer read the analogue narrative to the subjects individually, then delivered the designated prompt, listened to the response, and had the
subject complete the Post-Trial form. After the subjects had responded to all the analogue situations, four people were randomly selected from the subject population in order to videotape their individual responses to four randomly assigned baseline situations.

Two subjects dropped out of participation after the baseline session. During Phase II, or the Training phase, each group consisted of four subjects. Each training session consisted of four training trials based on the analogue situations in Appendix E. At the beginning of a training trial, each trainer presented an analogue situation to his group and then provided a rationale as to why the subject should not be compliant. This was accomplished by pointing out the possible negative consequences of nonassertiveness that one might experience as well as the possible consequences that may result from assertiveness. In other words, each rationale consisted of examples of specific negative consequences that could result from nonassertive behavior (being short changed, the implications of not getting work done or errands accomplished, and receiving inadequate service or treatment). Examples of specific positive consequences for responding appropriately were also provided (receiving correct change, avoiding undesirable people, and receiving proper service in various situations).
Next, the trainer emphasized that an assertive response is either a request for change in another person's behavior or a refusal to comply to an unreasonable request and provided an example of an assertive response. Finally, the subjects were told that their responses should be short in duration, should have a short response latency, and that they should maintain good eye contact while responding. Each trainer then examined his group member's individual responses based on the four components. Both trainers also kept notes on each subject's responses in order to evaluate progress. After responding to an analogue scene, each subject then completed the Post-Trial form.

An emphasis was placed on having each subject exhibit both the appropriate content and components of an assertive response. Trainer comments were in the form of verbal praise ("Good eye contact," "Quick response," "I liked the way you worded that refusal"). Suggestions and examples from the trainers were used to address any weak components of a subject's response. All group members were also encouraged to praise an individual's response and to generate alternative responses. The trainers acted as leaders in all group discussions of both analogue situations and personal problem situations that took place. An emphasis was placed on discussing possible
responses, rewarding consequences, and subject performances. All attempts were made to avoid discussing feelings or self-perceptions that a subject may have experienced in order to prevent contamination of responses to the Post-Trial Form.

During the introduction and in training, it was emphasized by trainers that the subjects should apply the skills they were learning to their own situations which they believed required assertive responses. Before each training session began (Phase II & III), subjects discussed many problem situations they were experiencing and how they were progressing in dealing assertively with them. Subjects were taught to respond assertively to their personal situations in the same manner used for the standard situations. In contrast to the standardized training trials, no Post-Trial forms were administered at the conclusion of a personal situation trial. Again, an emphasis was placed on connecting the skills learned in training trials to the personal situations.

There were only two differences between the extended-prompt training phase (Phase III) and the training phase (Phase II). During Phase III subjects were taught to respond repeatedly to the prompts of their trainer during each analogue scene. The second difference was that there were only three trials during Phase III as
opposed to the four for Phase II. Videotaping was conducted at the conclusion of the final trial of each phase as previously described.

After taping the responses of the final sample, all subjects were asked to complete the RAS and the EIBS. Following this the debriefing session took place. The subjects were asked if they felt influenced by the experimenter to answer the Post-Trial form in a certain manner. They were then asked if their responses to this form were influenced by changes in their behavior over the course of training. All subjects were asked for suggestions and a full explanation of the study was provided.
CHAPTER III
RESULTS

The major experimental question asked that if nonassertive subjects were to be taught the necessary assertive skills and to act assertively to a number of standardized situations, would those subjects also exhibit a change in their perceptions about their assertive abilities? In other words, if the nonassertive subjects were to act assertively, would they also perceive themselves to be more assertive or would they perceive themselves as still being nonassertive? The data show the former to be the case. As subjects exhibited more assertive behavior, they also perceived themselves to be more assertive.

The ratings of judges on the content, latency, and duration of the subject's response indicated that the training was effective in producing assertive behavior in comparison to baseline behavior. Table 3 provides the means and standard deviations of the judges' ratings for the content, duration, and latency of the subjects' responses across the three experimental conditions. The table also provides t-values for comparisons of means between conditions and the respective level of significance.
### Table 3

Average Scores for Components of Responses by Experimental Phase and t-scores for Tests of Significance Between Phases

<table>
<thead>
<tr>
<th>Phase</th>
<th>Content</th>
<th>Latency</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td></td>
<td>$\bar{X} = 2.45$</td>
<td>$\bar{X} = .895$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$s = .5454$</td>
<td>$s = .357$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$n = 20$</td>
<td>$n = 20$</td>
</tr>
<tr>
<td>II</td>
<td></td>
<td>$\bar{X} = 3.08$</td>
<td>$\bar{X} = .79$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$s = .2764$</td>
<td>$s = .363$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$n = 12$</td>
<td>$n = 12$</td>
</tr>
<tr>
<td>III</td>
<td></td>
<td>$\bar{X} = 2.84$</td>
<td>$\bar{X} = .51$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$s = .4785$</td>
<td>$s = .286$</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$n = 43$</td>
<td>$n = 43$</td>
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Comparisons Between Phases

<table>
<thead>
<tr>
<th></th>
<th>I &amp; II</th>
<th>I &amp; III</th>
<th>II &amp; III</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$t = 3.786$</td>
<td>$t = 3.023$</td>
<td>$t = 2.69$</td>
</tr>
<tr>
<td></td>
<td>$df = 30^e$</td>
<td>$df = 61$</td>
<td>$df = 53$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .005$</td>
<td>$p &lt; .005$</td>
<td>$p &lt; .05$</td>
</tr>
<tr>
<td></td>
<td>$p &gt; .10^b$</td>
<td>$p &lt; .025$</td>
<td>$p &lt; .01$</td>
</tr>
<tr>
<td></td>
<td>$p &lt; .0005$</td>
<td>$p &lt; .0005$</td>
<td>$p &lt; .01$</td>
</tr>
</tbody>
</table>

---

*a Scored in seconds.

*b Not statistically significant.

e Degrees of Freedom.

A one-tailed t-test comparing mean scores based on judges' ratings of the content of the subjects' responses indicated a significant difference between Baseline (Phase III) and each experimental phase (II) and (I).
I) and Training (Phase II) ratings. The difference between the two means was significant at the .0005 level with \( t = 3.786, \ df = 30 \). A significant difference was also found between the means of Phase I and Phase III. A one tailed t-test yielded a score of \( t = 3.023, \ df = 61 \), which was significant at the .005 level. There was found to be no significant difference between Phases II and III for content of response ratings.

The measures for the latency of responding indicated a significant difference between Phase I and Phase III. The difference between the two means was significant at the .005 level with \( t = 4.01, \ df = 61 \), for a one tailed test. A significant difference also occurred between Phase II and Phase III. A one tailed test resulted in a score of \( t = 2.69, \ df = 53 \), which was significant at the .05 level. These results indicate that as training progressed the latency of responding decreased. This was a goal of training and indicates that subjects were behaving in an assertive manner.

The measures of the duration of responding also indicate that training was effective. A significant difference existed between the mean duration for Phases I and III. A one-tailed test of significance resulted in a t-score of 2.14 with 61 degrees of freedom, which was
significant at the .025 level. The duration of responding decreased as training progressed. This was a goal of training.

Table 4

<table>
<thead>
<tr>
<th>Item</th>
<th>Phase</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>II</td>
<td>III</td>
</tr>
<tr>
<td>I/I</td>
<td>I/III</td>
<td>II/III</td>
</tr>
<tr>
<td>1</td>
<td>3.45</td>
<td>2.55</td>
</tr>
<tr>
<td></td>
<td>.888</td>
<td>.828</td>
</tr>
<tr>
<td></td>
<td>2.58</td>
<td>.6287</td>
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<td></td>
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<td>&lt;.025</td>
</tr>
<tr>
<td></td>
<td>2.673</td>
<td>&gt;.10</td>
</tr>
<tr>
<td>2</td>
<td>3.025</td>
<td>1.984</td>
</tr>
<tr>
<td></td>
<td>.6452</td>
<td>.5566</td>
</tr>
<tr>
<td></td>
<td>1.787</td>
<td>.3758</td>
</tr>
<tr>
<td></td>
<td>4.563</td>
<td>&lt;.005</td>
</tr>
<tr>
<td></td>
<td>5.741</td>
<td>&lt;.0005</td>
</tr>
<tr>
<td></td>
<td>1.531</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>3</td>
<td>2.3</td>
<td>1.91</td>
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<tr>
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<td>.6676</td>
<td>.56</td>
</tr>
<tr>
<td></td>
<td>1.62</td>
<td>.44</td>
</tr>
<tr>
<td></td>
<td>3.8328</td>
<td>&lt;.005</td>
</tr>
<tr>
<td></td>
<td>&gt;.05</td>
<td>&gt;.05</td>
</tr>
<tr>
<td>4</td>
<td>4.975</td>
<td>5.4817</td>
</tr>
<tr>
<td></td>
<td>.654</td>
<td>1.826</td>
</tr>
<tr>
<td></td>
<td>5.3725</td>
<td>.5699</td>
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<tr>
<td></td>
<td>&gt;.10</td>
<td>&gt;.10</td>
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<td></td>
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<td>.5563</td>
</tr>
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<td></td>
<td>&gt;.10</td>
<td>&lt;.025</td>
</tr>
<tr>
<td></td>
<td>2.755</td>
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<td></td>
<td>2.54</td>
<td>&lt;.025</td>
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<td>6</td>
<td>2.625</td>
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<td>.6452</td>
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<td></td>
<td>2.16</td>
<td>.6362</td>
</tr>
<tr>
<td></td>
<td>2.4798</td>
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</tr>
<tr>
<td></td>
<td>2.0291</td>
<td>&lt;.05</td>
</tr>
<tr>
<td></td>
<td>&gt;.10</td>
<td>&gt;.10</td>
</tr>
</tbody>
</table>

\( \bar{X} \) = Mean score per item for each phase.

\( s \) = Standard Deviation of scores per item for each phase.

\( t \) = Test of significance of difference between phases for subject's mean scores on each item.

\( p < \) Level of statistical significance.

>.05 not statistically significant.

As stated in the method section, agreement criterion.
for judges' ratings ranged between 95% to 100% agreement to be acceptable. Agreement checks for the content scores resulted in 100% agreement for Phases I and II, and 95% agreement for Phase III. Agreement checks between judges for the latency of responses scored in tenths of seconds resulted in 95% agreement for Phase I, 100% for Phase II, and 97% for Phase III. Duration of response, scored in tenths of seconds, yielded 95% agreement between judges for Phase I, 100% agreement for Phase II, and 97% agreement for Phase III.

The subjects' responses to the Post-Trial forms were the primary instruments used in this study to evaluate changes in the subjects' self descriptive attitudes. A one-tailed t-test was used to assess the significance of the difference between the means of the subjects' responses to each question from phase to phase. Table 4 provides the values for means, standard deviations, t-values, and levels of significance for one-tailed tests at seven degrees of freedom.

Item 1 asked subjects to rate how anxious they felt responding to each situation. A test measuring the difference between the mean ratings for Phases I and II resulted in a score of $t = 3.47$ which is significant at the .01 level. Comparing mean ratings between Phases I and III yielded a score of $t = 2.673$ which was significant
at the .025 level. Subjects rated themselves as less anxious following training as compared to before training.

Item 2 asked subjects to rate how assertive they believed they were in responding to each situation. A test of the significance of the difference between mean ratings for Phases I and II resulted in a score of $t = 4.5632$ which is significant at the .005 level. The difference between means for Phases I and III was found to be significant at the .0005 level with $t = 5.7414$. The difference between mean ratings for Phases II and III was found to be significant at the .05 level, with $t = 1.531$. The subjects saw themselves as more assertive following training than before training.

Item 3 asked subjects to predict how assertive they believe they would be in a situation similar to the training scene in real life. There was no significant difference between the mean ratings for Phases I and II. The difference between Phases I and III resulted in $t = 3.8328$ which was significant at the .005 level. There was no significant differences between the means for Phases II and III. As training progressed, subjects indicated they believed they would be more likely to respond assertively to situations similar to these in real life.

The probability of the differences ($p > .10$) between the mean scores of item 4 for each phase was not above the
level of chance (not statistically significant). While there were no significant differences between means for each phase, the mean scores indicated that subjects felt an assertive response would have been very justified in these types of situations across phases.

Item 5 required subjects to indicate how guilty/fair they believed they would be to a situation similar to the training scenes in real life. There was no significant difference between the mean ratings for Phases I and II but there was a significant difference between Phases I and III with $t = 2.7555$. This was significant at the .025 level. The difference between the mean ratings for Phase II and III was also significant at the .025 level with $t = 2.54$. As training progressed subjects viewed an assertive response as evoking less guilt and more fairness than prior to training.

Item 6 asked subjects to estimate the fear of confrontation they believed they would experience in a similar real life situation. A statistically significant difference was found between the mean ratings for Phases I and II at the .025 level with $t = 2.4798$. The difference between Phase I and Phase III resulted in $t = 2.0291$ which was significant at the .05 level. There was no significant difference between mean ratings for Phases II and III. As training progressed the results indicate that
subjects believed they would feel less scared and more relaxed than prior to training.

As stated previously, the RAS and EIBS were also used as measures of change over the course of treatment. The mean RAS score for the eight subjects before treatment was $\bar{X} = -14.875, s = 9.14$, with a range from -29 to -3. The mean pre-treatment EIBS score for the same subjects was $\bar{X} = 53.5, s = 6.4$, with a range from 41 to 62. A correlation of $r = .32$ was found between the two pre-treatment measures. The mean post-treatment RAS was $\bar{X} = 12.5, s = 11.89$, with a range from -9 to 29. The mean post-treatment EIBS was $\bar{X} = 46.5, s = 9.74$, with a range from 32 to 62. The correlation between these measures was $r = .21$. Means, Standard Deviations, and Ranges are provided in Table 5.

A one-tailed test to measure the significance of the difference between pre and post-treatment scores was employed for both schedules. A significant difference was found between pre and post-treatment RAS scores, with $t = 5.68, df = 7$. This was significant at the .0005 level. A score of $t = 2.70, df = 7$, was found for the difference between the pre and post-treatment EIBS scores. This score was significant at the .025 level.

To briefly summarize the results, behavioral ratings on the content of a subject's response indicated a change
Table 5
Pre and Post-Treatment RAS and EIBS Scores

<table>
<thead>
<tr>
<th>Subject</th>
<th>RAS</th>
<th>EIBS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>1</td>
<td>-25</td>
<td>-9</td>
</tr>
<tr>
<td>2</td>
<td>-3</td>
<td>15</td>
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<td>3</td>
<td>-22</td>
<td>12</td>
</tr>
<tr>
<td>4</td>
<td>-16</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
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<td>23</td>
</tr>
<tr>
<td>6</td>
<td>-12</td>
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<td>$\bar{x}$</td>
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<tr>
<td>$\bar{X}$</td>
<td>-14.875</td>
<td>12.5</td>
</tr>
<tr>
<td>s</td>
<td>9.14</td>
<td>11.89</td>
</tr>
<tr>
<td>Range</td>
<td>-29 to -3</td>
<td>-9 to 27</td>
</tr>
</tbody>
</table>

from nonassertive to assertive behavior over the course of the three experimental phases. Similar results were found with the remaining two components. An analysis of the responses to the post-trial form indicated that subjects rated themselves as less anxious, more assertive, more certain that they would respond assertively in similar
real life situations, feeling more fair, and more relaxed following training in comparison to baseline ratings. Finally, significant differences were found between pre and post-treatment RAS and EIBS scores for subjects indicating both more assertive ratings and more rational ratings after treatment.

Before debriefing, the subjects responded to four questions relating to the nature of this study. The first question asked, "Now that you have completed the workshop do you believe you can be more assertive in future situations?" Seven of the subjects responded with a "yes" and one responded with a "probably." The second question asked, "Did you feel any pressure from the trainers to change your attitudes about acting assertively?" All eight subjects responded with a "no." The third question asked, "Did practicing specific techniques and applying them to personal situations help in changing your attitudes?" The eight subjects responded with a "yes" to this question. The last question asked subjects to provide suggestions for improvements and comments regarding the workshop.
CHAPTER IV

DISCUSSION

The early cognitive dissonance experiments demonstrated that when people were asked to behave in a manner that contrasted with their beliefs, or attitudes, and there was not a sufficient payoff for this behavior, they would experience a shift in their beliefs/attitudes to correspond with the new behavior. In a similar manner, it was predicted that nonassertive subjects would evaluate themselves as more assertive following a series of behavioral assertiveness training sessions. No attempt was made to identify and change any thought processes that may have inhibited assertive responding. Rather, subjects were taught the components of assertive behavior and encouraged to practice assertive responses. Subjects were provided verbal feedback in the form of praise and constructive criticism from both the trainer and group members regarding their performances.

The judges' ratings based on audiotaped responses of the subjects' behavior revealed that as subjects progressed through training their behavior changed from nonassertive to assertive. Other studies have shown similar results as to the effectiveness of a behavioral
assertiveness training program (Hersen, Eisler, & Miller, 1974; McFall & Lillesand, 1971; McFall & Martson, 1970; McGuire & Thelen, 1983).

To measure changes in the subjects' self-descriptions and attitude/belief statements the self-report forms were completed after each training trial. The self-report ratings of the subjects during baseline were similar to the ratings of low assertive individuals in other studies. Subjects rated themselves anxious while responding which was similar to results in Alden & Cappe (1981), Bordewick & Bornstein (1980), and Schwartz & Gottman (1976). They viewed themselves as not assertive (Alden & Cappe, 1981; Nietzel & Bernstein, 1976), and were not very certain as to how assertive they would be in real life situations (Bordewick & Bornstein, 1980; Schwartz & Gottman, 1976). In addition, the subjects also reported experiencing a fear of confrontation.

As subjects progressed through training, their responses to analogue situations changed from nonassertive (during the baseline phase) to assertive (training phases) behavior based on the judges' behavioral ratings. A change in the subjects' self evaluations accompanied the changes in assertive behaviors. Subjects viewed themselves as more relaxed and assertive while responding, feeling fair or justified while responding, feeling less
fear of confrontation while responding assertively, and believing they would be more likely to behave assertively in similar real life situations. Many of the previously mentioned studies (Alden & Cappe, 1981; Bordewick & Bornstein, 1980; Carmody, 1978; Schwartz & Gottman, 1976) found that assertive subjects described themselves in a similar manner. Perhaps the changes in the subjects' self-perceptions may be due to the acquisition, application, and feedback regarding the subjects' assertive skills as they progressed through the three phases of training.

The impact the environment has on shaping a person's self perceptions has been described by Bem (1965). Much of Bem's explanations stem from his research in the area of cognitive dissonance. He bases his explanation on the theory that self-awareness is a product of social interaction. Self-awareness is described as one's ability to respond differentially to one's own behavior and its controlling variables. The most common form of behavior that comprises self-awareness is self-descriptive verbal statements. The individual is conditioned by the socializing community to describe his/her own behavior. In order for the community to condition an individual to describe internal or private stimuli, it must employ the public stimuli and responses that accompany the private
events. Thus, many self-descriptive statements of private events are under the discriminative control of both private and public stimuli. An individual is thus an observer of his/her own behavior and its controlling variables. Self-descriptive and attitude/belief statements are then Tacts (Skinner, 1957) of the reinforcing effects particular environmental stimuli have on the individual.

During training, both the trainer and other group members provided verbal feedback as to how effective and appropriate the subject's responses were. The training group provided a socializing environment that described the subject's behavior relative to the components of an assertive response. It also provided reinforcement in terms of how effective the subject's behavior was.

The RAS and EIBS were two other self-report inventories used in this study. As previously described, the RAS (Rathus, 1973) is a self-report scale used to assess assertiveness. The EIBS (Alden & Safran, 1978) is a scale that measures the extent to which people endorse or agree with several common irrational beliefs. Alden & Safran (1978) found that subjects who endorsed the irrational beliefs (a high endorsement group) were less assertive and more uncomfortable in role-playing assertive situations than those in a low endorsement group. Alden &
Cappe (1981) found similar results with the EIBS. Nonassertive individuals were more likely to endorse irrational beliefs and were more anxious than assertive subjects when responding in role-played situations. In this study, a significant difference was found between the subjects' pre- and post-training EIBS scores. Subjects were less likely to endorse irrational beliefs after training as opposed to before training. As previously described, subjects also expressed less anxiety while responding and described themselves as more assertive following training as opposed to before training. Similar changes occurred in the subject's RAS scores.

The RAS scores of the subjects increased significantly from pre- to post-training. In this study, the average pre-training RAS score was $\bar{X} = -14.87$, $SD = 9.14$. At post-training the average RAS score was $\bar{X} = 12.5$, $SD = 11.89$. A study by Carmody (1981) yielded similar results. In that study, subjects undergoing a behavioral assertiveness training program had an average RAS score of $\bar{X} = -13.53$, $SD = 19.75$. At post-training, their scores were $\bar{X} = 1.60$, $SD = 9.14$, at followup $\bar{X} = 8.45$, $SD = 19.75$. In addition, there were only four training sessions.

These results seem to indicate that as subjects progressed through training their self-descriptive
behavior and attitude/belief statements changed from more to less irrational and from less to more assertive. There was no direct attempt to manipulate the subjects' attitude/belief statements. However, a rationale for using an assertive response was provided for each training trial. Subjects were also provided with verbal feedback describing their behavior as they progressed through training. This may account for some of the reductions in the subjects' EIBS scores and increases in RAS scores. Demand characteristics may have also influenced the results of the post-training RAS and EIBS scores. Subjects were aware that the RAS and the EIBS would be administered before training and after training. The extent of influence this knowledge had on the results cannot be determined.

In Chapter I a review of some of the literature regarding the differences in cognitions between assertive and nonassertive individuals was provided. The authors who were cited suggested nonassertive behavior resulted from self defeating or irrational thoughts/beliefs rather than from a deficit of assertive skills. Attempts were made to demonstrate the differences in self-perceptions between assertive and nonassertive subjects. Justifications were presented for the preference of cognitive therapies over strictly behavioral therapies. The results

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of these studies seem to be contradictory.

While there seems to be some evidence that nonassertive individuals are more self-critical and self-effacing than assertive subjects, behavioral therapies were found to be as effective as cognitive therapies in changing and maintaining assertive behavior. The work of Maultsby (1974) indicated that changing cognitions alone was not sufficient but learning and practicing new behaviors was necessary for behavior change in people. Furthermore, a product of changes in behavior patterns is cognitive dissonance. The research in the field of cognitive dissonance revealed that if people behaved in a manner inconsistent with their personal beliefs, attitudes, or self-perceptions, these cognitions would change to correspond to changes in their behavior. These studies (taken together) indicated a need to examine the relationship between changes in behavior and its effect on self-perceptions.

Based on research in the area of cognitive dissonance it was predicted that the client's self-perceptions (self-descriptive statements, self-evaluations, attitude/belief statements) would change from nonassertive to assertive if his/her overt behavior were to change from nonassertive to assertive. This was found to be the case.

Two processes seemed to have occurred involving the
subject's verbal behavior (Skinner, 1957). First, the subjects were taught to respond assertively. This required a verbal response (a Mand) from the subjects to either request a change in another person's behavior or refuse a request from someone else. Subjects were taught to make such verbal responses by the trainers. They were encouraged to practice assertive responses and were provided feedback regarding their behavior by the trainer and other group members.

Second, subjects were changing their self-descriptive and attitude/belief statements (Tacts). Information was provided by the trainer and group members regarding the subject's overt behavior. This information seems to have been used by each subject to modify or change his/her own self-descriptions.

These results indicate that teaching nonassertive individuals assertive skills and providing positive feedback in the form of praise or constructive criticism will facilitate changes in the subject's self-descriptive verbal behavior.
Appendix A

Rathus Assertiveness Schedule
PLEASE NOTE:

Copyrighted materials in this document have not been filmed at the request of the author. They are available for consultation, however, in the author's university library.

These consist of pages:

APPENDIX A: pp. 53-55

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300 N. ZEEB RD., ANN ARBOR, MI 48106 (313) 761-4700

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Appendix B

Endorsement of Irrational Beliefs Scale
Instructions: Below, you will see a scale ranging from 1 to 9. Following the scale is a list of 11 statements. Please indicate the extent to which you either agree or disagree with each statement. One represents total disagreement, 9 represents total agreement. Place the numerical value of your estimate in the space before each statement.

Disagree Neutral Agree
1...2...3...4...5...6...7...8...9

_1. It is very important to me to be loved or approved of by almost everyone I meet.

_2. I believe I should be competent at everything I attempt.

_3. I believe that there are some people in the world who are bad or wicked. They should be held responsible for their actions and punished.

_4. I become more upset than I should when things are not the way I want them to be.

_5. I believe that most human unhappiness is caused by external factors; that people have little ability to control their own sorrows and disturbances.

_6. I become very concerned about things that are dangerous and dwell on the possibility of their occurrence.
7. I believe it is better in the long run to avoid some life difficulties and responsibilities than to face them.

8. I believe I need another person stronger than myself on whom to rely.

9. My past history is an important determinant of my present behavior. I believe that once something strongly affects my life it will always affect my behavior.

10. I become more upset than I should about other people's problems and disturbances.

11. I believe there is one right solution to any given problem. If I do not find this solution I feel I have failed.
Appendix C

Examples of Responses Based on Content Ratings
Situation: At an uncrowded restaurant you order a steak, medium-rare, mashed potatoes, and coffee. Forty-five minutes later, the waitress returns with your order. The steak is well-done and the potatoes are cold.

Waitress: "Here's your order, enjoy your meal."

Rating of 1: "Thanks, I guess I can eat it."

Rating of 2: "But I wanted a medium-rare steak and this is well done."a

Rating of 3: "Excuse me Miss, I ordered my steak medium-rare and this is well-done, also the potatoes are cold. Please take this back and give me what I asked for."

Rating of 4: "I suppose you really think I'm going to eat this crap. Take it back and bring me what I ordered."

This statement implies that the subject wants a new steak but does not specifically request a change in the waitresses behavior or ask for a new behavior.
Appendix D

Consent Form
I understand that this assertion training workshop is a research project and will consist of three phases. The first phase will consist of one session. The remaining two phases will each consist of two sessions. The five workshop sessions will be conducted on separate days, spanning a two week period in October of 1984. During each session, I will be taught by Mr. Boland and his assistants to respond in an appropriately assertive manner to a number of standardized training scenes. I understand that each session will be composed of a number of training trials. After each training trial I will be asked to complete a form measuring specific attitudes and beliefs regarding my performance and assertive abilities and that these forms are for research purposes. I understand that at the end of each phase I may be selected to be videotaped responding assertively to a standardized training situation.

I understand that the most likely benefit of my participation will be an improvement in my ability to act assertively in a wide variety of situations. I am also aware that positive or desirable results cannot be guaranteed. While I am informed that there are no documented cases of a person being harmed by assertion training techniques, I am aware that a possible (though unlikely) negative consequence from my participation is that I may not improve in my ability
to act assertively.

I am aware and understand that all results and records (data sheets, graphs, videotapes, and questionnaire responses) of my participation will be kept confidential. Only Mr. Boland, his workshop assistants, his three supervisors (all are Doctors of Psychology and professors at Western Michigan University), and the other clients participating in this workshop with me will be aware of my involvement in this project. I understand that all videotaped responses will be viewed and scored on data sheets by Mr. Boland and his assistants. Once this study is completed, reviewed by Mr. Boland's supervisors, and graded, the scores of my performance will be kept but all videotapes will be erased. Furthermore, I will not be identified by name on any tape or data sheet. My name will be associated only with my scores on the Rathus Assertiveness Schedule and the endorsement scale which accompany this form. I understand that the Rathus Assertiveness Schedule is to be used for selection purposes and as a measure of change through the course of this workshop. My participation will be determined by the score I achieve on this schedule. The accompanying endorsement scale will also be used as a measure of change and is experimental in nature.

I understand that my participation in this project is completely voluntary. I may discontinue my participation at
any time. If I have any questions about my rights, or the procedures used in this project, I am to address my concerns to Mr. Boland through the Psychology Department at Western Michigan University.

I have read and fully understand the explanation of what this research project consists of and what is expected of me. Furthermore, I understand that a copy of this study and it's results will be sent to me. I understand that this study may be published and am fully aware that I will not be identified as one of the subjects in order to protect my privacy.

Please check the appropriate line and sign your name and the date.

___ I understand and consent to participate in the assertion training workshop described herein.

___ I do not wish to participate in the assertion training workshop described herein.

_________________________________  ________________
Name                                      Date
Appendix E

Post Trial Form
Instructions: Please circle the number that you believe to be the most accurate response to each of the six items. Respond as truthfully as possible. If you are not sure of your answer, place a check in the space to the left of each scale.

1. How anxious did you feel in responding to this situation?
   Don't Know Calm Uneasy Anxious
   1........2........3........4........5........6

2. How assertive would you rate your response to this scene?
   Don't Know Assertive Nonassertive
   1........2........3........4........5........6

3. How likely would you be to respond assertively in a situation similar to this in real life?
   Don't Know Probable Uncertain Improbable
   1........2........3........4........5........6

4. How justified would you feel in responding assertively to a situation similar to this in real life?
   Don't Know Unjustified Justified
   1........2........3........4........5........6

5. How guilty would you feel when responding assertively to a situation similar to this in real life?
   Don't Know Guilty Fair
   1........2........3........4........5........6
6. In a situation similar to this, how afraid of confrontation do you believe you would be?

Don't Know  Relaxed  Scared  Terrified

_ 1......2......3......4......5......6
Appendix F

Analogue Situations
Baseline Analogues

Situation 1: Narrative: "You are in a drug store and you buy an item that costs 75 cents. You go to pay for it and hand a cashier a five dollar bill. He rings up the sale and hands you 25 cents which is change for only a dollar."

Male cashier: "Here's your change."

Situation 2: Narrative: "Aunt Margaret, with whom you prefer not to spend much time, is on the telephone. She has just told you of her plans to spend three weeks visiting you beginning next week."

Aunt Martha: "I'll really enjoy visiting you. You won't mind, will you?"

Situation 3: Narrative: "It is your only day off and you have several important errands to run. As you are leaving your house, your neighbor comes over and wants to borrow your car. You really need your car."

Male neighbor: "How about letting me borrow your car for awhile?"

Situation 4: Narrative: "One of the people you work with has been consistently arriving late for work over the past three days, making your job much more difficult."

Female co-worker: "Sorry I'm late, thanks for covering me."
Situation 5: Narrative: "You are in the middle of watching your favorite program on television. Your spouse walks in and changes the channel."
Spouse: "Let's watch this show instead."

Training Analogues

Situation 6: Narrative: "You are at a public meeting in a large room. A man enters the room and sits down next to you, puffing on a large cigar. The smoke is very offensive to you."
Male smoker: "Do you mind if I smoke."

Situation 7: Use situation 2.

Situation 8: Use situation 3.

Situation 9: Narrative: "At an uncrowded restaurant you order a steak, medium-rare, mashed potatoes, and coffee. Forty-five minutes later the waitress returns with your order. The steak is well-done and the potatoes are cold."
Waitress: "Here's your order, enjoy your meal."

Extended Prompt Situations

Situation 10: Narrative: "You took your car to a gas station and explicitly told the mechanic to give it only a tune-up. You were told it would only cost 20 dollars."
Male mechanic: "The tune-up was 12 dollars plus 8 dollars for labor. The grease and oil change was 6 dollars. Antifreeze was 5 dollars. 4 dollars for a new oil filter and 5 dollars
for rotating the tires. Will that be cash or charge?"

Situation 11: Use situation 2

Situation 12: Narrative: "You are in a crowded grocery store and are in a hurry. You have picked up six small items and get into line to pay for it when a woman with a shopping cart full of groceries cuts in line in front of you."

Female shopper: "You won't mind if I cut in here, will you? I'm late for an appointment.

\[a\] Confederates will provide a prompt to each of the subject's responses. A maximum of four prompts will be provided for each trial.
Appendix G

Observer Instructions and Data Sheet
Instructions: Below is a list of the four components of an assertive response that will be measured in this study. Each observer will be assigned a set of components or behaviors to monitor during an observation trial. During an observation trial you will watch a videotape. On the videotape a narrative describing a situation will be presented, followed by a confederate presenting a prompt, followed by a bell sound, then the subject's response. The bell sound is the signal for observers to begin monitoring responses and recording on the data sheets. Use the numerical ratings for judging the contents of the subject's response on the data sheet. A comment section to address questions and peculiarities is provided at the bottom of the data sheet.

1. Content of Response:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.</td>
<td>Aggressive; profanity, verbal threats.</td>
</tr>
<tr>
<td>3.</td>
<td>Appropriate assertion; makes explicit request or refusals, is polite if appropriate to the situation.</td>
</tr>
<tr>
<td>2.</td>
<td>Describes situation, only implies request or refusal.</td>
</tr>
<tr>
<td>1.</td>
<td>Compliance, passive response, or no response.</td>
</tr>
</tbody>
</table>
2. Latency: The time between the end of the prompt (bell sound) and the first utterance of the subject's reply. Record in seconds.

3. Duration: The length of time between the subject's first verbal utterance of his response to his last verbal utterance—recorded in seconds.

4. Eye Contact: The length of time the subject looks at the prompter while responding will be recorded in seconds.

Data Sheet:

Name of Subject: _____________________________________
Name of Observer: __________________________________________
Sex of Prompter: ______________________________________________
Request or Refusal Scene: ______________________________________

<table>
<thead>
<tr>
<th>Content*</th>
<th>Latency</th>
<th>Duration</th>
<th>Eye contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
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<td>4</td>
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</tbody>
</table>

Comments:

*Use lines 2, 3, and 4 for extended prompt scenes.


