ASSERTIVE TRAINING WITH
RETARDED WOMEN

THESIS

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

For the Degree of

MASTER OF ARTS

By

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Denton, Texas
May, 1978

Assertive training was investigated to determine its usefulness in teaching mildly retarded women to become more assertive. The 10 subjects (ages 18-35, WAIS VIQ 50-75) were randomly assigned to either the assertive training or the control group. Experimental subjects received 5 weeks of daily assertive training sessions which employed modeling, behavior rehearsal, and focused instructions in a group setting. Specific components of assertive behavior were taught in the following order: (a) assertive refusals, (b) assertive requests, (c) posture, (d) eye contact, and (e) loudness. Results of a behavioral role-playing task administered to both groups before and after treatment revealed that assertive training subjects made significantly greater improvement than controls in their assertive content. Additionally, these subjects manifested significantly more improvement than control subjects on a global assertiveness measure.
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ASSERITIVE TRAINING WITH
RETARDED WOMEN

Various behavioral problems with mentally retarded individuals have been treated successfully through the application of behavior modification techniques (Ullman & Krasner, 1975). However, virtually no research has been published in the area of assertive training with the mentally retarded. Assertive training has benefitted many nonassertive persons of normal intelligence by providing alternative ways for them to respond to situations which previously were met with either inappropriate aggression or passive submission to the demands of others (Alberti & Emmons, 1974). It is conceivable that assertive training, if it could be effectively applied to the mentally retarded, might benefit this population in the same way it has benefitted persons of normal intelligence.

Alberti and Emmons (1974) define assertive behavior as that which "enables a person to act in his own best interests, to stand up for himself without undue anxiety, to express his honest feelings comfortably, or to exercise his own rights without denying the rights of others" (p. 2). Although expressions of anger and resentment were initially seen as the most common of assertive behaviors dealt with in therapy situations (Wolpe & Lazarus, 1966), the outward expression of practically all feelings other than anxiety is regarded
as assertiveness by Wolpe (1969), including the expression of affectionate feelings.

Lazarus (1972) divides the main components of assertive behavior into four separate, specific response patterns: (a) the ability to say "no," (b) the ability to ask for favors and to make requests, (c) the ability to express positive and negative feelings, and (d) the ability to initiate, continue, and terminate conversations. He notes that a person may exhibit deficiencies in any or all of these four categories, and that training in each specific area is necessary, as little or no transfer of training occurs across categories. Lazarus also points out that appropriate assertiveness does not include an emphasis upon contradicting and attacking others, for not much is gained through abrasive or obnoxious interpersonal behaviors.

Although much emphasis has been placed on the verbal components of assertive behavior, nonverbal components are seen as important aspects of assertiveness as well. Wolpe and Lazarus (1966) contend that style of emotional expression, posture, facial expression, nonverbal speech characteristics, and socially appropriate content are important components of assertive behavior. Serber (1972) was concerned with loudness of voice, fluency of spoken words, eye contact, facial expression, body expression, and distance from the person with whom one is interacting as factors in effective assertiveness, pointing out that what the ineffective person lacks
is often not knowledge or courage but the ability to master appropriate nonverbal, as well as verbal, components of behavior. He bases his functional definition of what is appropriate upon the congruency between verbal and nonverbal messages, i.e., not smiling when angry, or not shouting during tender moments.

Eisler, Miller, and Hersen (1973) investigated components of assertive behavior that included duration of looking, frequency of smiles, duration of reply, latency of response, loudness of speech, fluency, compliance content, content requesting new behavior, and assertive affect. They found that all but frequency of smiles, duration of looking, and speech fluency were significantly related to judgments of overall assertiveness.

It seems reasonable to assume that assertive behavior, like most other complex human behaviors, is comprised of both verbal and nonverbal aspects. For the purpose of this investigation, it will be advantageous to limit the scope of the construct to patterns of verbal and nonverbal behaviors which enable a person to make reasonable requests effectively and refuse unreasonable ones.

Assertive training is one of the first therapeutic procedures to be developed by behavior therapists (Salter, 1949). The rationale for assertive training is presented by Wolpe (1969).
Assertive training... is required for patients who in interpersonal contexts have una-
daptive anxiety responses that prevent them from saying or doing what is reasonable and right... suppression of feeling may lead to inner turmoil which may produce somatic symptoms and even pathological changes in predisposed organs. (p. 61)

Wolpe assumes that the patient benefits from increased assertiveness in two ways. First, Wolpe sees assertion as antagonistic to anxiety, and an increase in the former will result in a decrease of the latter, in accordance with the principle of "reciprocal inhibition." Reduced anxiety will then bring about a greater feeling of well-being in the cli-
ent. Second, appropriate assertiveness will bring about positive changes in the behavior of others towards him, enabling him to obtain significant social rewards which he otherwise would not have.

Although Wolpe (1958) and Lazarus (1974) have emphasized the importance of anxiety as a causative factor in the fail-
ure to develop assertive behaviors, in many clients this failure may be viewed as the absence of specific response skills (McFall & Twentyman, 1973). It has been proposed by MacDonald (Ullman & Krasner, 1975) that a person is unassert-
ive for at least one of three reasons: (a) not knowing how to be appropriately assertive, (b) not knowing the circum-
stances under which assertiveness is appropriate, or (c) a
fear of rational or irrational consequences of being assertive. It is necessary to ascertain which of these reasons are operating in any given case, according to MacDonald, because each of them requires a different therapeutic approach.

Therapeutic techniques for instigating assertive behavior vary widely among clinicians—and have yet to be thoroughly investigated by researchers. Those which are most frequently applied include various forms of instruction, modeling, role playing, and behavioral rehearsal with feedback.

Instruction takes the form of advice (telling the client that he needs to become more assertive), exhortation (urging the client to claim his legitimate human rights), and education (explaining the general importance of assertion in human relationships). Instruction along rational-emotive lines of thought is sometimes employed when needed to dispel irrational fears of the consequences of assertion (Lazarus, 1972). Focused instruction has received attention in recent years as a promising approach to the teaching of assertive behavior (Frederickson, Jenkins, Foy, & Eisler, 1976; Server, 1972). With this technique, the therapist instructs the client systematically on each of the specific verbal and/or nonverbal components of assertion in which his behavior is deficient. When a new skill is mastered by the client, he then moves on to the next component, until adequate mastery of all the specific components of assertion is achieved.
Modeling (Bandura, 1971) is a technique based upon principles of imitative learning which has been used extensively in assertion training and other therapeutic techniques (Eisler, Hersen, & Miller, 1973; Rathus, 1973). Rathus utilized videotaped mediated models and directed practice to increase assertive behaviors in female college students; other researchers have investigated the effectiveness of live and audio models in combination with behavior rehearsal and coaching as techniques for increasing assertive behaviors (McFall & Lillesand, 1971; McFall & Twentyman, 1973). Bandura (1971) concluded that modeling with guided participation is one of the best methods available for reducing fears and anxiety-based avoidance behavior. In this method, the therapist models the desired behavior for the client, and the client then imitates the behavior with coaching from the therapist until a satisfactory imitation is achieved. Ideally, the behavior is modelled by more than one person. The client practices the modelled behaviors in a graduated sequence, starting with the behaviors that are easiest for him, and progresses to the more difficult ones. An advantage of the modelling technique is that when it is used in combination with instruction and feedback (coaching), it eliminates the need for trial and error in discovering the correct response.

Behavior rehearsal or role-playing is another commonly used technique in assertive training (Alberti & Emmons, 1974; Lazarus, 1964; McFall & Marston, 1970; Wolpe, 1969). In this
procedure, the client is required to role play interpersonal situations which are relevant to his particular problem while the therapist provides corrective feedback and verbal reinforcement. The roles are practiced repeatedly until the client feels comfortable performing an appropriately assertive response in areas which previously caused difficulty. The tasks are again graduated—the client progresses from those causing a minimum of anxiety to the more stressful ones.

Behavior rehearsal in conjunction with modeling has been found to be an effective technique in the teaching of assertive behavior, although the relative contributions of the two separate procedures to the success of the treatment have not been conclusively demonstrated (Friedman, 1971; McFall & Lillesand, 1971; McFall & Twentyman, 1973). In Friedman's (1972) review of research on the effects of modeling and role playing on changes in maladaptive behavior, he concluded that the most effective behavior-change procedures combined modeling with either role playing or participation (a technique which is similar to role playing in many respects). He also noted that modeling procedures were especially helpful with socially inhibited subjects, because these individuals are often unable to improvise new responses in role-playing situations and require explicit information to guide their behavior, such as that provided by a model.

Group settings have been found effective in assertion training (Hirsch, 1975), and some therapists regard a group
mode superior to individual therapy for most nonassertive or aggressive persons. The group provides a social environment in which each person can be accepted and supported by others with problems similar to his own. The advantages of multiple models, diverse feedback, and powerful social expectancies and reinforcements are all made available through the group mode of treatment. Because social situations are a frequent source of difficulty for persons with problems in assertion, group work is particularly useful in that it gives a realistic opportunity to face several people and overcome the problem in a relatively safe training environment (Alberti & Emmons, 1974).

Appropriate candidates for assertive training are those persons who lack the necessary interpersonal or social skills to cope effectively with situations which require assertive responses. The ineffective person may utilize one of two common behavior patterns in such situations: (a) nonassertive, passive, compliant behavior; or (b) aggressive, hostile behavior. The consequences of these types of responses, however, are often undesirable, as pointed out by Alberti and Emmons (1974).

Problems in assertion are frequently related to a variety of other difficulties. Lazarus (1972) noted a lack of assertive behavior in a large percentage of psychiatric patients, notably depressives, phobics, homosexuals, and "passive dependent" personalities. Problems in living are
usually associated with disturbed interpersonal relations, which in turn are often due to difficulties in assertion. Low self-esteem, psychosomatic complaints, inadequate mastery of life situations, rage, depression, apathy, and withdrawal can all result from a person's inability to express what he feels and thinks in an open, direct, and appropriate manner.

The range of human activities in which assertive training is applicable is very broad. A few of the areas in which this form of treatment can be utilized are marital/family therapy, school counseling, teacher education, personnel management, and rehabilitation. Some of the clinical populations which have responded to assertive training techniques include anxious, depressed, or aggressive persons, stutterers, alcoholics, schizophrenics, and sexual offenders. Children and adults have benefitted from various forms of assertive therapy (Chittenden, 1942; Gittelman, 1956).

The mentally retarded represent a minority group which has received virtually no attention in the area of assertive training. The retarded are assigned a low social status and are often regarded as incapable of making decisions for themselves. They are frequently treated like perpetual children by the normal population, and may be subtly encouraged to view all adults as their superiors. In such a cultural setting, the likelihood seems slight that the retarded individual would spontaneously develop appropriate assertive skills. In
any case, it is reasonable to assume that problems in assertion can be found among the retarded population, and these problems may cause difficulties in other areas of behavior just as they do in the normal population.

The value of psychotherapy for the retarded has been questioned from a theoretical point of view. Rogers (1954) claimed that psychotherapy was not relevant for the retarded because it required insight and verbal communication, elements inherent in normal intelligence. The inability of the retardate to experience insight into his behavior is the major argument presented by those theoreticians discouraging psychotherapy with mental defectives (Sternlicht, 1965).

Many researchers have found various psychotherapeutic techniques to be effective in bringing about positive changes in the behavior of mentally retarded persons (Thorne, 1948). Relationship therapy (Nehan, 1951), art therapy (McDermott, 1954), play therapy (Cewen, 1962), and group therapy (Astrachan, 1955) are only a few examples of the types of psychotherapies which have been successfully applied to retardates. Lott (in Menolascino, 1970) summarizes his findings on psychotherapy with the mentally retarded as follows:

Psychotherapy, with due respect to its limitations and special indications, can be of assistance to the mentally retarded, especially those who are verbal and are aware of their handicaps. It is a mistake to assume that mental retardation, with
its associated dimension of limited comprehension, is a firm barrier to the use of psychotherapy.

(p. 277)

Behavior therapy techniques have proven especially valuable in eliciting behavioral change in the retarded, and this fact has drawn widespread attention in recent years. Heber (1964) pointed out that one of the few striking and consistent findings to come out of the meager investment in personality research in the retarded is the importance of motivational variables. Even severely retarded persons appear to be responsive to variations in incentive conditions. Social reinforcement (in the form of verbal praise, encouragement, or just simple attention) appears to be at least as effective with retardates as with normal persons. Behavioral techniques have been utilized to improve the skills of the retarded in the areas of self-help behavior, speech, work, and classroom behavior (Ullman & Krasner, 1975, p. 524).

Although operant conditioning has been the behavior-modification technique most extensively employed in work with the retarded, some attention has been focused in recent years on the use of modeling and role-playing techniques as well (Altman & Talkington, 1971). Talkington, Hall, and Altman (1973) demonstrated the benefits of peer modeling in training communication skills with severely retarded subjects. Taylor (1969) evaluated role playing with borderline and
mildly retarded adolescents and found that having the individual perform the desired behavior pattern was more effective than telling him to change his behavior. He also reported that role playing has a specific advantage over other methods of communication with the retarded, primarily because it does not require the retardate to use his limited integrative and verbal abstracting abilities. In addition, he concluded that role playing is most rewarding when used in groups.

Considerable work has been done investigating group therapy with the retarded. Vail (1955) reported an unsuccessful group-therapy experience which he attributed to the nondirective approach which he utilized. Astrachan (1955) reported improvement in mildly retarded females after participation in a group-therapy project. Wilcox and Guthrie (1957) used a group-therapy approach including role playing, situational tasks, films, and psychodrama in mentally retarded subjects who were described as either markedly aggressive, conforming or passive, or a combination of both these patterns. Pretesting and posttesting consisted of ratings of critical incidents by matrons, and items adapted from the Hospital Adjustment Scale. Positive change was noted in the experimental groups. However, statistics were calculated only on the direction of change rather than the actual amount of change; therefore, the reader does not know to what degree the behavior was improved, only that those individuals who received the group therapy did improve.
The combined techniques of modeling, role playing, and instruction have been successfully applied in a group setting to teach work-related social skills to mentally retarded males whose IQ's ranged from 50 to 75 (MaGee, 1975). Pretest and posttest measures consisted of ratings on 16 target behaviors which were identified as frequently occurring problems in the sheltered workshop setting (reporting on time for work, asking permission before leaving the job station, falling asleep on the job, sharing tools and materials, etc.). Also, group participation was evaluated. MaGee found that role playing was more effective than either instruction or modeling in producing the participatory behaviors requisite to effective group treatment, and that changes in the targeted behaviors for the role-playing subjects generalized significantly to the subjects' actual work setting.

Since assertive behavior can be viewed as a type of social skill, it follows that the same techniques which have been used to teach social skills to the mentally retarded might be effective in teaching assertive skills to these individuals as well. No research has been published in the area of assertive training with the retarded. In light of the possibility that this form of therapy could benefit the retarded in much the same way as it does nonassertive persons of normal intelligence, research is needed. The present research project was directed to the problem of assertive training with retardates.
The hypotheses to be investigated can be stated as follows.

1. Deficits in assertive behavior exist and can be demonstrated among mildly retarded persons.

2. A group-based assertive training program employing the techniques of modeling, role playing, and focused instruction will be effective in eliciting significant behavioral change in the direction of increased assertiveness in nonassertive, mildly retarded women.

Method

Subjects

The 10 female subjects were selected from among clients participating in a sheltered workshop program. Criteria for selection included: (a) verbal IQ score between 50 and 75, as measured by the Wechsler Adult Intelligence Scale; (b) age 18 or older; and (c) recommendation by the workshop staff for participation in the project which was based upon the client's having demonstrated a poor ability to make appropriate requests and refusals. Each of the subjects was randomly assigned to either the assertive training or the control group.

Apparatus

A Panasonic U-Vision video cassette recorder, model number NV2125; a Panasonic VTR monitor, model number AN236V; and a Panasonic TV camera, model number WV-340P, were utilized in the study.
Procedure

Training took place at a private, nonprofit, rehabilitation facility. Assessments were conducted at North Texas State University so that the subjects' responses could be recorded by videotaping equipment.

Trained raters were used to evaluate the subjects' responses during pre- and posttraining assessment procedures. These two individuals received instruction and practice in the rating of verbal and nonverbal responses specific to the assertion-behavior criteria used in the study. The raters were unaware of the research hypotheses or experimental design to be employed. Interrater reliability was assessed using a Pearson product-moment correlation.

A behavioral role-playing task was used to assess responses before and after treatment (see Appendix B). Subjects were asked to respond to descriptions of situations requiring assertive responses. Half the scenes required assertive-request behavior and half required assertive-refusal behavior. Furthermore, half the request and refusal scenes involved interactions with a male role player, and the other half with a female role player. The subjects were asked to respond to the scenes as they would if they were actually in the situation. Audio and video tape recordings were made of the subjects' responses to the test.

Videotapes of the subjects' responses to the behavioral role-playing task were evaluated by the raters according to
the following commonly used criteria (Eisler et al., 1973):
(a) eye contact, (b) assertive content, (c) posture,
(d) latency, (e) loudness, and (f) overall assertiveness.
Specific definitions of the criteria can be found in Appendix C.

A questionnaire concerning the subjects' behavior and
mood was filled out by workshop supervisors and the parents
of all subjects before and after treatment. This measure
was designed to reveal possible emotional and behavioral
effects, whether beneficial or detrimental, which might have
generalized from the treatment setting to the home or work-
shop environments.

Preexperimental screening. In order to select an
appropriate group for inclusion in the study, a number of
individuals fulfilling the age and IQ requirements who were
recommended for participation in the project were admini-
stered a behavioral role-playing task using four scenes of
general applicability. The responses to the scenes were
evaluated by the experimenter as to assertive content using
a 0-4 rating scale (see Appendix C). The criterion for
inclusion consisted of an average score of less than 3 on
the rating scale for assertive content.

Pretreatment assessment. Information concerning the
personal, social, and vocational situations of each partici-
pant was gathered and used to formulate four scenes for each
subject which were specifically applicable to her life
situation. These four scenes and eight others which were more general in content were presented to each subject individually during the behavioral role-playing task in the manner previously described. The general scenes were the same for all subjects, but the specific scenes differed for each.

**Assertive training and control procedure.** Assertive training was conducted in a group setting using the techniques of modeling, focused instruction, and behavior rehearsal with feedback. The sessions were directed by the experimenter according to the following format.

A brief introduction was given to orient the group towards the purpose of the day's session. Included were a description of the specific behavioral goal which would be the topic of focused instruction during the session, plus a simple rationale as to why that particular behavior was a desirable goal.

A 5-minute discussion period followed during which group members could ask questions or make comments relevant to the information presented in the introduction or to past training sessions. Directive techniques were used to keep the discussion oriented towards the subject at hand and to encourage participation or supportive interaction among the group members.

Modeling (with focused instruction) was provided by the experimenter through modeling appropriate responses to the
role-played situations which differed in content from those used in the assessment procedure. Subjects were asked to attend to one facet of the modeled behavior at a time, e.g., eye contact.

Individual behavior rehearsal and feedback were conducted in the following manner. Each subject in turn was presented with a hypothetical situation and asked to respond to it as if she were actually in that predicament, directing her response toward the experimenter or another group member. Feedback was then provided by the experimenter and by members of the group as to the assertive quality of the response. Suggestions for improving the response were given if needed, and the subject then repeated the trial as many times as necessary until a satisfactory assertive response was achieved. Verbal reinforcement in the form of praise and approval was provided by the experimenter in such a way as to shape the development of assertive behaviors in each individual subject.

Training took place for 30 minutes each day, Monday through Friday, for 5 consecutive weeks. The specific components of assertion were undertaken in the following order during the course of training: (a) assertive refusals, (b) assertive requests, (c) posture, (d) eye contact, and (e) loudness.

The control group underwent preexperimental screening, pretreatment assessment, and posttreatment assessment in the
same manner and at the same time as the treatment group—however, assertive training was not carried out with these individuals. Instead, the control procedure was used in which the group met each day with the experimenter for 30 minutes of nondirected discussion on topics of general interest.

Posttreatment assessment. After the training phase was completed, all subjects were again administered the behavioral role-playing task in the same manner as during pretreatment assessment.

Results

Product-moment correlations were computed between raters on the measures regardless of experimental conditions. Correlation coefficients were .96 time talked, .94 time looked, .95 latency, .87 assertive content, .89 posture, .82 loudness, and .73 overall assertiveness. Mean scores and standard deviations before and after treatment on the behavioral role-playing task are reported in Table 1.

Intercorrelations were computed for each variable with every other variable (see Table 2). Except for time talked/time looked (.84) and overall assertiveness/assertive content (.78), there were no significant correlations between variables, indicating the relative independence of each measure from the others.

A two-way analysis of variance with repeated measures was used to analyze the data (see Appendix A, Tables 3-8).
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<td>Pre</td>
<td>Post</td>
<td>Pre</td>
<td>Post</td>
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<tr>
<td></td>
<td>72.13</td>
<td>84.94</td>
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<td>Eye Contact&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>17.30</td>
<td>18.60</td>
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<td>20.80</td>
<td>6.10</td>
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Note: Scores were summed across the 12 trials of the Behavioral Role-Playing Task.

<sup>a</sup>Eye contact = \( \frac{\text{total time looked while talking}}{\text{total time talked}} \)

<sup>b</sup>Latency scores are expressed in seconds
Table 2

Intercorrelations Between Dependent Variables

<table>
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<tr>
<th></th>
<th>Time Talked</th>
<th>Time Looked</th>
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<th>Loudness</th>
<th>Overall Assertiveness</th>
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<td>Time Talked</td>
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<td>0.8448</td>
<td>0.0138</td>
<td>0.9645</td>
<td>0.2479</td>
<td>0.4153</td>
<td>0.2217</td>
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<td>0.0033</td>
<td>0.1274</td>
<td>0.3239</td>
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<td>-0.1437</td>
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<td>0.3027</td>
<td>-0.2277</td>
<td>0.7804</td>
<td>0.3148</td>
<td>0.4855</td>
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This analysis for assertive content yielded a significant difference for treatments, $F(1,7) = 8.9638, p < .05$ (see Table 3). Results indicate that those subjects who received assertive training demonstrated significantly more improvement in their assertive content than control group subjects. Significant $F$ ratios were obtained on the measure of overall assertiveness for treatments, $F(1,7) = 5.7852, p < .05$, and interaction, $F(1,7) = 17.3486, p < .01$, indicating that assertive training subjects evidenced significantly greater gains pre to post in the global ratings of their assertive responses than control subjects who did not receive training (see Table 4). No significant differences between groups were found in the analysis of variance for eye contact, latency, posture, or loudness as shown in Tables 5-8.

The Wald-Wolfowitz runs test revealed no significant differences between groups before or after treatment for scores on the questionnaire regarding the behavior and mood of the subjects. This result suggests that the clients' behavior in general neither improved nor worsened noticeably during the course of treatment.

**Discussion**

Hypothesis 1 (that deficits in assertive behavior exist and can be demonstrated among the mentally retarded) is supported by the finding that the average pretreatment score on the assertive content scale for all subjects was 1.84. This mean falls below the criterion score of 3 which was used to
define an adequate level of assertiveness. Furthermore, none of the subjects received an average score of 3 or more on the measure prior to treatment.

Hypothesis 2 (that assertive training would be effective in increasing assertive behaviors in mildly retarded women) is supported by the fact that subjects who received the training showed significantly greater improvement on the rating scales for assertive content and overall assertiveness than did subjects in the control group. This indicates that mildly retarded individuals can acquire assertive responses as a result of assertive training in a group setting.

The lack of significant differences between groups for eye contact, latency, posture, and loudness contrasts with results obtained by some researchers who used normal subjects (Eisler et al., 1973; Serber, 1972). Since no direct attempt was made to alter the subjects' latencies during training, possibly no change should have been expected for this measure. However, eye contact, posture, and loudness were specifically taught during the training sessions. It should be noted that while the mean differences for these variables were not of sufficient magnitude to reach significance, there was a tendency for these variables to change in the expected direction. Additionally, since verbal content was the first component of assertiveness to be taught, and was subsequently stressed during all training sessions, it is possible that this component simply received more practice
than the others. Therefore, it is conceivable that with sufficient practice the subjects could have acquired these other components as well.

The fact that the overall assertiveness measure, which was designed to assess nonverbal as well as verbal aspects of assertiveness, showed a strong difference between groups is interesting in light of the fact that the nonverbal components showed no significant change in and of themselves. One possible explanation may be that the nonverbal variables did not affect the overall ratings of assertiveness, which were strongly associated with verbal content. The correlation between the assertive content scores and the overall assertiveness scores averaged .78 for the two raters, indicating that these measures covaried to a large extent. It is also possible that subtle changes in the subjects' nonverbal behavior (which were not readily identifiable to the raters) may nonetheless have contributed to the global rating of overall assertiveness. In any case, past research has indicated that nonverbal components are important covariants of appropriate assertive behavior (Eisler et al., 1973; Jenkins, 1977).

The high correlation between time-talked and time-looked is not surprising, as time-looked was measured only while the subject was talking. Low correlations between the nonverbal variables indicate the independence of these components from each other as well as from the verbal components of assertive
behavior. These results suggest that generalization across categories of assertive behavior cannot be expected—instead, each specific component of assertiveness must be taught independently for change to occur in that category.

This research demonstrates that assertive training can be an effective procedure for training mildly retarded individuals in the acquisition of appropriate assertive responses. Future research in this area might be concerned with: (a) whether or not a longer training period will produce greater changes in overall and specific assertive responding, (b) the issue of generalizability of training from the treatment setting into other areas of the client's life, and (c) whether other training techniques might prove more effective than those employed in this investigation in aiding the mildly retarded to acquire assertive responses.
Appendix A

Analyses of Variance for Dependent Measures

Table 3
Analysis of Variance for Assertive Content

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*p < .05

Table 4
Analysis of Variance for Overall Assertiveness

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*p < .05
**p < .01
Appendix A--Continued

Table 5
Analysis of Variance for Eye Contact

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### Analysis of Variance for Posture

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## Table 8
### Analysis of Variance for Loudness

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Appendix B

Behavioral Role-Playing Task

Instructions

I'm going to tell you some short stories about things that might really happen to you. I want you to imagine that each story is really happening; then do and say whatever you ordinarily would do and say in that situation. Let's practice a few times.

Practice scenes

You have just gotten a new blouse, and you wear it to work for the first time. Harriet sees you and says, "Wow, you look so pretty today."

You buy a candy bar from the machine in the lunchroom and begin eating it. A boy comes up to you and says, "Hey, where did you get that candy?"

General scenes

You are taking your break when a girl you know comes up and asks to borrow some money. You know it's against the rules, and anyway you are afraid she won't pay it back. She says, "Oh, come on, lend me a dollar, will you?"

You are standing near a cash register waiting to pay for a gift you have chosen and have it wrapped. Others who came after you are being waited on first. The clerk says, "Next?"
You are in the workshop, doing a job that calls for sticking gold stars in menu booklets. You run out of gold stars. Show what you would do.

You are at a party where people are dancing. You would like to dance too, but not by yourself. Just then someone you know comes over and smiles at you. She says, "Hi!"

You are alone with a guy when he starts trying to kiss you. You don't know him very well, and you would rather he didn't try. He says, "Hey, how about a little kiss?"

You are eating in the lunchroom and have a nice piece of cake that you are looking forward to for dessert. The guy across the table from you leans over and grabs your cake. He says, "I really like cake, can I have yours?"

You step on the bus to go home and find that all the seats are taken except one. However, in that seat is a small dog. The man in the next seat sees you looking at his dog and says, "I'm sorry, but Bosco here isn't happy unless he has a seat all to himself."

You are waiting for a bus when a man you don't know drives up in a big car. He says, "Hey, hop in, I'll give you a ride."

Specific scenes

You are waiting in line to buy a drink at the coke machine. It's almost your turn when a boy pushes ahead of you and says, "I want to go first!"
There is a new boy in your group at the workshop who looks nice, and you would like to know his name. He walks past you and smiles. What would you do?

You are in the workshop, sticking gold stars into menu booklets. Just then the girl working next to you takes your box of stars and says, "Can I use your stars?"

You would like to have Vickie come over to your house to watch T.V. with you. You see her at work and she says, "Hi, Natalie."

You are in a movie theatre enjoying a show when some people in front of you begin talking so loudly that you cannot hear the movie. What would you do?

There is a new guy in your group who is very nice looking and you would like to know his name. He looks over at you and smiles, "Hi!"

You are busy in the workshop when another worker comes over and begins bothering you, trying to get you to talk instead of work. She says, "Why don't you talk to me for a while?"

You are bowling with your sisters one evening when someone in the next lane picks up your bowling ball by mistake and starts toward the alley. It's your turn to bowl, and you need your ball. What would you do?

One of your friends is mad at the supervisor and doesn't want to do any work. She tries to get you to stop working, too. She says, "Let's not do any work this morning."
A new girl joins your group, and you would like her to sit next to you at lunchtime so you can get to know her better. When she passes you, she smiles and says, "Hi!"

You have just bought a candy bar and are getting ready to eat it when a boy you don't know very well comes up and says, "Hey, can I have that candy?"

You are doing a job in the workshop when a guy comes up and starts messing with your work. This bothers you. He says, "Let's see what you've got here."

One day at the workshop Harriet announces that there will be a music class on Fridays for anyone who wants to go. You like music and would like to join the class. Harriet says, "Who wants to be in the music class?"

A friend of yours hurt your feelings by not speaking to you when you said hello. The next time you see her she notices that you look mad and she says, "What's the matter, Shirley?"

You are doing a new job in the workshop, and you're not sure exactly how to do it right. You would like to have Mike check what you are doing to be sure. Show what you would do and say.

You are standing in line waiting to punch in at the time clock. Just then a guy pushes in front of you in line and says, "Hey, I want to get ahead of you."
You are standing in line waiting to get into the movies. A man cuts in front of you in line, saying, "You don't mind if I cut in here, do you?"

You are working on a new job and feel sort of confused over how to do it. You would like to have it explained to you again. What would you do?

There is a new girl in your group that you would like to get to know better. You think it would be nice to sit by her at lunchtime. When the lunch bell rings, she gets up, walks past you and says, "Hi!"

One of the guys in the workshop likes you and keeps coming over to tell you about it. You are getting tired of him doing this. He says, "Gee, I really like you, Sue Ann."

You are busy in the workshop when one of the male workers comes up to you and says, "Hey, you took my quarter, didn't you?"

You have just bought the latest copy of Playgirl and bring it home to read it. Your mother, who doesn't approve of Playgirl, begins to complain about it as she does every time you bring one home. She says, "Are you reading that terrible magazine again?"

A friend of yours hurt your feelings by not sitting by you at lunchtime. Later you pass her in the hall, and she notices that you look upset. She says, "What's the matter, Sue Ann?"
You are watching a show on T.V. with a friend when she decides to change the channel. You want to see the end of the show that is on. She says, "I think I'll change the channel, O.K.?

At break time you go to get your purse and discover that it is missing. A supervisor notices your worried look and says, "What's the matter, Elena?"

You are buying an item at the drugstore that costs 75¢. You give the clerk a five-dollar bill, expecting to get $4.25 in change. Instead, he hands you a quarter, and says, "Here's your change, Miss."

The group leaders at the workshop are planning a party and need some people to help. You would like to do something for the party. The leader says, "Who wants to help with the party?"

You are out one evening with some friends that you've known for a while. You would like to see a movie, but they are planning to go roller skating. They say, "Let's go skating tonight, O.K., Sheryl?"

You are standing up at the table in the workshop when the guy next to you accidentally steps on your foot. He doesn't realize that he is doing it. What would you do?

You are in a restaurant with a friend and order a hamburger. When the order arrives, the waiter sets a hot dog in front of you. He says, "Here's your order, Miss."
You are on a diet and doing fine when a girlfriend offers you a candy bar. You know it's not on your diet, and you will feel bad if you eat it. She says, "Have some candy."

You are in a drugstore looking for some hairspray, but you are having trouble finding it. There is a saleslady standing nearby. What would you do?

You are working in a new group at the workshop with a new supervisor. You run out of menu booklets and need more, but you don't know where they are kept. The supervisor says, "Is everyone doing all right?"

You and your boyfriend are about to leave on a date. You have been wanting to see a movie that's playing at a theatre nearby, but your boyfriend is planning to go to a club. He says, "Are you ready to go dancing?"

A guy from the workshop wants you to sneak off with him and make out. You know it is against the rules and don't really want to. He says, "Come on, don't be a chicken."
Appendix C

Criteria for Behavioral Role-Playing Task

1. **Eye contact:** Eye contact was defined as the length of time in seconds that the subject looks at the role-player's eyes while speaking.

2. **Assertive content:** The criteria for rating content of request and refusal behavior were as follows:

   **Request:**
   4 - A clear request or demand for action.
   3 - Clear statement of the problem without a clear request.
   2 - Phrases which suggest uncertainty, indicated by words such as "I think," "Is it possible," or "I don't believe."
   1 - Any attempt to compromise, or a partial agreement with the role-player's position.
   0 - No request made or implied; acquiescence to other's position.

3. **Posture:** Appropriate posture was defined as:
   (a) facing the person addressed, (b) standing or sitting appropriately close to him, (c) leaning slightly towards the person, and (d) holding the head erect. Posture was rated along a 0-4-point scale, allowing 1 point for each of the defining behaviors which was present.
4. **Latency**: Length of time in seconds between the end of the role-player's speech and when the subject begins to speak.

5. **Loudness**: Loudness of the subject's speech for each scene was rated on a 5-point scale from 1 (very low) to 5 (very loud).

6. **Overall assertiveness**: The raters were asked to consider both the verbal and the nonverbal aspects of the subjects' responses in rating overall assertiveness. A 5-point scale was used with 1 indicating very unassertive and 5 indicating very assertive.
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