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An Investigation of the Relationship
Between Positive and Negative
Assertive Behavior

by

Elisabeth Elaine Talbert

A Dissertation Submitted to
the Faculty of the Graduate School at
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in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Greensboro

1976

Approved by

A handwritten signature in cursive script, appearing to read 'P. L. ...', is written over a horizontal line. Below the line, the text 'Dissertation Adviser' is printed.

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APPROVAL PAGE

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Although previous research has emphasized negative assertive behavior, such as standing up for one's rights or refusing requests, there is increasing emphasis on positive assertive behavior, such as giving and receiving compliments. The present study was undertaken to assess the possible relationship between positive and negative assertive behavior. Such a relationship could be interpreted from the perspective of trait, stimulus-specificity, and response covariation hypotheses.

To study the relationship between positive and negative assertive behavior, 84 female undergraduates who scored at least one standard deviation below the mean on the College Self-Expression Scale were randomly assigned to three treatment groups (positive assertive, negative assertive, and combination positive-negative assertive), three information control groups (positive assertive, negative assertive, and combination positive-negative assertive), and one assessment control group, making 12 subjects in each group. The treatment groups received assertive training via behavioral rehearsal, coaching, and homework assignments, while the information controls only received information on assertive behavior. Verbal responses and concomitant self-report anxiety responses to a 30-item behavioral rehearsal test, College Self-Expression Scale scores, and responses to a follow-up questionnaire were the main dependent variables.

The posttest analysis of covariance demonstrated that the combination positive-negative assertive group engaged in significantly more positive assertive responses when compared to the assessment and negative information control groups. Furthermore, the combination positive-negative assertive group showed significantly more negative assertive responses than all the other groups with the exception of the negative assertive group. The negative assertive group demonstrated significantly more negative assertive responses than the combination positive-negative and negative information control groups on the posttest and the assessment control group on the follow-up test.

On the anxiety self-report measure, posttest and follow-up analyses of covariance indicated that anxiety ratings were higher for negative assertive items than positive assertive items. College Self-Expression Scale results indicated that the combination positive-negative and positive information control groups responded significantly higher on the College Self-Expression Scale, as compared to the positive assertive group. Furthermore, based on the Follow-Up questionnaire responses, the positive assertive group was more complimentary towards the experiment than were the other groups.

Factors possibly weakening the present results were (a) initial differences in the pretest data among groups and among assessment items, (b) unequal distribution of training items in the training procedures, and (c) an inadequate number of subjects in each group. Furthermore, specific suggestions, such as increasing sample size and simplification of the

experimental design, were discussed in order to improve the design for future investigations of positive and negative assertive behavior.

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CHAPTER I

INTRODUCTION

Assertive behavior has usually been considered to be the nonaggressive expression of negative feelings; for example, refusing to do something, disagreeing, and expressing dissatisfaction. Lazarus defined assertive behavior as "only that aspect of emotional freedom that concerns standing up for one's rights" (1971, p. 116). Jakubowski-Spector (1973) concurs with this definition, stating that if one uses a wider definition, the term assertion is rendered useless.

Others (Eisler, Hersen, Miller, & Blanchard, 1975; Fensterheim, 1972; Rimm & Masters, 1974; Salter, 1949; Serber, 1971; Wolpe, 1958, 1969), however, include within their definition of assertiveness the expression of positive feelings, for example, giving and receiving compliments. In both of their books Alberti and Emmons (1974, 1975) agree that positive expressions belong within the bounds of assertive behavior. The two earliest writers on assertion, Salter (1949) and Wolpe (1958, 1969), include the expression of positive emotions within their definitions of assertive behavior, or excitatory behavior. Wolpe (1969) defines assertive behavior as "the outward expression of practically all feelings other than anxiety" (p. 61). He divides assertive behavior into either hostile (negative) or commendary (positive) expressions.

Lazarus in 1973 changed his definition of assertive behavior to include the expression of positive feelings.

Several researchers not only define assertive behavior as including both positive and negative emotional expressions, but they also emphasized the need for more research on positive assertion. Lazarus (1973) suggests that positive social reinforcement or emitting empathetic responses might be a more appropriate way of handling situations in which negative assertion is frequently recommended. Alberti and Emmons (1975) state that, based on their clinical experience, expressing positive feelings can be more difficult for non-assertive people than expressing negative feelings. Hersen, Eisler and Miller (1973) also say that the assertive behavior literature has placed too much emphasis on "defending your rights" behavior as compared to positive expression and that research needs to explore whether or not positive assertive behavior can be changed by the same methods used with negative assertive behavior. The topic of positive and negative assertive behavior will be further discussed after other aspects of assertion have been presented. Whenever the term assertion is used in this paper, it will represent the expression of both positive and negative feelings. The term positive assertion will refer to the expression of positive feelings as exemplified by giving and receiving compliments and initiating social interaction with the intent of positive outcome for both parties. Negative assertion will refer to the expression of negative feelings, such as refusing a request and expressing dissatisfaction.

Benefits of Being Assertive

In therapy clients who are labeled "nonassertive", i.e., those who cannot express their feelings, are given assertive training. It is the present opinion of most clinicians that it is better for someone to be assertive than nonassertive, which suggests that certain benefits accrue from being assertive.

Rimm and Masters (1974) discuss two benefits that one supposedly gains from assertive training. They state that by behaving assertively, one will feel better about oneself and will find social interactions more rewarding. Lazarus (1971) states that emotional freedom leads to "decreased anxiety, close and meaningful relationships, self-respect, and social adaptivity" (p. 116). Alberti and Emmons (1974) say that assertive behavior "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). Standing up for one's rights without denying others their rights differentiates assertive from aggressive behavior. Alberti and Emmons further state that behaving assertively can relieve people of such physical complaints as "headaches, general fatigue, stomach disturbances, rashes, and asthma" (p.3). As will be shown, there is some empirical evidence supporting these behavior changes as resulting from assertive training. However, many of these changes attributed to assertive training have not been adequately assessed.

Relationship of Assertion and Other Behavior

Assertion, as measured by paper-and-pencil measures, is related to other constructs and behavior. For example, assertion has been found to be positively correlated with self-acceptance for both men and women and to be negatively correlated with anxiety for women only (Percell, Berwick, & Beigel, 1974). Morgan (1974) reported a significant correlation between social fearfulness and nonassertiveness. However, he reported that there were a large number of males who scored in the upper 25 percent of being both socially fearful and assertive. Similarly, a large number of females fell in the lower 25 percent of being both socially brave and nonassertive. Morgan speculated that perhaps males receive more reinforcement than females for being assertive, despite the anxiety they may feel.

Assertiveness is often confused with aggressiveness. The two are commonly differentiated in that assertion means expressing oneself without treading on the rights of others while aggression includes treading on the rights of others. Concerning the relationship between assertiveness and aggression, Galassi and Galassi (1975) compared the results of the College Self-Expression Scale (CSES), a paper-and-pencil measure of assertiveness, with the eight aggression scales of the Buss-Durkee Inventory which measures aggressiveness. A significant positive relationship between verbal aggressiveness with females was observed. However, all the other aggression scales of the Buss-Durkee Inventory were found to be unrelated or negatively correlated with assertive behavior.

Dependent Variables

Three types of measures have been used in assessing assertive behavior: (a) paper-and-pencil; (b) behavioral (verbal and nonverbal); and (c) physiological. The paper-and-pencil procedure usually takes the form of questionnaires and scales specifically designed to measure assertiveness. Wolpe and Lazarus (1966) generated the first questionnaire of 30 items with questions such as "Do you generally express what you feel?". Wolpe (1969) and Lazarus (1971) utilized similar questions in these later references, as were used in the 1966 questionnaire. Lawrence (1970) devised the Interpersonal Behavior Test containing over 100 items. Multiple-choice responses were required for this inventory as compared to Wolpe and Lazarus's (1966) questionnaire. Rathus (1973) developed a 30-item Schedule for measuring assertive responses which required subjects to rate on a six-point scale how each example of assertive and nonassertive behavior fits their own behavior.

The College Self-Expression Scale (CSES) was constructed to measure assertiveness in college students (Galassi, DeLo, Galassi, & Bastien, 1974). It is a 50-item inventory in which subjects note on a five-point scale how frequently they would emit assertive and nonassertive behaviors in various situations. Gay, Hollendsworth, Jr., and Galassi (1975) published the Adult Self-Expression Scale which is similar to the CSES, except the questions are tailored to non-college populations. The CSES has a test-retest reliability of .90.

Concurrent validity was high and in some cases significant when the CSES scores were compared with assertive ratings by people who knew the individual who took the CSES. For example, when self-ratings by students and ratings on these students by residence hall counselors were compared, a correlation of .33 ($p < .005$) between the two sets of raters was obtained (Galassi & Galassi, 1974).

All of these paper-and-pencil measures derive an overall score of assertiveness and do not analyze the specific situations in which assertive behaviors occur or whether the appropriate assertive behavior is positive or negative. However, most of these scales use a variety of both positive and negative assertive situations. In the present study, the CSES was used as a dependent measure, since it utilizes situations in which positive and negative assertive behaviors would be appropriate and since it has been recently developed and validated.

Verbal and nonverbal behavioral measures have been used frequently in conjunction with paper-and-pencil measures. Hersen, Eisler, and Miller used both verbal and nonverbal responses, video-taped during behavior rehearsal sessions, as their main dependent measures (Eisler, Hersen, & Miller, 1973; Hersen, Eisler, & Miller, 1973; Hersen, Eisler, Miller, Johnson, & Pinkston, 1973). Behavior rehearsal is a procedure in which people are placed in simulated real-life situations and are asked to act out how they think they would behave in the actual situations. Behavioral rehearsal and role-playing are frequently used synonymously in the behavioral literature.

Although Hersen, Eisler, and Miller did report verbal content, such as compliance and requests, their main dependent variables were nonverbal measures such as duration of looking and reply, latency, loudness of speech, and affect. For example, in their study comparing positive and negative assertive behaviors, Eisler, Hersen, Miller, and Blanchard (1975) found negative assertive responses were generally characterized by "longer replies, increased eye contact, greater affect, more speech volume, and increased latency of responses," whereas positive assertive responses were accompanied by more frequent smiles (p.335).

Serber (1972) also stressed nonverbal behaviors, such as loudness of voice, fluency of spoken words, eye contact, facial and body expression, and distance from the person with whom one is interacting. He stated that too much emphasis has been allotted to verbal components of assertive behavior to the neglect of nonverbal components.

McFall and his researchers (McFall & Lillesand, 1971; McFall & Marston, 1970; McFall & Twentyman, 1973) used behavior rehearsal sessions in order to tape-record their subjects' verbal responses. Raters then listened to and rated the content of the taped verbal responses as to how assertive the responses were. (The present study obtained verbal behavior measures in a similar manner.)

Using a physiological measure, pulse rate, concomitant with paper-and-pencil and behavioral data, McFall and Marston

(1970) found a significant decrease in pulse rate correlated with an increase in assertive behaviors as measured by the other two dependent variables following assertive training with nonassertive college students. Twentyman and McFall (1975) found similar results with socially shy males.

Independent Variables

A variety of different techniques have been used to train assertion. The following are the main studies comparing the effectiveness of various techniques used in training assertive behaviors.

In one of the earliest studies to determine an effective technique for training assertive behavior, Cameron (1951) used behavior rehearsal in combination with a logical directive approach, i.e., providing clients with direct instructions on how to change their nonassertive behavior. He found that out of nine cases, six improved significantly over a two-year period and of these six, all had become more assertive with the main significant persons in their lives.

Stevenson (1959) used a logical directive approach by itself in working with 21 nonassertive clients and reported that 14 of the 21 significantly improved, even after a follow-up of eight months to several years.

In 1966 Lazarus compared behavior rehearsal with direct advice (synonymous with logical directive therapy) and non-directive reflection-interpretation, similar to Carl Roger's nondirective therapy. Lazarus found with his clients, behavior rehearsal was twice as effective as direct advice which was better than non-directive therapy.

A similar study was performed in 1970 by Lawrence. After comparing the effectiveness of behavior rehearsal, logical directive therapy, an attention control, and an assessment control, he found that the behavior rehearsal procedure was more effective, as measured by the posttest and the followup two weeks after the posttest, than the logical directive therapy and the two other procedures.

In comparison with the Lazarus and Lawrence studies, Hedquist and Weinhold (1970) obtained conflicting results. When they compared behavior rehearsal, social learning (a problem-solving procedure similar to logical directive therapy) and a no-treatment control group, they found that the two treatment groups differed significantly from the control group. However, during a two-week followup performed six weeks after the end of treatment, the differences were no longer significant. One explanation for there not being significant differences between treatment groups in this study is that the social-learning group did differ from the logical directive procedure used by Lazarus (1966) and Lawrence (1970). Subjects in this group, as well as the behavior rehearsal group, were instructed to keep behavior diaries of their assertive behavior. Furthermore, the subjects' reports in their diaries were Hedquist and Weinhold's main dependent measure. Concomitant with the use of behavior rehearsal as a treatment procedure, Lazarus (1966) and Lawrence (1970) used behavior emitted during behavior rehearsal sessions as their main dependent measures.

Similarly, behavioral rehearsal was used as both a treatment and an assessment procedure in the present study. Hedquist and Weinhold used the behavior diaries to bridge the transition from laboratory to the natural world. Subjects in the present study also carried out a similar assignment in conjunction with behavior rehearsal.

Modeling has received a good bit of attention in the assertive literature. Young, Rimm, and Kennedy (1973) compared modeling with verbal reinforcement, modeling without verbal reinforcement, an attention control, and an assessment control. The two modeling groups had more effective results as measured by taped behaviors obtained from behavior rehearsal sessions. However, the verbal reinforcer did not increase the treatment effect. Young et al.'s reinforcement procedure which was independent of instructions, may have confused many of the subjects.

Eisler, Hersen, and Miller (1973), using psychiatric patients, compared modeling to practice (behavior rehearsal without feedback, coaching or modeling) and assessment control groups. They found that on the eight behavior measures used, the modeling group improved significantly on five of the eight components. No differences were found between the practice and assessment control groups.

In 1973 Hersen, Eisler, Miller, Johnson, and Pinkston compared modeling, instructions, and a practice control group. The five groups of ten psychiatric patients each were: (a) assessment control, (b) practice control, (c) instructions,

(d) modeling, and (e) modeling plus instructions. They found modeling plus instructions to be more effective or equal to the modeling alone or instructions alone groups on five of the seven assertive components, while modeling alone and instructions alone were more effective in the remaining two components.

In a later study, Hersen, Eisler, and Miller (1974) compared the combination of modeling and instructions to generalized instructions. The generalized instructions were composed of two or three statements telling subjects to remember to use what they had learned in the practice sessions and to try to be assertive in other situations. Hersen et al. found that generalized instructions did not appreciably add to the overall effectiveness of modeling and instructions. However, since their generalized instructions consisted of only a few sentences, they might not have been of enough duration to have any effect. Therefore, the effectiveness of generalized instructions has yet to be adequately assessed.

McFall and his colleagues have published a series of research studies, similar methodologically to Eisler, Hersen, and Miller's research. However, while Eisler and Hersen emphasized modeling and instructions, McFall resumed the investigation of behavior rehearsal begun by Lazarus (1966) and Lawrence (1970). McFall and Marston (1970) compared behavior rehearsal with and without performance feedback to attention and assessment control groups. They found that a

behavior rehearsal procedure resulted in significantly more assertive behaviors on three dependent measures as compared to the two control groups and that feedback appeared to enhance the effectiveness of behavioral rehearsal.

McFall and Lillesant (1971) compared overt rehearsal with modeling and coaching, covert rehearsal with modeling and coaching, and an assessment-placebo control. They found that the covert rehearsal subjects achieved the greatest improvement, although not significantly more than the overt behavior rehearsal group. McFall and Lillesant explained this difference between covert and overt rehearsal by stating that overt rehearsal subjects may have been inhibited by hearing their overt assertive responses on tape. If they experienced anxiety in situations in which assertive behavior was appropriate, hearing their responses may have increased their anxiety over being assertive. The covert rehearsal group only had to imagine what their responses had been, as opposed to listening to taped responses.

Kazdin (1974) also has investigated covert processes and their effectiveness with assertive training. However, he was interested in studying covert modeling, as opposed to covert rehearsal. He compared covert modeling, covert modeling plus covert reinforcement, no modeling, and an assessment control group. He found that both covert modeling and covert modeling plus reinforcement increased assertiveness significantly on a

role-playing test and self-report inventories. Covert modeling plus reinforcement maintained the greatest effect during a follow-up, two weeks after treatment.

In 1973 McFall and Twentyman published a series of four experiments in which they performed a detailed component analysis of various techniques for training assertion. Some of their results from these experiments conflicted with previous research. In Experiment 1 they compared the following six groups: (a) covert rehearsal, modeling and coaching, (b) covert rehearsal and modeling, (c) covert rehearsal and coaching, (d) covert rehearsal only, (e) modeling and coaching, and (f) assessment control. The results of Experiment 1 demonstrated that modeling added nothing to the effectiveness of rehearsal alone or the combination of rehearsal plus coaching. Coaching and rehearsal were found to be significant and independent contributors to assertive training. In Experiment 2, when they compared (a) covert rehearsal combined with modeling and coaching, (b) covert rehearsal with coaching, and (c) covert rehearsal alone, McFall and Twentyman found similar results, i.e., modeling added nothing to the treatment effect.

McFall's results regarding the ineffectiveness of modeling conflict with those of other researchers (Eisler et al., 1973; Hersen et al., 1973; Hersen et al., 1974; Young et al., 1973) mentioned previously, in that these latter results indicated that modeling was a very effective technique when compared to instructions, attention control, and assessment control

groups. However, Young et al. and Hersen and Eisler did not compare modeling to behavior rehearsal, as did McFall and Twentyman. Also, Hersen and Eisler used psychiatric patients, whereas McFall and Twentyman used college students. These two differences may partially explain the lack of compatibility of their results.

In Experiment 3, McFall and Twentyman investigated some parameters that may have influenced their previous results. They compared their previous models, models who responded quickly and confidently, to models who were more hesitant and tactful. In this same experiment, McFall and Twentyman replicated the earlier experiment performed by McFall and Lillesand, comparing overt and covert rehearsal groups but eliminated response feedback. The results showed that the tactful models did not produce a stronger modeling effect than the confident models. Therefore, the results of Experiment 3 support those of Experiments 1 and 2 in that modeling did not enhance the treatment effect. Also, when feedback was eliminated, McFall and Twentyman found that covert rehearsal was equivalent to but not more effective than overt rehearsal, contradicting the results of McFall and Lillesand (1971).

In Experiment 4 McFall and Twentyman compared audiovisual versus auditory training stimuli in modeling. The purpose of this study was to assess if audiovisual models would increase the treatment effect compared to audio-taped models that had been used by McFall and Twentyman in their other experiments.

The results showed audiovisual models as having no additive treatment effect over audio-taped models. Therefore, modeling still appeared to contribute nothing to the treatment effect.

Aiduk and Karoly (1975) performed a study further evaluating the role of audiovisual techniques in training assertion. However, audiovisual tape was used to provide feedback on the subjects' role-playing behavior, as opposed to showing assertive models as in the McFall and Twentyman study (Experiment 4, 1973). Subjects who received the audiovisual feedback observed their own behavior on video tape and made their own judgments of their behavior. However, the experimenter did not offer any verbal feedback.

Aiduk and Karoly compared behavior rehearsal, behavior rehearsal with video-taped feedback, behavior rehearsal and video-taped feedback with self-evaluation practice, and a no-treatment control group. All the groups with behavior rehearsal yielded changes in the appropriate direction with the video-taped feedback adding little enhancement of treatment effects. Gormally, Hill, Otis, and Rainey (1975) found similar results in that video-taped feedback provided almost no benefit in assertive training.

In conclusion, current research suggests that behavior rehearsal and coaching are the most effective methods of increasing assertive behaviors. Covert and overt rehearsal appear to be equivalent in effectiveness. Modeling is more

effective than no treatment at all or placebo controls, but less effective than behavior rehearsal. Therefore, in the present study, the treatment groups received assertive training via behavior rehearsal and coaching. Modeling was occasionally used when coaching alone did not lead to the desired response.

Theories of Assertive Behavior

Salter (1949) was one of the earliest authors who wrote about assertive behavior, which he called excitatory behavior. Under his definition of excitation he included the expression of both positive and negative assertive behavior. Salter labeled the opposite of excitation, inhibition. In Salter's theory, humans were supposedly born free of any inhibitions but as they were exposed to different conditioning experiences, they developed more and more inhibitory experiences and became "inhibitory personalities" by the time they reached adulthood.

Salter explained the development of inhibitory behaviors by Pavlovian, or classical conditioning, theory. An example of this type of conditioning influencing human behavior would be an unconditioned stimulus, such as a slap or another form of physical punishment, frequently being paired with conditioned stimuli such as specific interpersonal situations. With frequent pairings, the unconditioned responses of fear or avoidance could become conditioned to occur in the presence of the interpersonal situations where punishment occurred.

Conditioned fear would also generalize to similar interpersonal situations even though punishment had not occurred. Salter saw classical conditioning as explaining all forms of human learning. Therefore, he saw "excitation" training as being relevant for a wide range of problems such as claustrophobia, stuttering, various addictions, and sexual problems. Since Salter described people as either being excitatory or inhibitory personality types, his theory holds that being assertive is a trait characteristic of some individuals and is independent of immediate environmental situations.

Similarly, Wolpe (1958,1969) describes assertive behavior as a trait in that for nonassertive individuals, most interpersonal situations lead to anxiety and, therefore, lack of assertion. Wolpe did state that interpersonal situations specifically lead to nonassertion and anxiety, whereas Salter (1949) discusses personality types (i.e., an "inhibited personality"). However, Wolpe describes a nonassertive person acting nonassertively and being anxious in interpersonal situations in general rather than describing specific interpersonal situations.

Wolpe uses his reciprocal inhibition theory to describe why someone behaves nonassertively. Anxiety responses are seen as inhibiting assertive responses. If an individual can be made to behave assertively, his or her assertive responses will inhibit the underlying anxiety. This decrement in anxiety also reinforces the overt assertive response. Therefore, Wolpe sees both respondent and operant learning processes

involved in this paradigm. Although Wolpe emphasizes interpersonal anxiety as being detrimental to assertive responses, he does occasionally attribute nonassertiveness to a lack of interpersonal skills (Wolpe, 1970). In other words, Wolpe states that in some cases nonassertiveness is due more to a social learning deficit, as opposed to high anxiety. However, he uses his theory of reciprocal inhibition as an explanation of nonassertiveness in all the case studies he presents.

Several researchers in the area of assertiveness argue against a trait theory and insist that assertive behavior is under stimulus control. After training people to verbalize disagreement (in situations which they covertly disagreed), Lawrence (1970) evaluated their verbal agreeing behavior (in situations which they covertly agreed) and found no increase in their rates of agreeing. Hersen, Eisler, and Miller (1974) discussed the lack of treatment effects on generalization items as compared to trained assertive items and gave this as evidence for a stimulus-specific theory of assertiveness. In their later article, Eisler et al. (1975) compared positive and negative assertive responses and found different component responses (for example, eye contact and duration of reply) depending upon the situational variables (for example, familiarity and sex).

More recently, Kirschner (1976) assessed the degree to which assertive training effects generalize. Kirschner found that training effects generalized to situations most similar

to the training items and that these effects disappeared by the three-week follow-up period. He cited these results as further support for a stimulus-specificity theory of assertion.

The above evidence is consistent with Mischel's theory of stimulus-specificity. Mischel (1968) presents evidence that explaining behavior by trait theory is inaccurate and useless. Mischel says, "With the possible exception of intelligence, highly generalized behavioral consistencies have not been demonstrated, and the concept of personality traits as broad response predispositions is thus untenable" (1968, p. 146). Mischel emphasizes that although behavior may remain stable over time, it is not usually stable across situations. Therefore, in order to increase appropriate behavior within each situation in which the behavior is desired, each situation has to be attended to when the behavior is being shaped.

Alberti and Emmons (1974) do not take a position as to whether or not assertiveness is a trait or under stimulus control. Instead, they describe two kinds of assertive behavior, generalized and specific, which describe the two separate theories just discussed. Generalized nonassertion is a pervasive type of nonassertion, covering a variety of situations, and is similar to a description of a trait, whereas specific nonassertion is lack of assertion in specific settings.

As can be gathered from this discussion, assertive behavior is usually described in terms of trait or stimulus-specificity theory. However, one type of behavioral relationship

which might be relevant here is that of behavioral covariation (Sajwaj, Twardoz, & Burke, 1972; Twardosz & Sajwaj, 1972; Wahler, 1975). Behavioral covariation is similar to the concept of an operant response class, "...all members of which are functionally equivalent in their dependency upon a stimulus" (Nevin & Reynolds, 1973, p. 6), in that responses in both cases are functionally interdependent and are controlled more by stimulus consequences, as opposed to stimulus antecedents. However, response classes in the operant tradition usually implies response changes in the same direction, whereas response covariation usually refers to any directional change in behaviors other than the response that is being reinforced or punished.

Sajwaj, Twardosz, and Burke (1972) describe a study in which a teacher extinguished conversational behavior in a young boy. While the socially appropriate behavior of playing with other children increased, disruptive behavior increased and attention to academics decreased. These latter two undesirable behavioral changes were attributed to the extinction procedure used with conversational behavior. In this study, Sajwaj et al. not only demonstrated behavioral covariation but also produced evidence that behavioral procedures implemented to appropriately change one behavior may have detrimental effects on other responses.

As can be surmised from the earlier discussion, assertive behavior has usually been considered in relation to stimulus-specificity or trait theory. However, assertive behavior has

not been discussed in terms of behavioral covariation prior to this study. The usefulness of behavioral covariation to the present study will be discussed following a presentation of the research on positive and negative assertive behavior.

Positive and Negative Assertive Behavior

As has been mentioned earlier (see p. 1), many researchers consider the expression of both positive and negative emotions within the range of assertive behavior (Alberti & Emmons, 1974; 1975; Salter, 1949; Wolpe, 1958; 1969). Also, many have emphasized the need for more research investigating both positive and negative assertive behaviors (Alberti & Emmons, 1975; Lazarus, 1973).

Eisler, Hersen, Miller, and Blanchard (1975) assessed characteristics of positive and negative assertive behaviors. Thirty-two assertive situations, sixteen requiring positive assertive responses and sixteen requiring negative assertive responses, were assessed by recording the role-playing responses of 60 male psychiatric patients. Sex and familiarity of the role-playing partner were also varied. The results demonstrated that when compared to positive assertive responses, negative assertive responses led to "longer replies, increased eye contact, greater affect, more speech volume, and increased latency of response," while "positive scenes elicited a greater number of smiles than negative scenes" (Eisler et al., 1975, p. 335). Concerning the variables of sex and familiarity, subjects tended to talk longer to other males than to females

and were rated higher on an overall measure of assertiveness with unfamiliar people as compared to familiar people. Based on the results of this study, Eisler et al. (1975) argue that situational context is very important in relation to assertive behaviors.

Hersen and Bellack (1976), working with two chronic schizophrenics, systematically increased different assertive responses using a multiple baseline analysis. Of the eight role-playing situations used to measure the increase in assertiveness, four were positive and four were negative assertive situations. The types of target behaviors measured were responses such as ratio of eye contact to speech duration, number of requests, number of compliances, and number of appropriate smiles. Only two of the seven target behaviors were verbal content responses. Number of compliances was assessed for negative assertive scenes only. Similarly, number of smiles was observed for only positive assertive scenes. These behaviors were observed only in those situations in which they were to be increased by social reinforcement and feedback. Therefore, no effort was made to assess what might be happening in the positive assertive situations when behaviors in the negative assertive situations were being reinforced and vice versa. All the target behaviors increased systematically over baseline levels as they were reinforced. The treatment effects were largely maintained for a two-month period.

In the two studies just cited, both Eisler et al. (1975) and Hersen and Bellack (1976), used both positive and negative assertive situations. However, Eisler et al. (1975) did not actively modify assertive responses, their purpose being to assess the baseline relationship of situational differences and assertive behaviors. Hersen and Bellack (1976), limited their assessment of assertive responses to the specific situation or situations (positive and/or negative) in which the assertive response was being reinforced. If a response was being shaped in one situation, they did not observe any changes that might be happening in the other situation. Therefore, no statements could be made as to what was happening in situations other than those in which the behaviors were being reinforced.

Rationale for the Present Study

As was previously mentioned, there has been more emphasis on negative assertive behavior to the neglect of positive assertive behavior (Hersen, et al., 1973). This is consistent with a general trend in the clinical literature to emphasize pathology and behavior problems (Serber, 1971). There is evidence that this emphasis on negative assertion may be leading to unfortunate consequences in the client's natural environment. Based on in vivo observations of assertive training consequences, there is indication (Bloom, Coburn, & Pearlman, 1975; Osburn & Harris, 1975; Phelps & Austin, 1975;

Wolpe, 1970) that when negative assertive behaviors are first taught, the newly assertive trainee "over-asserts" himself or herself. For example, Phelps and Austin (1975) state, frequently a woman who is passive will overreact and behave aggressively in her attempts at being assertive. This overcompensation is common, especially in one's initial attempts to become assertive. Furthermore, nonassertive people who have received assertive training may be overasserting themselves because assertive training may have taught them that most social interactions require negative assertive responses and/or because they have never been taught how to express themselves positively.

These observations of increases in aggression or inappropriate negative assertive behaviors following assertive training might suggest that individuals would also be less positively assertive after negative assertive training than they were prior to this training. Similarly, according to this "negative relational" hypothesis, individuals receiving positive assertive training might have less of a tendency to be negatively assertive after positive assertive training than before the positive assertive training. Results such as this could also be supported by both stimulus-specificity and trait theories. Stimulus-specificity would state that positive or negative assertion had been trained to the point that positive or negative assertive responses, depending upon which had been trained, were generalizing to situations other than those in which they had been trained. Similarly, trait theory might state that

behaviors characteristic of either positive or negative assertive traits were being emitted in a variety of situations.

Another possible outcome from comparing positive and negative assertive behavior would be that if positive assertive behaviors are reinforced, and thereby increase in frequency negative assertive behaviors would also increase and vice versa. Results such as this would lend support to both trait and response covariation theories.

Another possible result would be that when positive assertive behaviors are reinforced, they alone increase in frequency, having no effect on the baseline occurrence of negative assertive behaviors. This same type of relationship could hold for positive assertive behaviors when only negative assertive behaviors were reinforced, i.e., the frequency of positive assertive behaviors would remain unchanged. However, if both positive and negative assertive behaviors were reinforced, this should lead to an increase in both types of assertive behavior. Results such as these would support a stimulus-specific theory of assertive behavior in that the behaviors that were reinforced and the situations in which those behaviors occurred would indicate the type of assertive behaviors that would increase. However, these types of results could also support a type of trait theory of positive assertion and negative assertion were perceived as separate traits, although most discussions of trait theory and assertion usually discuss overall assertiveness as a trait.

Therefore, no matter which of these alternatives the data might support in actuality, neither of the two theories, trait or stimulus-specificity, would be definitely ruled out based on observations of the results at the positive and negative assertive behavior levels. However, if both positive and negative assertive behaviors were each divided into trained items (specific situations in which there has been assertive training) and untrained items (specific situations in which there has been no training), then observations of possible generalization from trained to untrained items might better discriminate between the two theories. If an increase in positive assertive behaviors was observed on both trained and untrained items, then support for either of the two theories separately would be difficult. However, if the effect of increased positive assertion was significantly greater on trained positive items as opposed to untrained positive items, then these results would be supportive of a stimulus-specificity theory. (Results such as this on negative assertive items would also be supportive of stimulus-specificity theory.) Likewise, if both positive and negative assertive behaviors were trained and significant training increases were observed on trained items, as opposed to untrained items, this would further support stimulus-specificity theory.

The main purpose of the present study was to assess the relationship between positive and negative assertive responses, not to definitively support either stimulus-

specificity or trait theory. Therefore, perhaps the best way to describe the results of this study would be in terms of response covariation (Sajwaj, Twardosz, & Burke, 1972). Does one type of assertive response (i.e., positive or negative assertion) remain the same, increase, or decrease when the other type is taught? As was previously mentioned, any of these alternatives would be supportive of both trait and stimulus-specificity theory, although trained and untrained items were added to help better delineate the contributions of these theories. However, even if stimulus-specificity is supported over trait theory, neither of the theories describe the covariation of the responses which needs to be described. Considering the applied implications, the direction of this covariation is very important. For example, following assertive training, are people decreasing in their frequency of positive expressions? If the latter effect is happening, can combined training of both positive and negative assertion offset this detrimental training effect? Therefore, the purpose of the present study was to assess the relationship between positive and negative assertive responses and some applied implications of this relationship.

Subjects were divided into three treatment groups (positive assertion, negative assertion, and combined positive-negative assertion), three information controls (positive assertion, negative assertion, and combined positive-negative assertion) and an assessment control group. One asset of the

present study was the four control groups. While the three information control groups were used to control for treatment and experimenter demand effects, the assessment control group was used to control for the passage of time. Such controls have not typically been utilized in previous research on assertive behaviors.

CHAPTER II

METHOD

Subjects

Eighty-eight female undergraduates taking introductory psychology who scored at least one standard deviation below the mean on the College Self-Expression Scale (CSES) and who were willing to be in an experiment concerned with self-expression training were selected to be in the study. Females were used in the present study in order not to add the confounding variable of sex to the study and because females were more plentiful at the University of North Carolina at Greensboro than males. Subjects were randomly assigned to each of seven groups by using a table of random numbers: (a) the positive assertion group, (b) the negative assertion group, (c) the combination positive-negative assertion group, (d) the positive information control group, (e) the negative information control group, (f) the combination positive-negative information control group, and (g) the assessment control group. After four subjects (who had already been assigned to groups) had been dropped from the study in order to make an equal number of subjects in each group, there were a total of 12 subjects in each group.

Apparatus and Materials

College Self-Expression Scale (CSES). The CSES is a fifty-item test designed by Galassi, et al. (1974) to measure

both positive and negative assertive behaviors (see Appendix A). Concurrent validity has been established for this scale by comparing self-ratings of assertion by students and residence hall counselor ratings of these same people who took the CSES. A correlation of .33 ($p < .005$) between the two sets of raters was obtained (Galassi & Galassi, 1974). Test-retest reliabilities of .89 and .90 have also been established (Galassi et al., 1974).

Jakubowski and Lacks (1975) state that the CSES is the best measure presently available for assessing a variety of assertive responses. They state that although its validity is low, the validity is comparable to that of other scales. Bodner (1975) also supports the CSES's usage in evaluating the overall assertive skills of college students.

In the instructions for the Adult Self-Expression Scale, a scale modeled after the CSES, Gay, Hollandsworth, Jr., and Galassi (1975) suggested using one standard deviation below the mean of any given population as the criterion for selecting nonassertive students. Based on a sample of 55 UNC-G undergraduates taking introductory psychology in the Spring, 1975, seven out of the 55 (13%) tested would have qualified for assertive training using Gay et al.'s (1975) criterion. Of this population, the mean equaled 126.15 and the standard deviation equaled 18.29. Using these results as indicative of the number of people who would need to be pretested in order to obtain at least 84 subjects, approximately 600 students, all introductory psychology students, were administered the

CSES in the beginning of the Fall Semester, 1975. Based on this population's 600 scores, the new mean equaled 122.80 and the standard deviation equaled 19.77. Sixty-one females in the Fall 1975 and 27 females in the Spring 1976 who obtained a total CSES score of 103 or less, who responded neutrally or positively to being in the study, and who had not been reserved for other studies were reserved to be in the current study. As has been mentioned previously, four subjects were randomly dropped from the groups at the conclusion of the study, to supply an equal number of subjects in each group, and leave a total of 84 subjects, 12 subjects in each group.

Pretest, posttest, and follow-up responses. The pretest, posttest, and follow-up test were composed of identical items, i.e., 15 positive and 15 negative assertive situations. (See Appendix B for these 30 items.) These assessment assertive situations were selected from 56 assertive scenes that were rated by the experimenter and eight advanced graduate students in order to determine whether or not each scene required a positive assertive or a negative assertive response. Concurrent validity was established for the items by only selecting items that the experimenter and 100% of the graduate students labeled identically. Of these 56 items, two were dropped because of lack of agreement on their labeling. From the remaining 54 items, 50 (25 positive and 25 negative) were randomly selected to be used as assessment and training items.

The three different orders of the items on the pretest, posttest, and follow-up test were determined independently by a random number table. The items for the pretest-posttest-follow-up and training scenes were generated from Lawrence's Assertive Inventory (1970), from ideas obtained from Assert Your Self: A Handbook on Assertiveness Training For Women (1974), and from the experimenter's ruminations.

Training scenes. Sixteen positive and sixteen negative assertive training scenes (see Appendix C) were audio-taped and used in teaching assertive skills to the subjects. Subjects received either positive and/or negative tapes, depending upon the groups to which they were assigned. The assertive scenes were chosen in the same manner as the pretest-posttest scenes. An overlap of six positive and six negative scenes on both the assessment and training scenes was used in order to test for possible generalization from trained to untrained items. Trained items refer to the items that were identical on both the assessment test and training scenes, whereas the untrained items refer to the non-overlapping items on the assessment test and the training. Half of the total trained and untrained items presented to any given subject were used during the behavior rehearsal procedure in session 1 and the other half were used in the behavior rehearsal procedure during session 2. For example, the positive expression group received three positive assessment training scenes and the negative assertion group received three negative assessment training scenes in the behavior rehearsal procedure during each

session. The combination positive-negative assertion group received three positive and three negative training scenes in each of the two training sessions.

Raters

All the verbal assessment test items were rated by two undergraduate students who were fulfilling a requirement for an independent study in psychology. Although the two students simultaneously rated the verbal responses, they were continuously monitored by the experimenter. The two raters were unaware of whether they were listening to pretest, posttest, or follow-up items. They rated the verbal responses to items by using a five-point scale (see Table 1, Appendix H). The experimenter trained the undergraduates to rate the tapes by using pilot tapes of verbal responses in assertive situations, by providing written examples of all the possible scale responses from 0 to 5 for all questions (see Appendix D) and written examples of "feeling" statements (see Appendix E). Discussions of appropriate responses for the different scale categories were held before and after rating sessions. Reliability between raters was calculated separately for each subject's pretest, posttest, and follow-up test trial. All the subjects' verbal responses were recorded on six audio-tapes. The order of the presentation of the tapes was randomized so that the raters did not know if they were listening to verbal responses from pretest, posttest, or follow-up tests. After listening to a side of a tape, the

raters had to re-rate each particular test on which inter-rater reliability had fallen below 85%. Re-ratings occurred on 5 percent of the total test presentations.

Homework sheet. The homework sheet (see Appendix F) was given to all groups of subjects, except the information and assessment control groups. It was a single sheet of paper with column headings for the date, the situation, the subjects' behavior in the situation, an anxiety rating from 0 (no anxiety) to 4 (high anxiety), and the consequences of their behavior. Subjects were told to fill this out during the week between their first and second sessions.

Setting. The CSES was administered to subjects the first day of their introductory psychology class as part of the general assessment period for testing introductory psychology students. The assessment tests and the training sessions with subjects took place in a room adequately supplied with a table, two chairs, and a tape recorder.

Procedure

Each subject was given the CSES a few weeks before she participated in the experiment. After being selected as a subject for the experiment based on the two criteria mentioned in the Subjects' section, subjects individually participated in three assessment sessions. The first two, the pretest and posttest sessions, were an hour in length and one week apart. The last session, the follow-up session, lasted approximately 30 minutes and was held about two months after the posttest session. When a subject came in for session 1, she was told

the following:

This is an experiment concerning the various ways people express themselves in different situations. To begin with, I'm going to have you react or respond to some situations similar to those on the College Self-Expression Scale which you filled out the first day or two in the semester.

You will hear a situation on the tape recorder and you are to respond to the tape recorder as you would react to another person. For example, let's say the following scene is presented on the tape recorder. You are driving around looking for a friend's house. Her/his address is 1203 Marlin Ave. Although you know that you are on Marlin Ave., the house numbers are not clearly marked. You see a man outside cutting his grass. Have the tape recorder be the man. React to the situation.

The experimenter then coached the subject on how to directly respond to the tape recorder as if she were in a real situation, as opposed to statements such as "I would tell them..." which implied removal of the subject from the situation. Next the subject was also told to write on a piece of paper her subjective anxiety, using a scale from 0 to 4 (0 equalling no anxiety and 4 equalling high anxiety), after she had verbally responded to each situation. This anxiety rating provided an ongoing self-report measure to temporally correlate with the verbal role-playing responses. It was felt that this could be a helpful measure to use in interpreting unusual patterns in the verbal role-playing responses.

Once the subject was shaped to respond appropriately, using the verbal and self-report anxiety measures, the experimenter once again told the subject to be sure to respond to the tape recorder directly. The experimenter further

informed subjects that if they would remain silent in the actual situation described by any of the assessment scenes, they should then remain silent following that scene. After a time lapse of eight to ten seconds, the subject was told to rate his anxiety. Then the experimenter advanced to the next pretest situation. Following these instructions, pretest items were administered. If at any time during the pretest, posttest, or follow-up, a subject forgot to respond directly to a situation (unless she was not responding to the situation), removing herself from the situation, the experimenter stopped her and reminded the subject to respond appropriately. Following the administration of the pretest, each subject was given instructions and/or training in assertion, according to the group to which the subject was randomly assigned.

Treatment and control groups. The seven groups were: (a) the positive assertion group, (b) the negative assertion group, (c) the combination positive-negative assertion group, (d) the positive information control group, (e) the negative information control group, (f) the combination positive-negative information control group, and (g) the assessment control group (See Table 2, Appendix H, for an outline of the seven groups' components).

The positive assertion group was called the positive expression group in the experiment in order to prevent subjects from generalizing their positive assertive responses to the negative assertive response category based purely

on the label "assertive" and to help prevent subjects from theorizing about the experiment. At the beginning of session 1 for the positive assertion group, the pretest was administered. Following the twenty-minute pretest, subjects listened to a three-minute audio tape describing positive assertive behaviors. The content of the tape is as follows:

As has been mentioned earlier, this study is concerned with the manner in which people express themselves in a variety of situations. The expression of positive emotions is an area in which people frequently feel inhibited in showing what they honestly feel. Positive expressive behaviors include receiving and giving compliments, introducing yourself to someone whom you wish to meet, talking with a stranger about topics in which you are both interested, and telling someone that you love them or that you have some other positive feeling towards them.

Accepting a compliment for what it is worth is a positive skill that most people have not learned. If a compliment makes you feel good, then to honestly express your positive feelings, you should tell the giver that the compliment makes you feel good and thank them for the praise.

Whenever you are around someone whom you believe deserves praising, you should express your feelings by verbally rewarding their efforts. However, praise should only be given when you honestly mean it. Dishonest praise is not true positive expression.

Accepting compliments which make you feel good and delivering honest compliments to others are only two types of positive expression. Telling someone your positive feelings toward them, introducing yourself to someone, and talking about topics of interest with strangers all involve the expression of positive feelings. Whenever you want to honestly express a positive feeling, you should describe your feelings and specify what you are praising and/or why you are pleased. By denying the honest expression of your positive feelings, you deny your own self.

After the introduction to positive assertion, subjects were introduced to the training tapes (see Appendix C) in the following manner:

Now that you have an idea of what positive expressive behaviors are, I'm now going to give you some training on how to positively express yourself. We are going to listen to situations in which responding expressively is appropriate. First, I will play a scene on the tape recorder. Next, you will express yourself in the situation. Third, I will coach you on your response and have you repeat your statement, until it is appropriately expressive. Once your response meets this requirement, we will go on to the next statement.

This instructional format follows the behavioral rehearsal procedure used by McFall and his associates (McFall & Lillesand, 1971; McFall & Marston, 1970; McFall & Twentyman, 1973). In training, subjects met the requirement for being appropriately assertive if they stated their feelings and described or defined why they felt the way they did. For example, the statement, "I feel happy when you compliment me like that," would include a statement of the individual's feelings plus provide a reason for why the person is happy. After meeting the criteria for being appropriately expressive on one item, they were given the next item until all eight training scenes for session 1 had been presented. The eight training scenes lasted around 20 minutes of session 1.

After the training scenes were over, subjects were then given the homework sheet (see Appendix F) and told to monitor situations in which positive assertive behaviors were appropriate, their behavior in those situations, their anxiety level in each situation, and the consequences of their behavior.

Also, they were told to try to engage in at least five positive assertive behaviors during the week before they came back for their second session. An appointment was then set for their second session, and they were instructed to return with their homework sheet.

The second session began with a five-minute discussion of the subject's homework sheet with the experimenter praising the subject for any appropriate responses that she may have engaged in. Eight more positive expression scenes were presented and subjects were trained as in session 1. Following the twenty-minute training session, the twenty-minute posttest was presented and then the CSES was readministered, taking up the last twenty minutes of the session. Subjects were then dismissed with requests to return one more time in approximately two months for one final follow-up session.

The negative assertion group followed the same procedure as was used with the positive assertion group. After being administered the pretest, this group received the following three-minute tape on negative assertion:

As has been mentioned earlier, this study is concerned with the manner in which people express themselves in a variety of situations. The assertion of negative emotions is an area in which people frequently feel inhibited in expressing what they honestly feel. Negative assertive behaviors include saying "no" to requests with which you do not want to comply and expressing disagreement or dissatisfaction which you honestly feel. Negative assertion can be done without personally attacking or aggressing against an individual. When you negatively assert yourself, you stand up for your own rights without interfering with the rights of others.

Saying "no" to requests is sometimes difficult for people to do. If a request is made of you, you may think it is harmless but nevertheless feel uneasy about complying with it. If this is the case, you should say no and describe your uneasy feelings without apologizing.

Negatively asserting yourself by expressing disagreement or dissatisfaction is frequently hard to do, also. People sometimes feel that they do not have a right to say what they feel or that they might hurt the feelings of someone if they express what they honestly feel. However, by not asserting their negative feelings, they deny their own feelings and set themselves up for easy manipulation.

Whenever you want to negatively assert yourself, you should describe your feelings and specify exactly why you are displeased or why you are refusing a request. By denying the honest expression of your negative feelings, you deny your own self.

After the script on negative assertion, subjects were given the same introduction to the training tapes that was administered to the positive assertion subjects, except the word negative assertion was substituted for positive expression. Following this, subjects were administered the first eight negative assertive training scenes (see Appendix C) and then given the homework assignment. In session 2, the experimenter discussed the homework sheet and then subjects were administered the last eight negative assertive training scenes, the posttest, and the CSES.

The combination positive-negative assertion group was given the identical initial instructions as used with the previous two groups. After the pretest, this group received the following five-minute tape on positive and negative assertion,

which is a combination of the two scripts used with the positive assertion and the negative assertion groups:

As has been mentioned earlier, this study is concerned with the manner in which people express themselves in a variety of situations. The assertion of negative emotions is an area in which people frequently feel inhibited in expressing what they honestly feel. Negative assertive behaviors include saying "no" to requests with which you do not want to comply, and expressing disagreement or dissatisfaction which you honestly feel. Negative assertion can be done without personally attacking or aggressing against an individual. When you negatively assert yourself, you stand up for your own rights without interfering with the rights of others.

Saying "no" to requests is sometimes difficult for people to do. If a request is made of you, you may think it is harmless but nevertheless feel uneasy about complying with it. If this is the case, you should say no and describe your uneasy feelings without apologizing.

Negatively asserting yourself by expressing disagreement or dissatisfaction is frequently hard to do, also. People sometimes feel that they do not have a right to say what they feel or that they might hurt the feelings of someone if they express what they honestly feel. However, by not asserting their negative feelings, they deny their own feelings and set themselves up for easy manipulation.

Not only is the expression of negative feelings difficult but the expression of positive emotions is an area in which people frequently feel inhibited in showing what they honestly feel, also. Positive expressive behaviors include receiving and giving compliments, introducing yourself to someone whom you wish to meet, talking with a stranger about topics in which you are both interested, and telling someone that you love them or that you have some other positive feeling towards them.

Accepting a compliment for what it is worth is a positive skill that most people have not learned. If a compliment makes you feel good, then to honestly express your positive feelings, you should tell the giver that the compliment makes you feel good and thank them for the praise.

Whenever you are around someone whom you believe deserves praising, you should express your feelings by verbally rewarding their efforts. However, praise should only be given when you honestly mean it. Dishonest praise is not true positive expression.

Accepting compliments which make you feel good and delivering honest compliments to others are only two types of positive expression. Telling someone your positive feelings toward them, introducing yourself to someone, and talking about topics of interest with strangers all involve the expression of positive feelings.

In summary, whenever you want to negatively assert or positively express yourself, you should describe your feelings and specify why you are pleased, why you are refusing a request, what you are praising, and/or why you are displeased. By denying the honest expression of your negative and positive feelings, you deny your own self.

Following this script, subjects were given the same introduction to the training tapes administered to the positive assertion and negative assertion groups, except that the phrases "positive expression" and "negative assertion" were used in place of either "positive expression" or "negative assertion". The eight training scenes used with the positive assertion group and the eight scenes used with the negative assertion group, making a total of sixteen scenes, were randomly presented as training scenes to the subjects in this combination group in session 1 (see Appendix C). When discussing the homework sheet, the experimenter emphasized both

types of behavior and instructed subjects to engage in at least five positive expressive behaviors and five negative assertive behaviors during the week between the two sessions.

In session 2, the homework sheet was discussed. Next subjects were administered sixteen more training tapes composed of the eight positive assertive and eight negative assertion training scenes used during training in session 2 with the positive assertion and negative assertion groups. Finally, the posttest and the CSES were administered.

The three information control groups received the same instructions for the pretest as did the treatment groups. The positive information control group received the same script administered to the positive assertive group. Also, this group was instructed to listen to the eight taped training scenes administered to the positive assertion group. Similarly, the negative information control and the combination positive-negative information control received the same scripts and heard the same training scenes as the treatment groups to which they were matched. After subjects in the information control groups had listened to the training tapes, they were dismissed and told to come back the following week for more "training".

In session 2, the three information control groups listened to the second set of training scenes used with their respective treatment groups and took the posttest and CSES.

These three groups received no coaching, modeling, or feedback during the experiment. Furthermore, they were not given the homework sheet, since this was considered part of the treatment. These groups were established mainly to serve as controls for the information and demand characteristics possibly present in the treatment procedures.

Posttest and second CSES administration. The posttest was administered in the same fashion as the pretest, only the posttest items were presented in a different order (see Appendix B). Subjects once again had to respond to the taped scenes as if they were in the actual situations and write down anxiety ratings after responding to each scene. After subjects finished the posttest, they were handed the CSES with the instructions, "I'd like for you to take this again". Following the CSES subjects were told that they would be contacted in approximately two months to return for a final session.

Follow-up. All subjects who participated in the pretest and posttest sessions of the study returned for the follow-up session. The length of time from the posttest to the follow-up session varied from nine to twelve weeks. Subjects who had their posttest session in the Fall, 1975 returned for their follow-up session in January, 1976, while subjects who had their posttest session in January, 1976 were recalled for their follow-up session in late March, 1976.

In the follow-up session, the identical 30 items administered in the pretest and posttest were readministered in a

different order. Subjects were required to respond in the same manner, as in the previous assessments, through verbal role-playing and anxiety self-reports. Also, all subjects were administered the CSES again and a follow-up questionnaire (see Appendix G) to assess subjects' perceptions of the experiment.

CHAPTER III

RESULTS

Inter-rater Reliability

Table 3 (see Appendix H) demonstrates the inter-reliability coefficients for each group of subjects across each test. These reliabilities ranged from .93 to .96, as was mentioned in the Method section. Only 5 percent of the tests rated had to be re-rated due to the inter-rater reliability falling below .85.

Verbal Measure

The verbal measure was based on ratings of subjects' verbal responses for each of the 30 items on the pretest, posttest, and follow-up behavioral test. Table 4 (Appendix H) provides the means and standard deviations of the seven groups for the verbal measure across the three test sessions. Each of these means was derived by obtaining the mean of each subject's untrained positive, untrained negative, trained positive, and trained negative verbal rating scores. These four individual subject means were used for each of the 12 subjects in obtaining each overall group mean. Hence, the number reported in Table 4 for each group is 48.

Based on these same means, Figure 1 (see Appendix I) compares the pretest, posttest, and follow-up means of all seven groups. Figure 1 illustrates large increases in assertive responses on both the posttest and follow-up means for

all seven groups. Figure 1 illustrates large increases in assertive responses on both the posttest and follow-up means for all three experimental groups, with the largest increases being observed on the combination positive-negative assertive group's posttest mean data point. Contrasted with the three experimental groups' mean increases on the posttest and follow-up, little or no changes can be observed on the three information and the assessment control groups' means across the three test sessions.

Figure 2 (see Appendix I) presents each of the seven group's pretest, posttest, and follow-up means on both positive and negative assertive items. Figure 2 presents a greater change from pretest to posttest for the positive assertive group on positive items when compared to the negative assertive group and a greater increase from pretest to posttest on negative assertive items for the negative assertive group as compared to the positive assertive group. The combination positive-negative assertive group increased from pretest to posttest on positive assertive items equal to the positive assertive group. This combination group also increased on negative assertive items to a greater extent than the negative assertive group. Furthermore, Figure 2 also indicates that although there was extensive variability between the information and assessment control groups' pretest scores, none of these control groups' posttest scores varied much from their pretest scores.

Subjects' verbal responses to the pretest, posttest and follow-up items were initially analyzed by separate analyses of variance (see Table 5, Appendix H) on each of the three test levels. However, significant pretest differences were observed on the main effects of group, valence, and training and the interaction effect of valence x training. Based on these initial pretest differences, the decision was made to attempt to control these differences by using analyses of covariance on the posttest and follow-up tests, utilizing the pretest as a covariate.

Scheffé post hoc analyses (Winer, 1971) were used to analyze significant main effects and Scheffé post hocs with Cichetti's approximate solution (Cichetti, 1972) were used to analyze significant interaction effects. For cases in which Scheffé post hocs yielded no significant comparisons on significant main effects or interactions, Newman-Keuls tests were used (Winer, 1971).

On the posttest and follow-up analyses of covariance, Himmelfarb's (1975) suggestion of partitioning the main effect of groups to compare the overall effectiveness of treatments and control groups was used. Partitioning such as this is helpful in an experiment such as the present study with an assessment control group which does not gracefully fit into the experimental design. Using Himmelfarb's suggestion of partitioning the main effect of group's sums of squares enables the experimenter to compare treatment groups and the various control groups, the information control and

assessment control groups, and any other relevant between group comparisons. The posttest and follow-up analyses of covariance with the Himmelfarb partitioning will be discussed first.

Analyses of covariance. Table 6 (see Appendix H) presents the analyses of covariance summary table for the posttest and follow-up results. Using Himmelfarb's (1975) suggestion of partitioning, the group main effect's sums of squares for both the posttest and follow-up were partitioned in order to make the following comparisons: (a) three treatment groups versus the assessment control group; (b) three information control groups versus the assessment control group; (c) three treatment groups versus three information control groups; (d) two single treatment and two single information control groups versus two combined treatment and information control groups; and (e) the interaction of treatment and valence (within the group main effect).

The posttest analysis of covariance results indicated that the group x valence interaction was significant ($F [6,230] = 4.90, p < .0002$). Scheffé post hoc tests using Cichetti's approximate solution for Scheffé interactions indicated that on positive assertive items, the combination positive-negative assertive group was significantly more assertive than the assessment or the negative information control groups ($p < .05$). On negative assertive items, both the negative assertive and the combination positive-negative assertive groups were both significantly more assertive than the combina-

tion positive-negative and the negative information control groups ($p < .01$ and $p < .05$). Furthermore, the combination positive-negative assertive group was also more significantly assertive than the positive information control, the assessment control, and the positive assertive groups on negative assertive items ($p < .05$). When comparing each of the seven groups at the valence level, the positive assertive and the combination positive-negative information control groups were significantly more assertive on positive items as compared to negative assertive items ($p < .01$).

Next Scheffé post hoc tests using Cichetti's approximate solution were performed on the significant valence x training interaction ($F [1,230]=17.63$, $p < .0001$). These results indicated that on untrained items, positive assertive responses were significantly higher than negative assertive responses ($p < .01$). Furthermore, on negative assertive items, trained items led to higher assertive responses than untrained items ($p < .01$). Related to these significant interactions of group x valence and valence x training were the significant main effects of group ($F [6,77]=8.23$, $p < .01$), valence ($F [1,230]=10.12$, $p < .0017$), and training ($F [1,230]=13.11$, $p < .0004$).

As was previously mentioned, the main effect of group was partitioned into five comparisons (Himmelfarb, 1975). Comparisons involving the three treatment groups versus the assessment control group and the three treatment groups versus the three information control groups were significant ($p < .01$), supporting the overall effectiveness of the treat-

ment groups. Furthermore, the treatment versus valence comparison was significant ($p < .05$). This corresponds to the significant group x valence interaction previously discussed.

The follow-up analysis of covariance indicated once again that the valence x training interaction was significant ($F [1,230]=24.53, p < .0001$). Scheffé post hoc tests using Cichetti's approximate solution indicated that on untrained items, positive assertive responses were significantly more frequent ($p < .01$) than negative assertive responses. Furthermore, for positive items, a greater number of assertive responses were observed on untrained items as compared to trained items ($p < .01$) and for negative items, the opposite results were found in that a higher number of assertive responses were observed on trained items as compared to untrained items ($p < .01$). These results are comparable to those found with the posttest results with the exception of the follow-up finding that more assertive responses occurred in the presence of untrained items than trained items for positive assertive items. Related to the follow-up significant interaction of valence x training was the significant main effect of valence ($F [1,230]=8.13, p < .0048$), indicating that positive items led to higher assertive responses than negative items.

On the follow-up analysis of covariance results, the group main effect was also significant ($F [6,77]=3.17, p < .008$). Newman-Keul post hoc analyses indicated that the negative assertive group was significantly more assertive than the

assessment control group. Himmelfarb's (1975) partitioning of the group effect indicated the comparisons of the three treatment groups versus the assessment control group and the three treatment groups versus the three information control groups were significant, replicating the posttest results.

In summary, the posttest analysis of covariance results demonstrated the combination positive-negative assertive group led to significantly more assertive responses on positive assertive items when compared to the assessment and negative information control groups ($p < .05$). Furthermore, on negative items, the combination positive-negative assertive group differed significantly ($p < .01$ and $p < .05$) from all the other groups, with the exception of the negative assertive group. The negative assertive group differed significantly ($p < .01$ and $p < .05$, respectively) from the combination positive-negative information and negative information control groups. On the follow-up analysis of covariance, the negative assertive group exhibited significantly more assertive responses ($p < .05$) than the assessment control group. These results support the success of negative assertive and combination positive-negative assertive training. Furthermore, the Himmelfarb partitioning indicated that on both the posttest and follow-up, all treatment groups were significantly more assertive ($p < .01$) than the information and the assessment control groups. These results, plus the treatment groups' mean changes illustrated by Figures 1 and 2 (see Appendix I) strongly support the success of positive assertive training as well as other training procedures.

Comparison of analyses of covariance and analyses of variance. A comparison of the analyses of covariance results (see Table 6, Appendix H) with the analyses of variance results (see Table 5, Appendix H) demonstrated many similarities. For example, on the posttest results, the main effects of groups, valence, training and the group x valence and valence x training interactions were significant on both types of analyses.

On the follow-up, the two types of analyses differed. Although the main effect of valence and the valence x training interactions were significant on both types of analyses, the group main effect was also significant on the analysis of covariance, while the training main effect was significant on the analysis of variance. In summary, both of these analyses produced similar results.

Individual subject responses on the verbal measure.

Given the significant increase in the combination positive-negative assertive group's results and the observable increments of the other two treatment groups from pretest to posttest (see Figure 1, Appendix I), individual subject responses from these groups were studied. Table 7 (see Appendix H) indicates the number of subjects increasing, decreasing, or not changing from pretest to posttest and posttest to follow-up for the three treatment groups. Using the data from Table 7, the positive assertive group increased more on positive items as compared to negative items, whereas the other two groups tended to increase on both positive and negative asser-

tive items from pretest to posttest. However, these effects were not maintained on the follow-up.

Figure 3 (see Appendix I) provides a sample of individual subject responses for the three treatment groups for the pretest, posttest, and follow-up. Differences between positive and negative assertive responses appear to be greater on the positive assertive group's individual subject graphs. Furthermore, a higher frequency of positive assertive responses for all groups can be seen in all the individual subject graphs on Figure 3.

Anxiety Self-Report Measure

The anxiety measure was based on subjects' self-report scores for each of the 30 items on the pretest, posttest, and follow-up behavioral test. Table 8 (see Appendix H) provides the means and standard deviations of the seven groups for the anxiety measure across the three test sessions.

In order to remain consistent across the verbal and anxiety self-report measures, the anxiety self-reports were analyzed in the same manner as the verbal measure, i.e., with analyses of covariance on the posttest and follow-up with the pretest as the covariate. Furthermore, the analyses of variance were also performed for comparison with the analyses of covariance results and are presented in Table 9 (see Appendix H). Scheffé post hoc tests on main effects and Scheffé tests with the Cinchetti correction on the interaction effects were used to further analyze significant effects.

Himmelfarb's (1975) suggestion of partitioning the sums of squares of the group main effect was also utilized.

Comparison of analyses of covariance and analyses of variance. On both the posttest and follow-up analyses of covariance (see Table 10, Appendix H), valence was the only significant main effect, indicating that anxiety ratings were higher for negative assertive items than positive assertive items. These results are identical to those found on the posttest and follow-up analyses of variance (see Table 9, Appendix H), with the exception that the group x valence interaction was significant on the follow-up analysis of variance. In summary, based on this data, positive assertive items appeared less anxiety-inducing when compared to negative assertive items.

Colege Self-Expression Scale (CSES)

The CSES (see Appendix A) was administered to subjects as part of the pretest, posttest, and follow-up. The means and standard deviations of the seven groups are exhibited in Table 11 (see Appendix H). One-way analyses of variance performed on the pretest, posttest, and follow-up scores are reported in Table 12 (see Appendix H). A Newman-Keuls test performed on the significant group effect ($F [6,77]=3.28$, $p < .007$, $UI = .014$) found in the posttest analysis, indicated that the combination positive-negative and positive information control groups responded significantly higher ($p < .05$) on the CSES, as compared to the positive assertive group.

Follow-up Questionnaire

The follow-up questionnaire (see Appendix G) was administered to subjects at the end of the study to assess their overall judgment of the present study's value. A discriminant function analysis was performed on the questionnaire items (Winer, 1971). Based on this analysis, Item 6 ("ideas for better ways of dealing with people and problems") was indicated as a better discriminator between groups than any of the other items on the questionnaire. The negative assertive group responded to Item 6 higher than the assessment control group ($p < .01$) and the positive and combination positive-negative information control groups ($p < .05$). Also, the combination positive-negative assertive group responded to this question higher than the assessment control group ($p < .01$).

Table 13 (see Appendix H) shows comparisons between the seven groups based on the eight items of the questionnaire which led to significant comparisons between the groups. (The other two questionnaire items did not lead to any more significant between-group comparisons.) Based on this table all three treatment groups scored significantly higher ($p < .05$) than the positive information group. Also, the positive assertive group scored significantly higher ($p < .05$) than the combination positive-negative assertive group. Furthermore, the positive assertive, combination positive-negative assertive, and the positive information control groups responded to the items significantly higher ($p < .05$) than the assessment control group.

Overall, these latter results suggest that the treatment groups rated the experiment higher than the control groups, having more significant group differences. Also, the positive assertive group rated the experiment higher than the other treatment groups in the sense of having more significant group differences and rating these questionnaire items significantly higher than the combination positive-negative assertive group.

CHAPTER IV

DISCUSSION

The main rationale for this study was to assess the relationship between positive and negative assertive behaviors. The literature on assertive training suggests that when negative assertive behaviors are trained, these behaviors sometimes increase so much that they are situationally inappropriate (Osborn & Harris, 1975; Phelps & Austin, 1975). Such data suggest that positive and negative assertive behavior might be reciprocally related, that is, if negative assertive behaviors were increased by training, the baseline level of positive assertive behaviors might decrease. Likewise, if positive assertive behaviors were increased by training, the baseline level of negative assertive behaviors might decrease. Such results would suggest that positive and negative assertive behaviors covary with one another in that manipulation of one behavior would lead to a change in the other behavior.

Alternatively it was possible that training would increase only the trained type of assertive behavior without changing the other type of assertive behavior. If so, the importance of situational variables in assertive training would be supported.

Since the verbal role-playing measure was the main dependent variable used to assess the hypotheses, the verbal results will be examined first, followed by a discussion of the anxiety, College Self-Expression Scale, and follow-up questionnaire results.

Verbal Measure

The posttest and follow-up analyses of covariance results indicated strong support for the treatment procedure's effectiveness. The Himmelfarb (1975) partitioning of both the posttest and follow-up group main effects demonstrated that the treatment groups were significantly more assertive than the information and the assessment control groups. Scheffé post hoc tests further indicated that on posttest positive assertive items, the combination positive-negative assertive group was significantly more assertive as compared to the assessment and negative information control groups. Furthermore, on posttest negative items, the combination positive-negative assertive group was significantly more assertive than all the other groups with the exception of the negative assertive group. On posttest negative items, the negative assertive group engaged in significantly more assertive responses than the combination positive-negative information and negative information control groups, while on the follow-up, the negative assertive group was significantly more assertive than the assessment control.

In addition to the statistical results supporting the strong treatment effect, Figure 1 (see Appendix I) also strongly evidenced the success of the treatment groups by illustrating large mean changes for the treatment groups and little or no changes for the control groups. Furthermore, Figure 2 further demonstrated a greater change for the positive assertive group on positive items when compared to the negative assertive group and a greater increase on negative assertive items for the negative assertive group when compared to the positive assertive group. Also, the combination positive-negative assertive group increased on positive assertive items equal to the positive assertive group and on negative assertive items to a greater extent when compared to the negative assertive group. Little or no changes were demonstrated for the control groups across pretest, posttest, and follow-up, as was also illustrated in Figure 1. Both Figures 1 and 2 demonstrated large increases in assertiveness for the positive assertive group along with the other two treatment groups.

It was also hypothesized that assertive responses would be greater for situations in which assertive responses had been trained (trained items) versus situations that had not received training (untrained items). These results were confusing in that the follow-up analysis demonstrated that for positive items, untrained items led to a greater number of assertive responses as compared to trained items, while on

negative assertive items, trained items had more assertive responses than untrained items. These conflicting results coupled with the fact that all the analyses of covariance and variance had significant valence x training interactions suggest that the trained and untrained items may not have been equally likely to produce assertive behavior in students and therefore were biased throughout the study. Therefore, no definite conclusions can be made concerning the effectiveness of trained versus untrained assertive situations in increasing assertion.

Anxiety Self-Report, College Self-Expression Scale, and Follow-Up Questionnaire Results

The posttest and follow-up analyses of covariance indicated that anxiety ratings were higher for negative assertive items as compared to positive assertive items. Assertive responses were found to be higher for positive assertive items as compared to negative assertive items on untrained items (Table 6, Appendix H). By comparing these two sets of interactions, there appears to be a relationship between a high frequency of assertive responses and a low frequency of anxiety responses on positive assertive items and a low frequency of assertive responses and a high frequency of anxiety responses on negative assertive items. However, this relationship does not indicate whether anxiety or assertiveness is the controlling variable or whether there may be a third controlling variable in this relationship. For example, positive assertive items may

simply be easier to emit and less anxiety-inducing as compared to negative assertive responses. Unfortunately, the present study does not provide answers to the controlling variables of this relationship.

On the College Self-Expression Scale (CSES), the post-test analysis of variance results indicated that the combination positive-negative and positive information control groups increased significantly more than the positive assertive group. Since the CSES is an overall measure of assertion and is predominantly composed of negative assertive items, these results support one of the present study's predicted outcomes in that positive assertive training did not lead to an increase in negative assertive responding, as measured by this questionnaire.

The Follow-up Questionnaire suggested that the positive assertive group rated the experiment higher than the other treatment groups in the sense of having more significant group differences. Furthermore, this group rated the overall questionnaire items higher than the combination positive-negative assertive group. Perhaps these differences can be attributed to the training the positive assertive group received in positive expression, i.e., this group was more complimentary of the experiment after receiving training on giving compliments.

Factors Which May Have Weakened Treatment Effects

There are at least three factors which may have weakened the treatment effects in the present study. These include (a) initial pretest differences among groups and assessment items, (b) deficiencies in the training procedure, and (c) an inadequate number of subjects in each group. Each of these possible contributing factors relevant to the present study's results will be discussed separately.

The significant pretest differences observed on the main effects of group, valence, and training and the interaction of valence x training may have continued to influence the results during the posttest and follow-up. Although analyses of covariance using the pretest as the covariate, were performed on the posttest and follow-up data to control for the initial pretest differences, Cronbach and Furby (1970) argue against using an analysis of covariance for this purpose, especially when subjects are randomly distributed to groups, as they were in the present study. They state, "If the treatment groups differed systematically at the start of the experiment with respect to any relevant characteristic other than the covariate, even a perfect measure of the covariate cannot remove the confounding"(p.78). They continue by stating that there is no adequate or appropriate statistical procedure which can properly handle pretest differences between groups. These comments were supported in the present study by the small number of differences between the results of the analyses of covariance and the analyses of variance.

Another possible contributing factor which may have weakened the predicted outcomes and also possibly influenced the initial pretest differences was the small number of subjects in each group. A larger number of subjects in each group would have tended to alleviate initial group differences and led to more decisive results. Tversky and Kahneman (1971) discuss this point, stating that many researchers incorrectly assume that a small sample drawn from a population is representative of the total population. Furthermore, they state that people believe sampling to be a "self-correcting" process in that errors will eventually cancel each other out. They recommend not only using large samples which are more representative of the target population but also calculating the power in relation to a study's main hypotheses and the number of subjects one plans to use before a study is carried out. Unfortunately, finding large numbers of subjects for research can be a difficult task, especially if the study stretches across several months and requires a specific population, as did the present study. However, as has been mentioned, more subjects in the present study could have erased the initial group differences.

Another possible factor which may have weakened the present study's results may have been the training procedure's briefness in the positive and negative assertive groups compared to the training procedure's length in the combination positive-negative assertive group. This combination group received training on all 8 positive and all 8 negative behavior

rehearsal training scenes used with the positive and negative assertive groups respectively. Perhaps if the positive and negative assertive groups had each received training on 16 scenes, they may have increased as significantly in assertiveness as did the combination positive-negative assertive group.

If the relationship between positive and negative assertive responses is investigated in the future, a simpler design using Tversky and Kahneman's (1971) suggestion of a larger sample would be recommended. In order to simplify the experimental design, the relationship between positive and negative responses should be studied first before trained versus untrained items are examined. A recommended design would be to divide the experiment into two factors, treatment versus information. Within each of these factors would be a positive assertive item group, a negative assertive item group, and a combination group with both positive and negative assertive items. Also, added to the design would be an assessment control group, double the size of the other groups, so it could be split between the treatment and information factors to make comparisons with the three other groups within each of these factors. This design with the double size assessment control is recommended by Himmelfarb (1975).

Conclusion

Both the posttest and follow-up analyses of covariance using Himmelfarb's partitioning of the group main effects demonstrated that the treatment groups were significantly more assertive than the information and assessment control groups. Both the negative assertive and combination positive-negative assertive groups differed significantly from many of the control groups on both the posttest and follow-up. Although the positive assertive group did not differ significantly from any of the control groups, Figures 1 and 2 illustrated large mean changes for all the treatment groups, including the positive assertive group, with little or no changes shown for the control groups.

Another observation based on the present findings is that information concerning assertiveness is not sufficient to lead to assertive responses. As Figures 1 and 2 illustrated, there were few changes in mean responses for the information control groups across pretest, posttest, and follow-up sessions. Furthermore, the analyses of covariance indicated significantly more assertive responses for the treatment groups only. Therefore, information about assertiveness does not appear to lead to a significant increase in assertive responses.

Relating the results of this study to the theories (stimulus-specificity and trait) discussed in the Introduction (see Chapter I) is a difficult task. The significant increase in assertive responses for the combination positive-negative assertive group from pretest to posttest and the large increase

in positive assertive responses for the positive assertive group and in negative assertive responses for the negative assertive group (see Figure 2, Appendix I) suggested that the responses that were taught and the situations in which these responses were taught were important factors in determining the type of assertive response that was observed to increase.

Some evidence for response covariation was suggested in Figure 2. Not only were large increases in positive and negative assertive responses from pretest to posttest observed for the positive and negative assertive groups, respectively, but also slight increases in both negative assertive responses for the positive assertive group and positive assertive responses for the negative assertive group were indicated. Although these negative covariations were small and likely due to chance, another investigation of positive and negative assertive responses, increasing sample size (Tversky & Kahneman, 1971) and simplifying the design (Himmelfarb, 1975), might clarify these covariations.

One consistent effect observed throughout the analyses was the higher frequency of positive assertive responses compared to negative assertive responses and the significantly lower frequency of anxiety responses on positive assertive items as compared to negative assertive items. These discrepancies in response frequency and anxiety levels describe some topographical differences between positive and negative assertive responses. However, their functional relationship is still in question. If the controls previously suggested

are implemented in a future study designed to explore these two types of assertive behavior, perhaps more definitive results concerning their relationship will be obtained.

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APPENDICES

APPENDIX A

The College Self-Expression Scale¹

The following inventory is designed to provide information about the way in which you express yourself. On the answer sheet (separate from the booklet), put your (a) name, (b) sex, (c) age, and (d) class at the top of the answer sheet. (Do not mark on this booklet.) Answer the questions by marking (Xing) the appropriate number from 0 to 4 (Almost Always or Always = 0; Usually = 1; Sometimes = 2; Seldom = 3; Never or Rarely = 4) on the answer sheet. Your answer should reflect how you generally express yourself in the situation, not how you think you should express yourself. After answering all 51 questions, return both this booklet and your answer sheet to your instructor.

1. Do you ignore it when someone pushes in front of you in line?
2. When you decide that you no longer wish to date someone, do you have marked difficulty telling the person of your decision?
3. Would you exchange a purchase you discover to be faulty?
4. If you decided to change your major to a field which your parents will not approve, would you have difficulty telling them?
5. Are you inclined to be over-apologetic?
6. If you were studying and if your roommate were making too much noise, would you ask him (her) to stop?
7. Is it difficult for you to compliment and praise others?
8. If you are angry at your parents, can you tell them?
9. Do you insist that your roommate does his (her) fair share of the cleaning?
10. If you find yourself becoming fond of someone you are dating, would you have difficulty expressing these feelings to that person?

¹Galassi, J.P., DeLo, J.S., Galassi, M.D., & Bastien, S. The college self-expression scale. Behavior Therapy, 1974, 5, 165-171.

11. If a friend who has borrowed \$5.00 from you seems to have forgotten about it, would you remind this person?
12. Are you overly careful to avoid hurting other people's feelings?
13. If you have a close friend whom your parents dislike and constantly criticize, would you inform your parents that you disagree with them and tell them of your friend's assets?
14. Do you find it difficult to ask a friend to do a favor for you?
15. If food which is not to your satisfaction is served in a restaurant, would you complain about it to the waiter?
16. If your roommate without your permission eats food that he (she) knows you have been saving, can you express your displeasure to him (her).
17. If a salesman has gone to considerable trouble to show you some merchandise which is not quite suitable, do you have difficulty in saying no?
18. Do you keep your opinions to yourself?
19. If friends visit when you want to study, do you ask them to return at a more convenient time?
20. Are you able to express love and affection to people for whom you care?
21. If you were in a small seminar and the professor made a statement that you considered untrue, would you question it?
22. If a person of the opposite sex whom you have been wanting to meet smiles or directs attention to you at a party, would you take the initiative in beginning a conversation?
23. If someone you respect expresses opinions with which you strongly disagree, would you venture to state your own point of view?
24. Do you go out of your way to avoid trouble with other people?
25. If a friend is wearing a new outfit which you like, do you tell that person so?

26. If after leaving a store you realize that you have been "short-changed", do you go back and request the correct amount?
27. If a friend makes what you consider to be an unreasonable request, are you able to refuse?
28. If a close and respected relative were annoying you, would you hide your feelings rather than express your annoyance?
29. If your parents want you to come home for a weekend but you have made important plans, would you tell them of your preference?
30. Do you express anger or annoyance toward the opposite sex when it is justified?
31. If a friend does an errand for you, do you tell that person how much you appreciate it?
32. When a person is blatantly unfair, do you fail to say something about it to him (her)?
33. Do you avoid social contacts for fear of doing or saying the wrong thing?
34. If a friend betrays your confidence, would you hesitate to express annoyance to that person?
35. When a clerk in a store waits on someone who has come in after you, do you call this attention to the matter?
36. If you are particularly happy about someone's good fortune, can you express this to that person?
37. Would you be hesitant about asking a good friend to lend you a few dollars?
38. If a person teases you to the point that it is no longer fun, do you have difficulty expressing your displeasure?
39. If you arrive late for a meeting, would you rather stand than go to a front seat which could only be secured with a fair degree of conspicuousness?
40. If your date calls on Saturday night 15 minutes before you are supposed to meet and says that he (she) has to study for an important exam and cannot make it, would you express your annoyance?
41. If someone keeps kicking the back of your chair in a movie, would you ask him (her) to stop?

42. If someone interrupts you in the middle of an important conversation, do you request that the person wait until you have finished?
43. Do you freely volunteer information or opinions in class discussions?
44. Are you reluctant to speak to an attractive acquaintance of the opposite sex?
45. If you lived in an apartment and the landlord failed to make certain necessary repairs after promising to do so, would you insist on it?
46. If your parents want you home by a certain time which you feel is much too early and unreasonable, do you attempt to discuss or negotiate with them?
47. Do you find it difficult to stand up for your rights?
48. If a friend unjustifiably criticizes you, do you express your resentment there and then?
49. Do you express your feelings to others?
50. Do you avoid asking questions in class for fear of feeling self-conscious?
51. Would you be interested in participating in an experiment designed to help you increase self-expression skills like the ones mentioned in this booklet? (Mark 0=no; 1=yes).

ANSWER SHEET
The College Self-Expression Scale

Name _____ Sex _____ Age _____ Class _____

Almost Always or Always = 0, Usually = 1, Sometimes = 2,
Seldom = 3, Never or Rarely = 4

- | | | | | | |
|-----|-----------|-----|-----------|-----|-----------|
| 1. | 0 1 2 3 4 | 21. | 0 1 2 3 4 | 41. | 0 1 2 3 4 |
| 2. | 0 1 2 3 4 | 22. | 0 1 2 3 4 | 42. | 0 1 2 3 4 |
| 3. | 0 1 2 3 4 | 23. | 0 1 2 3 4 | 43. | 0 1 2 3 4 |
| 4. | 0 1 2 3 4 | 24. | 0 1 2 3 4 | 44. | 0 1 2 3 4 |
| 5. | 0 1 2 3 4 | 25. | 0 1 2 3 4 | 45. | 0 1 2 3 4 |
| 6. | 0 1 2 3 4 | 26. | 0 1 2 3 4 | 46. | 0 1 2 3 4 |
| 7. | 0 1 2 3 4 | 27. | 0 1 2 3 4 | 47. | 0 1 2 3 4 |
| 8. | 0 1 2 3 4 | 28. | 0 1 2 3 4 | 48. | 0 1 2 3 4 |
| 9. | 0 1 2 3 4 | 29. | 0 1 2 3 4 | 49. | 0 1 2 3 4 |
| 10. | 0 1 2 3 4 | 30. | 0 1 2 3 4 | 50. | 0 1 2 3 4 |
| 11. | 0 1 2 3 4 | 31. | 0 1 2 3 4 | 51. | 0 1 2 3 4 |
| 12. | 0 1 2 3 4 | 32. | 0 1 2 3 4 | | |
| 13. | 0 1 2 3 4 | 33. | 0 1 2 3 4 | | |
| 14. | 0 1 2 3 4 | 34. | 0 1 2 3 4 | | |
| 15. | 0 1 2 3 4 | 35. | 0 1 2 3 4 | | |
| 16. | 0 1 2 3 4 | 36. | 0 1 2 3 4 | | |
| 17. | 0 1 2 3 4 | 37. | 0 1 2 3 4 | | |
| 18. | 0 1 2 3 4 | 38. | 0 1 2 3 4 | | |
| 19. | 0 1 2 3 4 | 39. | 0 1 2 3 4 | | |
| 20. | 0 1 2 3 4 | 40. | 0 1 2 3 4 | | |

APPENDIX B

Pretest, Posttest, and Follow-up Assertive Items

<u>Pre- Test Order</u>	<u>Post- Test Order</u>	<u>Follow- Up Order</u>	
1	30	25	A friend, upon discovering you will be in the library that night, asks you to xerox a forty-page article. You feel that you do not have the time to find and xerox the article that night, given that you have to study for an exam to be held the next day. React to this situation. (N) (Negative Training scene #1)
2	26	7	At a party a stranger walks up to you and compliments you on your neat appearance. React to this situation. (P)
3	15	19	A student in one of your classes calls you to ask if s/he may borrow your notes two days before a test and keep them for at least a day. You are going to need the notes yourself, since you have not had time to study. React to this situation. (N)
4	24	5	A student who did not score well on what you consider to be a reasonable and fair examination compliments you on your much better performance. React to this situation. (P)
5	4	13	The person you regularly go out with looks especially attractive tonight. React to this situation. (P)
6	9	30	Your date has just complimented you on your neat appearance. This makes you feel very good. React to this situation. (P)
7	22	2	You go to a party with your date who then ignores you the rest of the evening until it is time to go home. You are on the way home and are upset over what has happened. React to this situation. (N)

<u>Pre- Test Order</u>	<u>Post- Test Order</u>	<u>Follow- Up Order</u>	
8	16	16	Your boss is talking to you after work one day and asks if you mind writing one or two letters before you leave. It is essential that you get home for dinner on time. React to this situation. (N)
9	21	27	Your class is discussing the answers to a multiple choice exam with your laboratory instructor. He says alternative <u>b</u> is correct for an item, but you feel very strongly that alternative <u>c</u> is correct. No other student in your class objects to the instructor's answer. React to this situation. (N) (Negative training item #2)
10	14	3	A rather loud and dominant student in class presents an opinion which is contrary to your own. React to this situation. (N)
11	19	20	At a restaurant you are eating what you consider to be the best food you have ever eaten. The waitress comes over and asks you if everything is satisfactory. React to this situation. (P)
12	27	28	A member of your class tells you that you gave a good class presentation. React to this situation. (P) (Positive training scene #10)
13	2	1	A friend asks to borrow one of your sweaters. The last time s/he borrowed your sweater from you, it was returned with beer stains all over it. Also s/he had not offered to clean it. React to this situation.(N)
14	7	9	An employee of yours has been with you for about a month and has not been performing his (her) work to your satisfaction. React to this situation. (N) (Negative training item #10)

<u>Pre-Test Order</u>	<u>Post-Test Order</u>	<u>Follow-Up Order</u>	
15	29	21	During a movie the two teenagers sitting in front of you are talking and giggling rather loudly. React to this situation. (N) (Negative training item #9)
16	25	12	While you are telling some friends about a short adventure you had recently, a close friend keeps interrupting you. You are beginning to get irritated. After your other friends have left, you are left alone with the close friend who has been interrupting you. React to this situation. (N)
17	23	26	You are feeling considerable discomfort because of a friend who persists in asking you a stream of personal questions regarding your family situation in spite of your hesitancy in answering. React to this situation. (N)
18	10	11	A close friend tells you that she (he) really admires how you express your opinion. React to this situation. (P)
19	11	29	You are taking a timed quiz in one of your classes. The instructor interrupts you several times to give you the next week's homework, correct items, etc. These interruptions are making your concentration next to impossible. React to this situation. (N)
20	13	15	You have a two-party phone and the other party seems to be on the phone every time you lift the receiver to make a call. One day you are talking on the phone for about 10 minutes and the other party keeps lifting the receiver off the hook every 30 seconds to see if you are still using the phone. React to this situation. (N) (Negative training scene #12)
21	18	18	A new neighbor has just moved in next door. You would like to meet him or her and notice him (her) sitting outdoors one day. React to this situation. (P)

<u>Pre- Test Order</u>	<u>Post- Test Order</u>	<u>Follow- Up Order</u>	
22	12	14	You are sitting at a desk studying in the library. A pair of students are talking nearby and annoying you. You have an exam the next day and are very uptight about it. React to this situation. (N)
23	28	10	A professor asks you to step into his office and then praises you for improving the quality of your work in his course. React to this situation. (P)
24	20	23	A close and respected relative makes increasing and in your view inappropriate demands on you so that your other activities are beginning to be interfered with. S/He is asking you to come over tonight, but you do not want to. React to this situation.(N) (Negative training scene #3)
25	17	24	As you are walking to class, you see a close friend of the guy (girl) you used to date. You used to enjoy talking with this person. React to this situation. (P) (Positive training scene #4)
26	1	8	You are eating out with a member of your immediate family. You suddenly realize that although the two of you frequently argue, that you have strong emotional ties with this person. React to this situation. (P)
27	3	4	You are waiting in line to pay your tuition fees. You've been waiting for a long time with some other students who begin talking about a topic in which you are interested. React to this situation. (P) (Positive training scene #7)
28	5	17	You are in the library elevator which is taking a long time to descend. You are standing by someone whom you have seen in the library frequently and have found attractive. React to this situation. (P) (Positive training scene #12)

<u>Pre- Test Order</u>	<u>Post- Test Order</u>	<u>Follow- Up Order</u>	
29	6	22	A close friend tells you that they admire how patient and friendly you are with other people. React to this situation. (P) (Positive training scene #11)
30	8	6	A close friend tells you that you have frequently cheered them up when they have been feeling low. React to this situation. (P) (Positive training scene #3)

APPENDIX C
Training Scenes

Positive Assertive Training Scenes

Session 1

1. For several days in a row you notice an attractive-looking person of the opposite sex sitting alone on a bench by the mall near where your class gets out. You would like to meet this person. React to this situation.
2. At a party you notice a person of the opposite sex whom you find very attractive. You are by yourself, and s/he also seems to be by himself (herself). React to this situation.
3. A close friend tells you that you have frequently cheered them up when they have been feeling low. React to this situation. (Pretest scene #30)
4. As you are walking to class, you see a close friend of the guy (girl) you used to date. You used to enjoy talking with this person. React to this situation. (Pretest scene #25)
5. You have been in a bookstore for a 1/2 hour, looking for a book. A saleslady approaches and asks what you are looking for. When you tell her, she walks over to a shelf and points to the book you have been looking for. React to this situation.
6. Your regular date tells you that you are really fun to be with. This makes you feel very good about your relationship. React to this situation.
7. You are waiting in line to pay your tuition fees. You've been waiting for a long time with some other students who begin talking about a topic in which you are interested. React to this situation. (Pretest scene #27)
8. You recognize your roommate's sister at a movie theater. You have met her once several months previously. React to this situation.

Session 2

1. One of your instructors gives extremely interesting lectures in your opinion. You are the first student to enter class one morning he is writing some notes on the board. React to this situation.
2. A member of your class tells you that you gave a good class presentation. React to this situation. (Pretest scene #12)
3. A close friend tells you that they admire how patient and friendly you are with other people. React to this situation. (Pretest scene #29)
4. You are in the library elevator which is taking a long time to descend. You are standing by someone whom you have seen in the library frequently and have found attractive. React to this situation. (Pretest scene #28)
5. As you are leaving the library, you drop one of your books on the steps. Another student picks up the book and gives it to you. React to this situation.
6. You have just finished writing a long paper for one of your classes. You feel especially proud of this paper. A week later, after handing in the paper, your professor tells you that you did an excellent job on the paper. React to this situation.
7. A professor of your most favorite course this semester informs you that because you have an A average going into the final, you don't have to take the final. React to this situation.
8. Your regular date tells you that he (she) loves you. You have similar feelings towards him (her). React to this situation.

Negative Assertive Training Scenes

Session 1

1. A friend, upon discovering you will be in the library that night, asks you to xerox a forty-page article. You feel that you do not have the time to find and xerox the article that night, given that you have to study for an exam to be held the next day. React to this situation. (Pretest scene #1)

2. Your class is discussing the answers to a multiple choice exam with your laboratory instructor. He says alternative b is correct for an item, but you feel very strongly that alternative c is correct. No other student in your class objects to the instructor's answer. React to this situation. (Pretest scene #9)
3. A close and respected relative makes increasing and in your view inappropriate demands on you so that your other activities are beginning to be interfered with. He/She is asking you to come over tonight, but you do not want to. React to this situation. (Pretest scene #24)
4. You are living with a new roommate. This roommate has been throwing her clothes all over the room during the past week and today the room is especially messy. React to this situation.
5. Someone that you dated a few times but with whom you were bored keeps calling you up and chatting on the phone. You do not intend to go out with this person again and you are very tired of the calls. This individual has just called you. React to this situation.
6. You are in a restaurant with a male (female) friend and are talking with a waitress about what the two of you will order. The waitress keeps directing all her inquiries to your friend, making you feel irritated, as if you have no say with the meal. React to this situation.
7. Your coworker has been taking company supplies home for personal use every Friday afternoon. This dishonesty is beginning to annoy you. React to this situation.
8. You have a guest who puts her cigarettes out in your coffee cups, even though an ashtray is nearby. React to this situation.

Session 2

1. During a movie the two teenagers sitting in front of you are talking and giggling rather loudly. React to this situation. (Pretest scene #15)
2. An employee of yours has been with you for about a month and has not been performing his (her) work to your satisfaction. React to this situation. (Pretest scene #14)
3. You have been standing in a long line for about an hour and are now near the front when someone butts directly in front of you. React to this situation.

4. You have a two-party phone and the other party seems to be on the phone every time you lift the receiver to make a call. One day you are talking on the phone for about ten minutes and the other party keeps lifting the receiver off the hook every 30 seconds to see if you are still using the phone. React to this situation. (Pretest scene #20)
5. A friend or date makes what you consider to be an unreasonable request, such as asking you to do some of his (her) homework for him (her). React to this situation.
6. You hear that one of your friends is spreading false rumors about you. The next day you run into him (her) after a class. React to this situation.
7. You are eating dinner with your family in a fancy restaurant. You have been waiting several minutes for your waiter to refill your glass with water. React to this situation.
8. While sitting in class taking a test a student wrongly accuses you of cheating. React to this situation.

Combination Positive-Negative Assertive Training Scenes

Session 1

1. Your class is discussing the answers to a multiple choice exam with your laboratory instructor. He says alternative b is correct for an item, but you feel very strongly that alternative c is correct. No other student in your class objects to the instructor's answer. React to this situation. (Pretest scene #9)
2. You recognize your roommate's sister at a movie theater. You have met her once several months previously. React to this situation.
3. You are living with a new roommate. This roommate has been throwing her clothes all over the room during the past week and today the room is especially messy. React to this situation.
4. A close and respected relative makes increasing and in your view inappropriate demands on you so that your other activities are beginning to be interfered with. He/She is asking you to come over tonight, but you do not want to. React to this situation. (Pretest scene #24)

5. A friend, upon discovering you will be in the library that night, asks you to xerox a forty-page article. You feel that you do not have the time to find and xerox the article that night, given that you have to study for an exam to be held the next day. React to this situation. (Pretest scene #1)
6. Your coworker has been taking company supplies home for personal use every Friday afternoon. This dishonesty is beginning to annoy you. React to this situation.
7. As you are walking to class, you see a close friend of the guy (girl) you used to date. You used to enjoy talking with this person. React to this situation. (Pretest scene #25)
8. At a party you notice a person of the opposite sex whom you find very attractive. You are by yourself, and s/he also seems to be by himself (herself). React to this situation.
9. You have been in a bookstore for 1/2 hour, looking for a book. A saleslady approaches and asks what you are looking for. When you tell her, she walks over to a shelf and points to the book you have been looking for. React to this situation.
10. A close friend tells you that you have frequently cheered them up when they have been feeling low. React to this situation. (Pretest scene #30)
11. You are in a restaurant with a male (female) friend and are talking with a waitress about what the two of you will order. The waitress keeps directing all her inquiries to your friend, making you feel irritated, as if you have no say with the meal. React to this situation.
12. Your regular date tells you that you are really fun to be with. This makes you feel very good about your relationship. React to this situation.
13. You have a guest who puts her cigarettes out in your coffee cups, even though an ashtray is nearby. React to this situation.
14. For several days in a row you notice an attractive-looking person of the opposite sex sitting alone on a bench by the mall near where your class gets out. You would like to meet this person. React to this situation.
15. Someone that you dated a few times but with whom you were bored keeps calling up and chatting on the phone. You do not intend to go out with this person again and you are very tired of the calls. This individual has just called you. React to this situation.

16. You are waiting in line to pay your tuition fees. You've been waiting for a long time with some other students who begin talking about a topic in which you are interested. React to this situation. (Pretest scene #27)

Session 2

1. During a movie the two teenagers sitting in front of you are talking and giggling rather loudly. React to this situation. (Pretest scene #15)

2. One of your instructors gives extremely interesting lectures in your opinion. You are the first student to enter class one morning and he is writing some notes on the board. React to this situation.

3. You have just finished writing a long paper for one of your classes. You feel especially proud of this paper. A week later, after handing in the paper, your professor tells you that you did an excellent job on the paper. React to this situation.

4. You have a two-party phone and the other party seems to be on the phone every time you lift the receiver to make a call. One day you are talking on the phone for about ten minutes and the other party keeps lifting the receiver off the hook every 30 seconds to see if you are still using the phone. React to this situation. (Pretest scene #20)

5. An employee of yours has been with you for about a month and has not been performing his (her) work to your satisfaction. React to this situation. (Pretest scene #14)

6. As you are leaving the library, you drop one of your books on the steps. Another student picks up the book and gives it to you. React to this situation.

7. You are eating dinner with your family in a fancy restaurant. You have been waiting several minutes for your waiter to refill your glass with water. React to this situation.

8. Your regular date tells you that he (she) loves you. You have similar feelings toward him (her). React to this situation.

9. A member of your class tells you that you gave a good class presentation. React to this situation. (Pretest scene #12)

10. A professor of your most favorite course this semester informs you that because you have an A average going into the final, you don't have to take the final. React to this situation.
11. You have been standing in a long line for about an hour and are now near the front when someone butts directly in front of you. React to this situation.
12. While sitting in class taking a test a student wrongly accuses you of cheating. React to this situation.
13. You hear that one of your friends is spreading false rumors about you. The next day you run into him (her) after a class. React to this situation.
14. You are in the library elevator which is taking a long time to descend. You are standing by someone whom you have seen in the library frequently and have found attractive. React to this situation. (Pretest scene #28)
15. A close friend tells you that they admire how patient and friendly you are with other people. React to this situation. (Pretest scene #29)
16. A friend or date makes what you consider to be an unreasonable request, such as asking you to do some of his (her) homework for him (her). React to this situation.

APPENDIX D

Training Examples Used with Raters

1. Desired R: Refuse to xerox article tonight.
 4. I feel that I can't do it tonight.
 3. I can't do it.
 2. You've got the nerve.
 1. No response.
 0. OK, I'll do it.
2. Desired R: Respond to complimenter in positive way and about compliment made.
 4. I appreciate your comment.
 3. Gee, that was nice.
 2. You've got nice shoes.
 1. No response.
 0. I don't like strangers talking to me.
3. Desired R: Refuse to lend notes.
 4. I don't want to lend you the notes.
 3. I can't lend you the notes.
 2. What's wrong--can't you read your notes?
 1. No response.
 0. OK, you can have them.
4. Desired R: Respond to student in positive way.
 4. I appreciate your saying that.
 3. Thanks. I studied hard.
 2. You have a hard time on tests, don't you. But maybe you'll do better next time.
 1. No response.
 0. Leave me alone.
5. Desired R: Compliment your date.
 4. I really like the way you look.
 3. You look very nice.
 2. What happened to you tonight?
 1. No response.
 0. You look terrible.

6. Desired R: Respond to date positively and to compliment.
 4. What you just said makes me feel very good.
 3. You look good yourself.
 2. You must be kidding!
 1. No response.
 0. I don't like the way you said that.

7. Desired R: Tell your date that you didn't like what he did.
 4. I didn't like the way you treated me tonight.
 3. Why did you ignore me tonight?
 2. Well, you seemed to have a good time!
 1. No response.
 0. Gee, I had a good time. (Non-sarcastic)

8. Desired R: Refuse to type letters this afternoon.
 4. I don't feel that your request is fair. I can type them tomorrow.
 3. I have to go home now.
 2. You have the nerve!
 1. No response.
 0. I'll stay.

9. Desired R: Tell instructor that you disagree with him.
 4. I feel that answer C is correct.
 3. Couldn't answer C be correct?
 2. He's full of bull!
 1. No response.
 0. I agree that B sounds right.

10. Desired R: Disagree with student in class.
 4. I don't agree with your opinion.
 3. I have different ideas than you have.
 2. He's crazy!
 1. No response.
 0. I agree with you.

11. Desired R: Comment on how you are enjoying the food.
 4. I appreciate your asking. The food is very good.
 3. Yes. Everything is fine.
 2. How long have you been working here?
 1. No response.
 0. I don't like the service here. I want some water.

12. Desired R: Respond to classmate positively and respond to compliment.
4. Thanks, That makes me feel good.
 3. What a nice thing to say.
 2. That's a dull class, isn't it?
 1. No response.
 0. Go compliment somebody else.
13. Desired R: Refuse to lend sweater.
4. I don't want to lend my sweater out any more.
 3. I can't lend it to you any more.
 2. Don't you have a sweater?
 1. No response.
 0. OK, but be careful with it and clean it if you dirty it.
14. Desired R: Tell employee that s/he needs to improve her/his work.
4. I don't feel that you are working up to par.
 3. You need to improve your work.
 2. He does lousy work!
 1. No response.
 0. You are doing a great job.
15. Desired R: Tell the teenagers that you are becoming irritated.
4. I don't like your interrupting the movie like this.
 3. Please be quiet.
 2. They're making a lot of fuss!
 1. No response.
 0. Oh, no, that is OK. You aren't bothering me.
16. Desired R: Tell friend that you didn't like her or him interrupting you.
4. I didn't like the way you kept interrupting me tonight.
 3. Why did you keep interrupting me tonight?
 2. You cad!
 1. No response.
 0. I really think that you said some interesting things tonight.

17. Desired R: Tell friend that you don't want to answer any more personal questions.
4. I don't want to answer any more questions. Let's talk about something else.
 3. Hey, how about stopping the questions.
 2. Hey what's with all these questions. You sure are snoopy.
 1. No response.
 0. I'm glad you are so interested in my family.
(Non-sarcastic)
18. Desired R: Respond to friend positively and respond to compliment.
4. I really appreciate your saying that.
 3. That's a nice thing to say.
 2. It's a pretty day!
 1. No response.
 0. I don't agree with you at all.
19. Desired R: Tell the instructor that the interruptions are bothering you.
4. I don't feel that you are being fair to us, interrupting us so much.
 3. Could you please tell us all this after the test.
 2. I wish he'd shut up!
 1. No response.
 0. I'm glad we're getting this information.
20. Desired R: Tell the other party to wait until you are finished.
4. I don't like your lifting up the phone. Please stop.
 3. Please stop lifting up the receiver.
 2. Gee, I wish that dope would stop lifting up the phone.
 1. No response.
 0. I'll be off in a few minutes. I hope I haven't inconvenienced you.
21. Desired R: Introduce yourself and/or say something positive about the neighbor.
4. I'd like to introduce myself.
 3. Hi. Do you like it OK here?
 2. Wonder if it will rain today?
 1. No response.
 0. Don't let your dog come in my yard.

22. Desired R: Tell the students to be quiet.
4. I'm becoming irritated with your talking.
 3. Please stop talking.
 2. I wish they'd shut up!
 1. No response.
 0. No, you aren't bothering me.
23. Desired R: Respond to the professor positively and respond to the compliment.
4. Thank you. I'm glad you like my work.
 3. Thank you.
 2. You're crazy!
 1. No response.
 0. I don't agree with you.
24. Desired R: Tell your relative that you can't come over.
4. I don't want to come over tonight.
 3. I can't come over tonight.
 2. How are your plants?
 1. No response.
 0. I'll be over in an hour.
25. Desired R: Say hello to person and express happiness at seeing them.
4. I'm happy to see you again.
 3. How have you been? I haven't seen you for a long time.
 2. It's awfully cold today, isn't it!
 1. No response.
 0. I don't want to talk now.
26. Desired R: Express close feelings to the other person.
4. I'm glad that we can have a good time like this together.
 3. It's been nice eating with you.
 2. You must not feel good!
 1. No response.
 0. I don't like our not fighting.
27. Desired R: Express interest in the topic.
4. I like talking about that, also.
 3. Hey, I'm interested in that, too.
 2. This line is sure slow!
 1. No response.
 0. I think that's a boring topic.

28. Desired R: Introduce yourself and/or say something positive about the person.
4. I'd like to talk with you sometime.
 3. Hi! Do you study here often?
 2. The elevator sure is taking it's time.
 1. No response.
 0. I don't like being in the elevator with another person.
29. Desired R: Respond to the friend positively and respond to the compliment.
4. I appreciate your saying that.
 3. You are nice to say that.
 2. You must be kidding! You're crazy!
 1. No response.
 0. I don't think I'm patient.
30. Desired R: Respond to the friend positively and respond to the compliment.
4. Thanks. I don't like to see you down.
 3. Thanks. Maybe you can do the same for me someday.
 2. Do you have this problem often?
 1. No response.
 0. I don't think I cheered you up. You must have the wrong person.

APPENDIX E

Feeling and Non-Feeling Statements

<u>Feeling Statements</u>	<u>Non-feeling Statements</u>
I feel--don't feel	I think, thought
that makes me feel good	I wonder, wondered
I have similar feelings	I need
I want--don't want	It is nice of
I wish--don't wish	I would rather
I appreciate--don't appreciate	I'm sorry
I like--don't like	I can't
I am pleased--displeased	Thank you
I'm happy--not happy	I've got to, have to
I'm glad--not glad	I understand, don't understand
I enjoy--didn't enjoy	I believe, don't believe
I love--don't love	I won't
I'd prefer--not prefer	
I hope--don't hope	
I desire--don't desire	
I'm satisfied--not satisfied	
I'm flattered--not flattered	
that means a lot to me	
I'm bothered--it bothered me	
I'm upset--it upset me	
I'm irritated	
I'm uptight	
I'm aggravated	
I'm nervous	
I can't stand	
I'm becoming tired of	
I'm disappointed	

APPENDIX F
Homework Sheet

Name _____ Date _____

Date	Situation(s)* (who you were with, place)	Your beha- vior in the situation	On a scale from 0-4, rate how anxious you felt in the situation (0=no anxiety, 4=high anxiety)	Consequences
Sun.	1.			
	2.			
	3.			
	4.			
Mon.	1.			
	2.			
	3.			
	4.			
Tues.	1.			
	2.			
	3.			
	4.			
Wed.	1.			
	2.			
	3.			
	4.			
Thurs.	1.			
	2.			
	3.			
	4.			
Fri.	1.			

2.

3.

4.

Sat. 1.

2.

3.

4.

*If not enough room is included for each day, use back of sheet.

APPENDIX G

Follow-Up Questionnaire

Name: _____

Date: _____

What do you feel that you got out of this study?¹

- | | | | | | |
|---|---|---|---|---|----|
| 1. Relief from anxiety or unpleasant feelings. | 0 | 1 | 2 | 3 | 4* |
| 2. More understanding of the reasons being my behavior and feelings. | 0 | 1 | 2 | 3 | 4 |
| 3. Confidence to try to do things differently. | 0 | 1 | 2 | 3 | 4 |
| 4. More ability to feel my true emotions, to know what I really want. | 0 | 1 | 2 | 3 | 4 |
| 5. More ability to express my feelings. | 0 | 1 | 2 | 3 | 4 |
| 6. Ideas for better ways of dealing with people. | 0 | 1 | 2 | 3 | 4 |
| 7. Better self-control over feelings and actions. | 0 | 1 | 2 | 3 | 4 |
| 8. More acceptance of my feelings and behaviors. | 0 | 1 | 2 | 3 | 4 |
| 9. A more realistic evaluation of my thoughts. | 0 | 1 | 2 | 3 | 4 |
| 10. No change: I feel the same as I did before the study. | 0 | 1 | 2 | 3 | 4 |
| 11. Other comments or changes. | 0 | 1 | 2 | 3 | 4 |
| | 0 | 1 | 2 | 3 | 4 |
| | 0 | 1 | 2 | 3 | 4 |

¹Most of these items were suggested and/or excerpted from A. Lazarus's "Therapy Session Report" in Lazarus, A., Behavior Therapy and Beyond. New York: McGraw-Hill, 1971, p. 267.

*Circle one number for each item: 0=Almost Always or Always; 1=Usually, 2=Sometimes; 3=Seldom; and 4=Never or Rarely

APPENDIX H

Table 1

Scale of Positive and Negative Assertive Responses

Rating Scale Number	Positive Assertive Response	Negative Assertive Response
4	Definite statement of positive feeling <u>and</u> description of positive reason	Definite statement of negative feeling <u>and</u> description of negative reason
3	Description of positive reason without positive feeling statement	Description of negative reason without negative feeling statement
2	Indirect positive comment; Indirect neutral comment; Sarcastic comment; Namecalling	Indirect negative comment; Indirect neutral comment; Sarcastic comment; Namecalling
1	No response	No response
0	Definite statement of negative feel- ing and/or descrip- tion of negative reason	Definite statement of positive feeling and/or description of positive reason

Table 2
Seven Treatment Groups and Their Components¹

Group	Session 1				Session 2			
	Pre-Test (20) ²	Script (3)	Training Scenes (20)	Homework Assignment (5)	Homework Assignment Discussion (5)	Training Scenes (20)	Post-Test (20)	CSES (15)
Positive Assertion	*	*	*	*	*	*	*	*
Negative Assertion	*	*	*	*	*	*	*	*
Combination Positive- Negative Assertion	*	*	*	*	*	*	*	*
Positive Information Control	*	*	Scenes W/O Training	_____	_____	Scenes W/O Training	*	*
Negative Information Control	*	*	Scenes W/O Training	_____	_____	Scenes W/O Training	*	*

Table 2 (Cont.)

Seven Treatment Groups and Their Components¹

Group	Pre-Test (20) ²	Script (3)	Training Scenes (20)	Homework Assignment (5)	Homework Assignment Discussion (5)	Training Scenes (20)	Post-Test (2)	CSES (15)
Combina- tion Posi- tive-Nega- tive Information Control	*	*	Scenes W/O Training	_____	_____	Scenes W/O Training	*	*
Assess- ment Control	*	_____	_____	_____	_____	_____	*	*

NOTE: * = group receives component
 _____ = group does not receive component

¹does not include follow-up session.

²numbers in parentheses are in minutes.

Table 3
Inter-Reliability Coefficients

Groups	Pretest	Posttest	Follow-Up
Positive Assertion	.94	.95	.95
Negative Assertion	.94	.96	.96
Combination Positive-Negative Assertion	.95	.96	.95
Positive Information Control	.94	.96	.96
Negative Information Control	.95	.95	.96
Combination Positive-Negative Information Control	.93	.96	.94
Assessment Control	.95	.94	.95

Table 4
Means¹ and Standard Deviations of Seven
Groups for Verbal Measure

Groups	<u>N</u>	<u>Pretest</u>		<u>Posttest</u>		<u>Follow-Up</u>	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Positive Assertion	48	2.43	.52	2.63	.71	2.65	.60
Negative Assertion	48	2.38	.57	2.63	.60	2.68	.51
Combination Positive-Negative Assertion	48	2.37	.63	2.84	.70	2.55	.74
Positive Information Control	48	2.60	.61	2.62	.60	2.57	.62
Negative Information Control	48	2.25	.64	2.27	.66	2.31	.65
Combination Positive-Negative Information Control	48	2.60	.62	2.51	.69	2.57	.54
Assessment Control	48	2.36	.62	2.39	.59	2.39	.56

¹The higher the mean, the greater the amount of assertiveness.

Table 5
Analyses of Variance for Verbal Measure

Source	df	Pretest			Posttest			Follow-Up		
		MS	F	P	MS	F	P	MS	F	P
Group (A)	6	.82	2.74	.0181	1.67	3.52	.0043	.87	1.84	.1026
Treatment vs Assessment Control	1	.05	.17	.6823	1.33	2.78	.0993	1.99	4.18	.0442
Information vs Assessment Control	1	.58	1.95	.1669	.22	.45	.5033	.10	.22	.6401
Treatment vs Information	1	.58	1.94	.1678	.92	1.92	.1696	2.36	4.97	.0287
Single Treat- ment and Information	2	.73	2.43	.0945	4.12	8.64	.0004	.17	.36	.7014
Treatment vs Valence	2	.78	2.61	.0808	.61	1.27	.2864	.97	2.05	.1339

Table 5 (Cont.)
Analyses of Variance for Verbal Measure

Source	df	<u>Pretest</u>			<u>Posttest</u>			<u>Follow-Up</u>		
		<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>
error a*	77	.30			.48			.47		
Valence (B)	1	41.87	271.98	.0001	36.95	211.24	.0001	31.25	212.82	.0001
Training (C)	1	3.34	21.68	.0001	6.45	36.89	.0001	1.92	13.07	.0007
A x B	6	.05	.33	.9183	.49	2.77	.0127	.06	.40	.8771
A x C	6	.17	1.09	.3705	.05	.30	.9361	.10	.68	.6652
B x C	1	14.03	91.11	.0001	14.75	84.33	.0001	15.24	103.76	.0001
A x B x C	6	.11	.68	.6662	.16	.94	.5304	.18	1.23	.2920
error b**	231	.15			.17			.15		

*Subjects within groups
**Residual error

Table 6
Analyses of Covariance for Verbal Measure

Source	df	<u>Posttest</u>			<u>Follow-Up</u>		
		<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Group (A)	6	1.61	8.23	.0000	.69	3.17	.0084
Treatment vs Assessment Control	1	3.05	15.61	.0002	1.66	7.58	.0075
Information vs Assessment Control	1	.00	.01	1.0000	0.01	.06	.8317
Treatment vs Information	1	5.87	30.04	.0000	2.76	12.62	.0007
Single Treat- ment and In- formation vs Combined Treatment and Informa- tion	2	.52	2.62	.0808	.04	.17	.8341
Treatment vs Valence	2	.89	4.46	.0148	.27	1.21	.2988
error a*	77	.20			.22		
Covariate**	1	85.15	673.34	.0001	76.25	741.37	.0001

Table 6 (Cont.)
 Analyses of Covariance for Verbal Measure

Source	df	<u>Posttest</u>			<u>Follow-Up</u>		
		<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Valence (B)	1	1.28	10.12	.0017	.84	8.13	.0048
Training (C)	1	1.66	13.11	.0004	.02	.23	.6310
A x B	6	.62	4.90	.0002	1.17	.93	.5222
A x C	6	.09	.74	.6214	.09	.90	.5047
B x C	1	2.23	17.63	.0001	2.52	24.53	.0001
A x B x C	6	.19	1.48	.1857	.11	1.11	.3548
error b***	230	.13			.10		

*Subjects within groups
 **Pretest
 ***Residual error

Table 7
 Number of Subjects in Each Group Increasing or Decreasing
 In Assertive Behavior Over Time¹

	Positive Assertive Group				Negative Assertive Group				Combination Positive-Negative Assertive Group			
	Pretest to Posttest		Posttest to Follow-Up		Pretest to Posttest		Posttest to Follow-Up		Pretest to Posttest		Posttest to Follow-Up	
	<u>Pos.</u>	<u>Neg.</u>	<u>Pos.</u>	<u>Neg.</u>	<u>Pos.</u>	<u>Neg.</u>	<u>Pos.</u>	<u>Neg.</u>	<u>Pos.</u>	<u>Neg.</u>	<u>Pos.</u>	<u>Neg.</u>
Subjects Increasing	11	6	3	8	10	11	10	5	12	11	1	3
Subjects Decreasing	1	5	9	3	1	1	2	5	0	1	10	9
Subjects not changing	0	1	0	1	1	0	0	2	0	0	1	0

¹Total number of subjects in each group = 12

Table 8
Means and Standard Deviations of Seven Groups
for Anxiety Measure

Groups	<u>N</u>	<u>Pretest</u>		<u>Posttest</u>		<u>Follow-Up</u>	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Positive Assertion	48	1.90	.79	1.75	.81	1.71	.75
Negative Assertion	48	2.21	.87	1.96	.80	1.85	.95
Combination Positive- Negative Assertion	48	2.08	.78	1.88	.96	1.79	.89
Positive Information Control	48	1.79	.80	1.69	.84	1.82	.76
Negative Information Control	48	2.22	.70	2.15	.63	2.03	.77
Combination Positive- Negative Information Control	48	1.82	.96	2.00	.95	1.90	.95
Assessment Control	48	1.96	.99	2.00	1.03	2.04	.92

Table 9
Analyses of Variance for Anxiety Measure

Source	df	<u>Pretest</u>			<u>Posttest</u>			<u>Follow-Up</u>		
		<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Group (A)	6	1.49	1.45	.2077	1.23	1.06	.3944	.72	.51	.7975
Treatment vs Assessment Control	1	.39	.37	.5426	.70	.60	.4414	2.35	1.67	.1999
Information vs Assessment Control	1	.01	.01	.9369	.12	.10	.7491	.54	.38	.5394
Treatment vs Information	1	.98	.96	.3314	.48	.41	.5238	1.29	.92	.3417
Single Treat- ment and Information vs Combined Treat- ment and Infor- mation	2	1.98	1.92	.1534	1.50	1.29	.2814	.38	.27	.7662
Treatment vs Valence	2	.54	.53	.5941	.23	.20	.8206	.03	.02	.9790

Table 9 (Cont.)

Analyses of Variance for Anxiety Measure

Source	df	<u>Pretest</u>			<u>Posttest</u>			<u>Follow-Up</u>		
		<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>
error a*	77	1.03			1.16			1.41		
Valence (B)	1	75.26	239.77	.0001	88.95	313.55	.0001	72.80	297.92	.0001
Training (C)	1	.04	.13	.7184	.03	.09	.7643	.43	1.74	.1849
A x B	6	.51	1.62	.1413	.51	1.80	.0992	.52	2.12	.0512
A x C	6	.48	1.53	.1673	.07	.23	.9651	.09	.37	.9000
B x C	1	1.27	4.08	.0425	1.00	3.53	.0582	.24	.99	.6788
A x B x C	6	.17	.55	.7724	.14	.49	.8140	.22	.91	.5087
error b**	231	.31			.28			.24		

*Subjects within groups

**Residual error

Table 10
 Analysis of Covariance for Anxiety Measure

Source	df	MS	Posttest		Follow-Up		
			F	P	MS	F	P
Group (A)	6	.82	1.50	.1903	.95	.92	.4899
Treatment vs Assessment Control	1	1.40	2.55	.1147	3.29	3.17	.0793
Information vs Assessment Control	1	.09	.16	.6870	.48	.47	.4989
Treatment vs Information	1	1.56	2.84	.0962	2.49	2.41	.1259
Single Treat- ment and Info- rmation vs Combined Treatment and Information	2	.67	1.22	.3014	.05	.05	.9531
Treatment vs Valence	2	.43	.78	.4612	.04	.04	.9623
error a*	77	.55			1.04		
Covariate**	1	152.62	826.62	.0001	104.46	572.75	.0001
Valence (B)	1	10.95	59.29	.0001	11.44	62.71	.0001

Table 10 (Cont.)
 Analyses of Covariance for Anxiety Measure

Source	df	MS	Posttest		Follow-Up		
			F	P	MS	F	P
Training (C)	1	.00	.01	.9164	.32	1.74	.1887
A x B	6	.17	.94	.5340	.34	1.87	.0870
A x C	6	.26	1.42	.2070	.19	1.03	.4050
B x C	1	.13	.71	.4007	.00	.00	.9697
A x B x C	6	.09	.51	.8048	.15	.81	.5619
error b***	230	.18			.18		

*Subjects within groups
 **Pretest
 ***Residual error

Table 11
Means and Standard Deviations of Seven Groups
for College Self-Expression Scale

Groups	<u>N</u>	Pretest		Posttest		Follow-Up	
		<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Positive Assertion	12	90.0	7.6	85.3	11.8	91.9	14.0
Negative Assertion	12	89.4	6.8	100.3	16.8	104.1	18.0
Combination Positive-Negative Assertion	12	87.8	9.9	97.3	13.5	100.0	13.2
Positive Information Control	12	95.7	5.8	101.6	11.0	105.7	11.3
Negative Information Control	12	92.0	8.9	87.5	10.7	95.7	17.2
Combination Positive-Negative Information Control	12	94.4	7.8	101.5	11.1	102.3	13.3
Assessment Control	12	88.1	12.8	95.8	13.4	99.6	8.2

Table 12
College Self-Expression Scale Analyses of Variance

Source	<u>df</u>	<u>Pretest</u>			<u>Posttest</u>			<u>Follow-Up</u>		
		<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>	<u>MS</u>	<u>F</u>	<u>P</u>
Group	6	114.02	1.48	.1964	533.55	3.28	.0065	276.08	1.42	.2171
Error a*	77	77.19			162.45			194.42		

*Subjects within groups

Table 13

Discriminant Analysis Results on Eight Items¹ of the
Follow-Up Questionnaire: Comparisons between
Groups

	Positive Assert.	Negative Assert.	Combin. Pos-Neg Assert.	Positive Info. Cont.	Negative Info. Cont.	Combin. Pos-Neg Info. Cont.
Negative Assert.	1.54					
Combination Pos-Neg Assert	2.36*	1.63				
Positive Information Control	2.55*	2.70*	2.25*			
Negative Information Control	1.50	1.81	1.77	1.98		
Combination Pos-Neg Information Control	1.99	1.69	1.83	1.15	1.80	
Assessment Control	2.27*	1.61	2.07*	2.34*	1.20	2.28

* $p(8,70) < .05$

¹items 2,3,4,5,6,7,8, and 10 (see appendix G)

Figure 1

Mean Assertive Response Levels Across Pretest, Posttest, and Follow-Up Conditions For All Seven Experimental and Control Groups

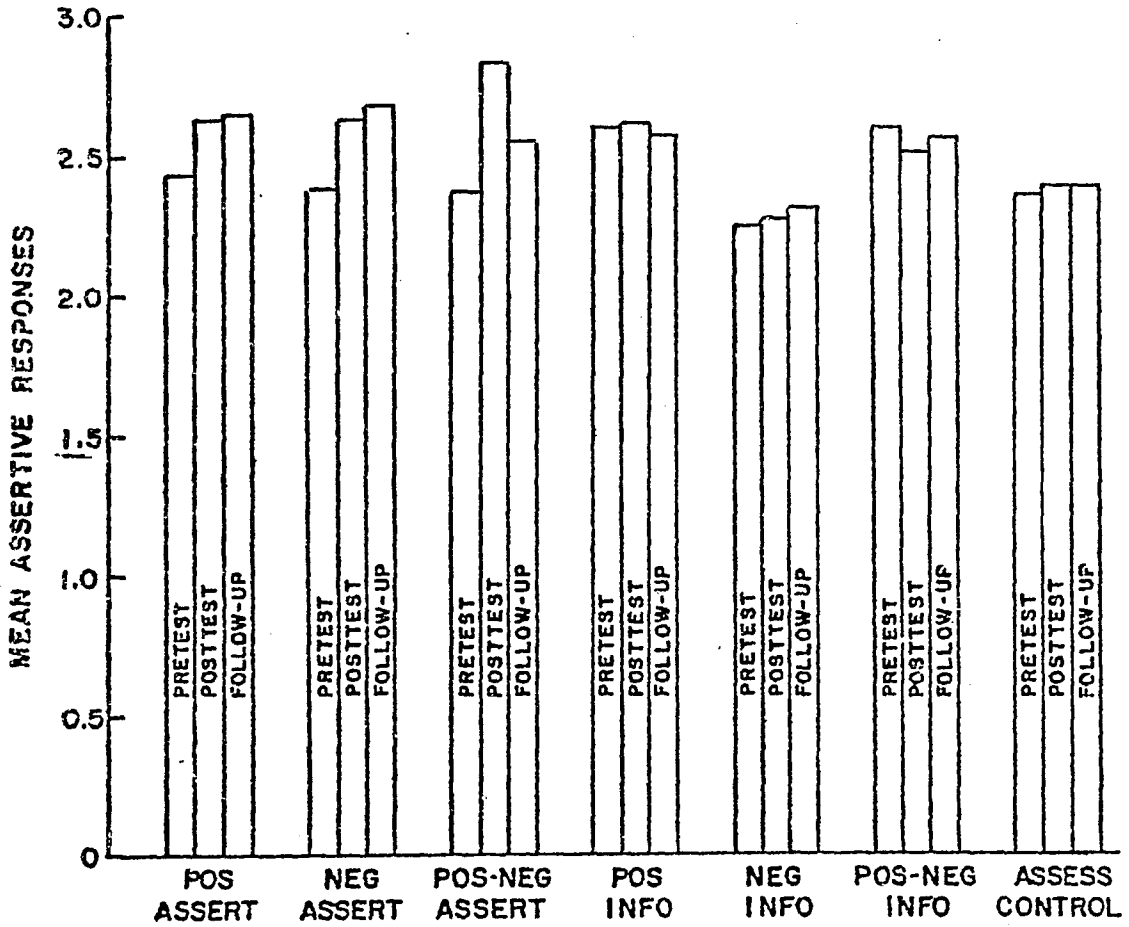


Figure 2

Mean Assertive Response Levels Across Pretest, Posttest, and Follow-Up Conditions For Items of Positive and Negative Assertive Content

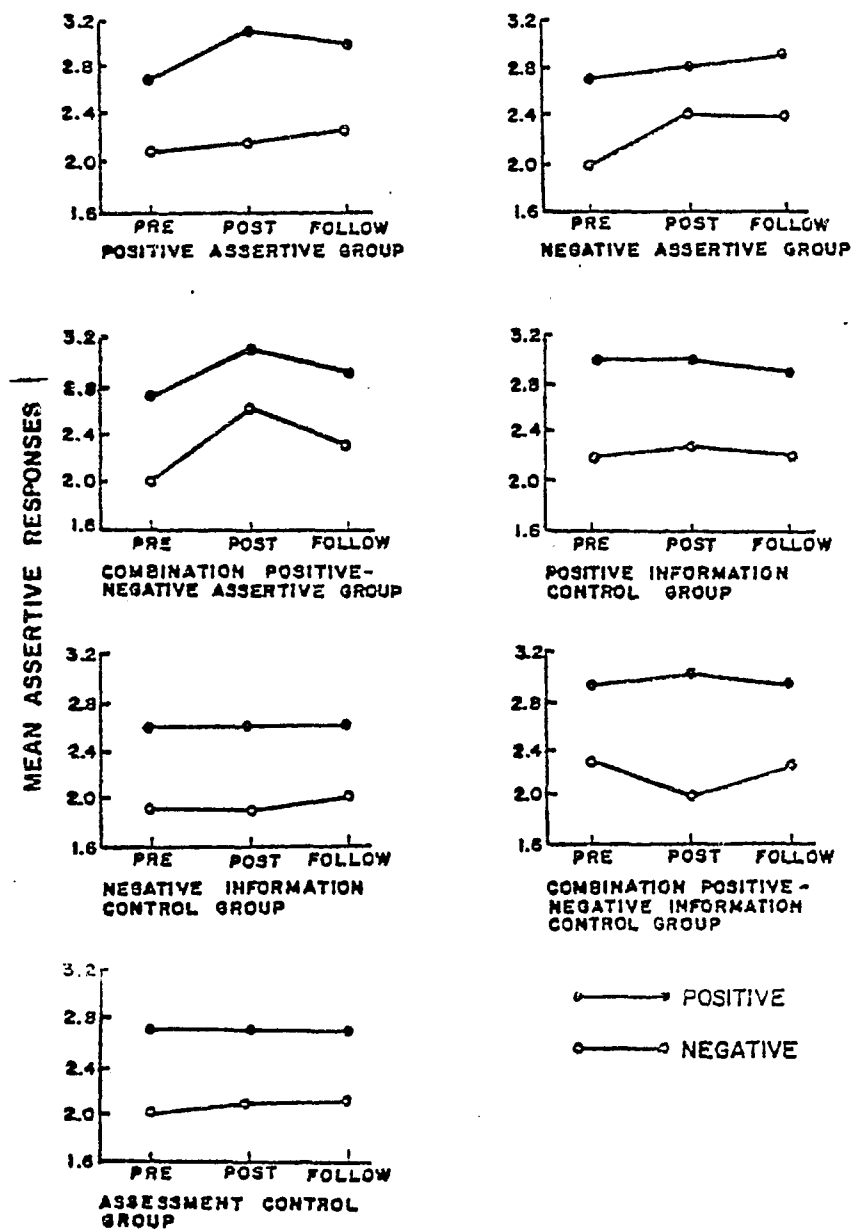


Figure 3

Frequency of Assertive Behavior for Individual Subjects In Positive Assertive, Negative Assertive, and Combination Positive-Negative Assertive Groups

