Effects of the Sex of Group Leaders on Women Participants in Assertion Training.

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EFFECTS OF THE SEX OF GROUP LEADERS ON WOMEN PARTICIPANTS IN ASSERTION TRAINING.

THE LOUISIANA STATE UNIVERSITY AND AGRICULTURAL AND MECHANICAL COL., PH.D., 1978
EFFECTS OF THE SEX OF GROUP LEADERS ON WOMEN PARTICIPANTS IN ASSERTION TRAINING

A Dissertation

Submitted to the Graduate Faculty of the Louisiana State University and Agricultural and Mechanical College in partial fulfillment of the requirements for the degree of Doctor of Philosophy in

The Department of Psychology

by

Laura Ann L’Herisson
B.A., Louisiana State University, 1971
M.A., Louisiana State University, 1974
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ABSTRACT

The purpose of this study was to evaluate the effectiveness of assertion training as well as the relative effectiveness of women's assertion groups conducted by male-female or female-female leader dyads. That is, this research investigated the effects of the presence or absence of a single male in the position of co-leader on women participating in assertion training. Co-leaders were used to minimize possible idiosyncratic styles of leadership which might affect treatment outcome. To further minimize possible idiosyncratic co-leader interactions affecting outcome, co-leader conditions were each repeated once with different group leaders, and one female served as a co-leader constant in each co-leader dyad. Hence, four assertion groups were conducted by four different leaders, two male and two female, plus an additional female who co-led each of the four groups.

Subjects in this study were 32 females who responded to assertion training advertisements and who met screening criteria. Group leaders were three female and two male clinical psychology interns; three were doctoral candidates and two, a male and a female, were recent doctoral degree recipients. Each assertion training group met on a weekly basis for 5 weeks and followed a theme oriented format. Self-report measures employed to evaluate training and the relative effects of the male-female or female-female condition included: (a) assertion
and aggression scales from the Interpersonal Behavior Survey (IBS), 
(b) the Depression Adjective Checklist, and (c) an inventory of 
assertion goals. An abbreviated version of the IBS was employed to 
evaluate male and female extra-group cohorts' perceptions of subjects' 
assertion and aggression. Process measures used to evaluate in-group 
assertion included: (a) true/false self and peer progress evaluations 
and (b) subjective leader appraisals of overt assertion and extra-
group, reported assertion.

Hypotheses were proposed in relation to the dependent variables 
specified above; however, they were based essentially on three 
assumptions. The central assumption in this study was that assertion 
training would increase assertiveness. This assumption was supported 
by every measure of assertion except the extra-group female cohort 
ratings. The second assumption was that the female-female leader 
condition would produce relatively greater increases in assertion 
than the male-female condition on all assertion measures, excluding 
the goals inventory and the male cohort ratings. Limited support was 
provided for the second assumption by leaders' ratings of overt asser-
tion. However, the assertion goals inventory also revealed signifi-
cantly higher goal attainment by subjects in the female-female condition 
at both post-test and again at a 2 week follow-up. The third assumption 
was that aggression would not be affected by training or treatment 
conditions. Contrary to expectations, subjects in the male-female 
condition increased aggression from pre- to post-test while those in 
the female-female condition decreased aggression (or maintained cons-
sistent pre/post aggression scores). And finally, depressive mood 
viii
did not appear to influence pre/post variations in assertion or aggression.

Results were interpreted as supporting the effectiveness of assertion training in increasing assertiveness. The presence of a male group leader did not appear to affect subjects' development of assertion, but it did seem to have a concomitant effect of increasing subjects' aggression. Future studies should explore further the effects of assertion training on aggression and possible effects related to the sex of the group leaders.
INTRODUCTION

Prior to World War II, males and females were admitted to psychiatric services at approximately equal rates (Dohrenwend & Dohrenwend, 1969; Ryan, 1969). However, in the subsequent 30 years women's use of psychiatric services has increased to the extent that women have become the more "treated" sex in Western society. Psychiatric disorders rank third among women's complaints to general practitioners while ranking only seventh among men's complaints (Shepherd, Cooper, Brown & Kalton, 1964). Women are more frequently hospitalized for mental disorders than men (Chesler, 1971; Gurin, Veroff & Feld, 1960) and also evidence a substantially greater use of outpatient psychotherapy ("Annual Report," 1971; "Annual Statistical Summary," 1969-70-71; Chesler, 1972; Thrall, 1963).

While there are numerous explanations for these phenomena, the feminist interpretation has received considerable attention as well as support in research findings. Adherents to this view maintain that feminine characteristics have been socially devalued, resulting in a double standard of mental health. A landmark study by Broverman, Broverman, Clarkson, Rosenkrantz and Vogel (1970) revealed that practicing clinicians--psychologists, psychiatrists and social workers of both sexes--agree in the characteristics they attribute to healthy females, healthy males and healthy adults. Healthy females are
characterized as passive, emotional, dependent, submissive and excit able--traits rated by the same clinicians as being socially undesirable. Healthy males are characterized as mature, resourceful, strong and reasonable, as are healthy adults. Thus, clinicians essentially identify the healthy adult as a healthy male, and one may readily infer that females are not healthy, or ironically, that the female is not adult. In short:

For a woman to be healthy, from an adjustment viewpoint, she must adjust to and accept the behavioral norms for her sex, even though these behaviors are generally less socially desirable and considered to be less healthy for the generalized competent, mature adult. (Broverman, et. al., 1970, p. 6)

The clinicians' characterizations of a healthy adult/male versus those of a healthy female seem to mirror prevalent sex-role stereotypes. According to O'Leary (1974) male attributes which are highly valued reflect a "competency cluster," whereas valued female attributes contribute to a "warmth-expressiveness cluster." She also notes that the female trait cluster is "antithetical to the male profile. That is, the idealized female does not possess male valued traits" (p. 813).

Similarly, McKee and Sherriffs (1957) found that subjects perceive the stereotypic male as being (a) rationally competent and capable, and (b) vigorous, active and effective. The stereotypic female is perceived as being (a) socially skillful and (b) warm and emotionally supportive.

Rosenkrantz, Vogel, Bee, Broverman and Broverman (1968) found that males are viewed as being unemotional, independent, aggressive, active, dominant and logical; females are viewed as being tactful, gentle, tender, feeling-oriented and neat. They also found, as did Broverman,
et. al. (1970), that both male and female subjects believe male traits are more socially desirable than female traits. In fact, the ascription of greater desirability to male traits has been demonstrated repeatedly in research on subjects of various ages and both sexes (Fernberger, 1948; Prather, 1971; Sheriffs & Jarrett, 1953; Smith, 1939).

The preceding research findings illustrate the double bind experienced by many women in Western society. In recent years, the women's movement has catalyzed an increasing awareness of and concern about the effects of that double bind on women. Women have begun to question their adherence to the stereotypic feminine behavior to which they impute so little social value. Concurrently, they have begun to question the essential masculinity of socially valued "male" traits. ¹

In addition to the women's movement, Jakubowski-Spector (1973) believes that two other recent cultural trends have had an impact on women. "The first trend is the wide-spread acceptance of the cultural imperative for self-growth" (p. 75), as evidenced by the popularization of sensitivity and encounter groups. The second trend is the greater flexibility of sex roles and the expanded range of socially acceptable behavior, as reflected by the increasing number of working women.²

¹ Some men in Western society have begun to experience and react to a parallel double bind, as is evidenced by organizations for unwed fathers and men's liberation. However, discussion of this parallel trend is beyond the scope of this paper.

² In 1977, women comprised 41% of the U.S. labor force, and 49% of all women over 16 years of age worked (U.S. Working Women: A Databook, 1977). Furthermore, 90% of the women in this country will be employed at some time during their lifetime (Women's Bureau, 1974).
Jakubowski-Spector's assessment of the women's movement is that it has increased women's self-acceptance, but it has also caused many women to "raise their personal aspirations to be strong and effective as well as feminine" (p. 75). She believes that as more women join the work force they are being exposed to different situations demanding more varied role behaviors and interpersonal skills, both necessary to cope effectively in the work environment. She further notes that many women seem to be blocked from self-growth by their inability to defend their personal rights or to tolerate interpersonal conflicts.

The women's movement and the two converging trends specified by Jakubowski-Spector have produced a cultural climate receptive to the development and refinement of assertion training. Although assertion training is not a panacea for all the interpersonal problems which befall women, it does address itself to the problem areas delineated by Jakubowski-Spector by offering training in personal effectiveness and interpersonal skills. It also seems to be particularly relevant and appealing to women who, after all, are stereotypically less healthy, less effective, and less "mature" than men.

Assertion versus Aggression

Considerable confusion seems to exist regarding the distinction between assertion and aggression since these terms have been used interchangeably in general conversation and in books written for laymen. For example, the title of a recent popular paperback by Bach and

---

3 Assertion and assertiveness are used synonymously in the current study, as are assertion training and assertiveness training.
Goldberg (1974) is **Creative Aggression: The Art of Assertive Living**. To avoid subsequent confusion, a distinction must be made between these two terms.

Wolpe (1973) defines aggression as "oppositional behavior which is socially reprehensible" (p. 89). He defines assertion as "all socially acceptable expressions of personal rights and feelings" (Wolpe & Lazarus, 1966, p. 39). Wolpe (1973) expanded his definition of assertion by describing two types of assertive behavior: (a) Oppositional or hostile assertion is the appropriate expression of disagreement or anger, and (b) commendatory assertion is the appropriate expression of praise or affection.

In differentiating between assertion and aggression, Wolpe seems to use "socially acceptable" and "socially reprehensible" in an egalitarian, utopian sense, wherein the same behavioral norms apply to both males and females. However, acceptable male behaviors are traditionally different from acceptable female behaviors (Steinman, 1975), and assertiveness is considered to be more desirable for males than females (Bem, 1974; Block, 1973). Consequently, some individuals may consider female assertiveness to be unacceptable, threatening, or masculine. Nevertheless, Wolpe's definitions of assertion and aggression and his distinction between two types of assertive behavior have been generally accepted, although more recent authors have substituted the term positive assertion for commendatory assertion and negative assertion for oppositional or hostile assertion (Eisler, Hersen, Miller, & Blanchard, 1975; Galassi, Delo, Galassi & Bastien, 1974; Gay, Hollandsworth & Galassi, 1975).
Alberti and Emmons (1974) further elaborate on the distinction between aggression and assertion by considering the interactions between the aggressor and the aggressor and between the assertor and the assertee. They maintain that aggressive behavior commonly results in the aggressor being castigated or intimidated by the aggressor. The aggressive individual is one who accomplishes his goals at the expense of others by deprecating others. In contrast, appropriate assertive behavior is the honest and direct expression of individual rights and feelings which results in self-enhancement for the assertor and which is not detrimental to the assertee. They stress that the appropriate expression of individual rights should not deny the rights of others.

Alberti and Emmons' description of appropriate assertive behavior is similar to Wolpe's definition of assertion in that it also represents an ideal state. In practice there may be considerable disagreement among individuals regarding the "rights" each has or should have, especially in interdependent relations. (For example, consider the "right" of a husband to have children versus the "right" of a wife not to have children.)

In a recent article, Hollandsworth (1977) states that neither Wolpe (1973) nor Alberti and Emmons (1974) sufficiently differentiate assertion from aggression since their definitions either "invoke behaviorally undefinable criteria or...are based on the consequences of an assertive response" (p. 348). He suggests that assertion be "defined as the direct verbal and nonverbal expression of one's feelings, needs, preferences, or opinions...emitted in specific interpersonal situations"
...in a nonthreatening, nonpunitive manner" (p. 351). In contrast, an aggressive response involves coercive power (threats and punishments) or "the verbal expression of rejection or negative evaluation and the nonverbal expression of physical threat" (p. 351). In short, Hollandsworth suggests aptly that assertion and aggression be distinguished by the use of threats and punishments.

Assertion Training

The popularization of assertion training in the seventies in conjunction with the copious number of assertion studies published since 1972 (prior to that year, Psychological Abstracts did not even have an "assertion" subject entry), might suggest that assertion training is a recent innovation. However, as early as 1949, Salter delineated an early form of assertion training. He described the "inhibitory personality" and recommended that such individuals display more effective "excitatory" or emotional behavior.

Salter's formulations received minimal attention until Wolpe (1958) began to systematize assertion training on the thesis that assertion reciprocally inhibits anxiety. Wolpe's theorizing on assertion evolved from early research on systematic desensitization to phobias. In systematic desensitization, relaxation, a response incompatible to anxiety, is paired successively with a series of graduated phobic situations arranged hierarchically from least to most anxiety producing. As a client is able to relax, thus extinguishing the anxiety felt in a lesser phobic situation, he proceeds to the next step of the phobia sequence. Similarly, Wolpe maintains that assertion
and anxiety are incompatible responses and that the instigation of 
assertive behavior reciprocally inhibits the fear or anxiety felt by 
clients in interpersonal situations while helping them become more 
appropriately responsive. Assertive behavior is developed by pairing 
assertive responses with anxiety evoking situations until the situation 
no longer produces anxiety. Piaget and Lazarus (1969) note that the 
pairing may be done through hierarchical covert desensitization 
(fantasy), through behavior rehearsal, or through a combination of the 
two procedures. Other techniques used to facilitate the development 
of assertiveness by inhibiting anxiety are relaxation training (Lange 
& Jakubowski, 1976) and anger induction (Goldstein, Serber & Piaget, 

Assertive training, as defined by Wolpe and Lazarus (1966), is a 
technique for treating individuals who have difficulty expressing posi­
tive or negative feelings and who are generally unable to express their 
own rights. Wolpe (1969) states that such training "is required for 
patients who in interpersonal contexts have unadaptive anxiety responses 
that prevent them from saying or doing what is reasonable and right" 
(p. 61).

In a critique of Wolpe's early views on assertion training, Hersen, 
Eisler and Miller (1973) note that Wolpe (1958; Wolpe & Lazarus, 1966) 
assumes the unassertive individual knows the appropriate behavior in a 
situation but is "blocked" by his anxiety. A negative relationship 
between assertive behavior and interpersonal anxiety has been demon­
strated in a number of studies (Gay, Hollandsworth & Galassi, 1975; 
Hollandsworth, 1976; Morgan, 1974; Perceull, Berwick & Beigel, 1974;
Orenstein, Orenstein & Carr, 1975), and Schwartz and Gottman (1976) have determined that some individuals who know how to formulate assertive responses are unable to deliver such responses. However, other research has provided evidence that many unassertive individuals fail to evince appropriate assertive responses in interpersonal situations because they have never learned such responses (Eisler & Hersen, 1973; Eisler, Hersen & Miller, 1974; Laws & Serber, in press; Lazarus, 1971; Meichenbaum, 1975; Neitzel & Bernstein, 1976; Serber, 1972).

Therefore, there appear to be at least two types of non-assertive individuals. Hersen, Eisler and Miller's (1973) criticism of Wolpe's views on assertion may be somewhat unfounded since Wolpe's later articles (1969, 1970) endorse the use of shaping and reinforcement during assertion training. Wolpe's endorsement of shaping and reinforcement connotes that he recognizes non-assertiveness may be caused by either skill deficits or inhibitory factors, or both. Recently, Neitzel and Bernstein (1976) demonstrated that the origins of non-assertion could be determined clinically by manipulating demand characteristics. They found that individuals with performance deficits displayed appropriate assertion only under high demand, whereas the assertive behavior of individuals with acquisition deficits remained inadequate regardless of demand conditions.

**Components of Assertion Training**

The basic goals of assertion training, regardless of the causes of non-assertion, generally include: (a) teaching individuals to distinguish assertion from aggression and non-assertion from politeness;
(b) facilitating individuals' identification and acceptance of their personal rights, as well as the rights of others; (c) reducing cognitive and emotive barriers which inhibit assertive behaviors, such as excessive anxiety, guilt, anger and irrational thinking; and (d) instilling assertive skills through practice (Jakubowski-Spector, cited in Lange & Jakubowski, 1976). The first goal is usually accomplished by presenting didactic material during training sessions and by having assertion participants distinguish between taped, live, or written examples of assertive, aggressive or non-assertive behavior.

The second and third goals may be subsumed under what Lange and Jakubowski (1976) call the "cognitive restructuring component of assertion training" (p. 124). Cognitive restructuring is related to Ellis' rational emotive therapy (Ellis, 1962, 1971, 1974; Ellis & Harper, 1975). It involves helping individuals identify unwarranted and irrational assumptions made about themselves or others, and helping them develop an understanding of how erroneous assumptions influence feelings and behaviors. For a review of cognitive restructuring concepts frequently presented to assertion trainees, the reader is referred to "The Bill of Assertive Human Rights" (Smith, 1975, p. 28) and the ten irrational beliefs described by Ellis and Harper (1975). The value of cognitive restructuring as a means of facilitating the development of assertive behavior has not been widely researched; however, it has received partial support in experimental literature (Lehman-Olson, 1975; Linehan & Goldfried, cited in Lange & Jakubowski, 1976; Schwartz & Gottman, 1976; Thorpe, 1973; Tiegerman & Kassinove, 1977; Wolfe, 1975).
The fourth and primary goal of assertion training is the development of assertive skills through practice or behavior rehearsal. The components of behavior rehearsal, including modeling, role-playing, reinforcement, and coaching or instructing, have received considerable attention in the experimental literature as numerous studies have attempted to determine the relative efficacy of these various behavior modification techniques in increasing assertive behavior. One of the initial studies in this area was conducted by McFall and Marston (1970). They compared: (a) behavior rehearsal, (b) behavior rehearsal plus audio-taped feedback, (c) assertive insight therapy, and (d) a waiting-list control group. Behavior rehearsal and therapy subjects were seen individually for four 1-hour sessions. The behavior rehearsal procedure was standardized and semi-automated; it consisted of having subjects practice assertive responses with or without feedback to various stimulus situations. A behavioral role-play test administered before and 2 weeks after subjects completed their training indicated that the behavioral groups were judged to be significantly more assertive after training than the control groups. Note that the preceding finding, as well as the one that follows, compares the two behavioral groups with the two control groups. In analyzing their data McFall and Marston first compared the two control groups and then, the two behavioral groups. If no significant differences were found on the first two comparisons, they combined the behavioral groups and compared them with the combined experimental groups. This obscures the fact that the rehearsal alone group and waiting-list control group had very similar mean change scores on the role-play test. A comparison
of those change scores would not show a significant difference between groups. McFall and Marston also used an unobtrusive, in vivo, follow-up measure. It consisted of having a confederate magazine salesman telephone and pressure subjects to buy magazines. Behavior rehearsal subjects evidenced significantly shorter resistance time than control subjects; however, subjective ratings of resistance did not differentiate between groups. In a subsequent and similar study, Aiduk and Karoly (1975) compared: (a) behavior rehearsal, (b) behavior rehearsal with video-feedback, (c) behavior rehearsal with feedback and self evaluation, and (d) a no-treatment control group. Subjects in all treatment conditions received four individual 40 minute sessions of refusal training. Although training time per subject was equal, the number of training situations presented per session varied across treatments with the most expanded behavior rehearsal format having the least number of stimulus situations per session. Aiduk and Karoly found no significant differences between treatment groups. However, the treatment comparisons may have been confounded by the unequal number of training situations presented in different conditions. They did find that the three behavior rehearsal groups were significantly more assertive than the control group on a self-report and an unobtrusive behavioral measure. The behavioral measure involved having a second confederate experimenter attempt to persuade subjects to leave the experiment in which they were participating so that they could participate in his study.

Another early therapy analog study was conducted by McFall and Lillesand (1971). They compared behavior rehearsal, covert rehearsal
(imagining oneself responding assertively), and an assessment-placebo control. Modeling and coaching were used as adjunct techniques in both rehearsal conditions. The total treatment per subject in the rehearsal and covert rehearsal conditions consisted of two 20 minute individual sessions, one week apart, of refusal training. Self-report and behavioral role-play measures showed that the covert rehearsal group was as effective as the rehearsal group, and both were more assertive than the control group. In addition, the authors reported that self-report and role-play assessment measures were significantly and positively correlated. Buttrum (1974) also compared rehearsal and covert rehearsal groups with control groups. Treatment groups each received four weekly sessions of group assertion training. He found that subjects in either overt or covert rehearsal groups obtained significantly higher scores on self-report measures of assertion, were rated more assertive by peers in the natural environment, recorded more in vivo assertive responses, and were rated as being more assertive under laboratory conditions.

In a series of four experiments, McFall and Twentyman (1973) compared the relative contributions of rehearsal, modeling, and coaching to assertion training. As in the McFall and Lilliesand study (1971), training was semi-automated and consisted of two individual 20 minute sessions of refusal training per subject. The conclusions they drew from the experiments were: (a) rehearsal, covert rehearsal, and coaching are effective means of developing assertive behavior; (b) overt rehearsal, covert rehearsal, or a combination of both appear to be equally effective; (c) the effects of rehearsal and coaching are
independent, as are the effects of covert rehearsal and coaching; (d) the effects of coaching are additive with either rehearsal or covert rehearsal; and (e) neither tactful or abrupt models nor audio or audio-visual modeling added much to the effects of rehearsal and coaching. McFall and Twentyman noted the failure to obtain significant modeling effects may have been due to the simplicity of the assertive behavior under study—the behavior was the ability to say "no". They also suggested that modeling may be more relevant in training more complex assertive behaviors. An interpretation which McFall and Twentyman did not consider is related to the fact that not one of the four experiments included a modeling only condition. Modeling was always used in combination with coaching and/or rehearsal. Perhaps modeling is effective in developing refusal behavior but has effects which are masked by the effects of rehearsal or coaching. It is also possible that modeling is a more important training component for younger subjects. Prince (1975) conducted a study similar to the McFall and Twentyman series, but he used high school volunteers (14-16 years old) rather than college students. He found that modeling significantly enhanced covert rehearsal in the development of refusal behavior whereas verbal reinforcement (vicarious consequences) did not.

The complexity of assertive behavior in interpersonal situations has been demonstrated by Eisler, Miller and Hersen (1973) who dichot-

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Treatment conditions including both coaching and rehearsal produced relatively greater treatment effects than conditions which included coaching without rehearsal or rehearsal without coaching. However, the rehearsal and the coaching conditions were both significantly different than controls.
omized high and low assertive subjects according to overall behavioral ratings. The dichotomization enabled them to differentiate five specific behavioral elements of assertion: (a) shorter verbal response latency, (b) more requests that others alter their behavior, (c) less compliance with the demands of others, (d) more audible speech, and (e) greater variation in vocal pitch. In a second study, Eisler, Hersen and Miller (1973) compared the effects of video-taped modeling with a practice-control group and with a no-treatment control group. Results indicated the modeling group changed significantly more than the other two groups, and the change was reflected on 5 of the 8 variables measured, including 3 of the 5 variables which had differentiated high from low assertiveness in the previous study. A third subsequent study conducted by the same group of researchers (Hersen, Eisler, Miller, Johnson and Pinkston, 1973) expanded the previous study to include two additional treatment conditions—modeling plus instructions and instructions alone. Video-taped data revealed the modeling plus instructions group performed more effectively or equally to the instructions alone or modeling alone groups on 5 of the 7 assertive behavioral components.

Kazdin (1973, 1974a, 1974b) conducted a series of assertion training studies examining the effectiveness of covert modeling (imagining someone else behaving assertively) and covert reinforcement (imagining favorable consequences resulting from assertion). He reported that covert modeling significantly increased self-report and behavioral indices of assertion, and that when covert modeling was used in conjunction with reinforcement, the training effects were enhanced.
Kazdin (1975, 1976) also investigated the relative effectiveness of covert modeling using single or multiple models whose assertive responses were or were not reinforced. He compared the four treatment conditions with two control groups and found significant effects with all four treatment conditions. The use of multiple models tended to enhance the treatment, and reinforcement effected the greater behavioral change.

In a somewhat involved study, Friedman (1971) compared six experimental conditions: (a) directed role-playing, (b) improvised role-playing, (c) live modeling, (d) modeling plus directed role-playing, (e) reading assertive script, and (f) reading non-assertive script. Each experimental treatment lasted from 8-10 minutes. Behavioral indicators revealed that although modeling plus role-playing resulted in the greatest increases in assertive behavior, other treatment conditions produced significant change as well when compared to the control group which read non-assertive script. A particularly interesting post hoc analysis was performed on the data generated by these comparisons. Friedman found a consistent sex difference. Females in one condition evidenced the greatest increases in assertion and maintained those increases over time. The author determined that the models and accomplice role-players in this condition were male and suggested that perhaps women were more willing to imitate male assertive models than female models.

Friedman's speculation is reinforced somewhat by an assertion training study conducted by Frieberg (1974). Frieberg used all female subjects and varied model sex and status. The treatment in this
study consisted of two group sessions of refusal training. Male models, regardless of status level, produced significantly greater increases in assertive behavior than female models. Other studies have produced inconsistent results. Poland (1974) found that viewing male or female video-taped assertive models effected increased assertiveness in both male and female subjects, and that there were no significant differences due to either model or subject sex. Similarly, Ellis (1973) found that the sex of the models did not significantly affect chronic psychiatric inpatients' susceptibility to modeling. In contrast, Little and Roach (1974) demonstrated that male counselors (video-taped with female counselees) are significantly more effective than female counselors in interesting women in non-traditional occupations.

In summary, considerable research has been conducted to determine the most effective components of behavior rehearsal in developing assertion skills. Investigators have generally attempted to follow a "constructive strategy" by isolating fundamental techniques and subsequently adding other components to determine whether they enhance treatment effects (McFall and Marston, 1970). One of the more fundamental behavior techniques is rehearsal. Research has documented the value of behavior rehearsal in developing or modifying specific overt behaviors. However, the exact contributions made by modeling are difficult to ascertain. As McFall and Twentyman (1973) noted, research on modeling is usually not limited to modeling alone but may include live or recorded narratives, reinforcement, or directives similar to instructions or coaching. Bandura (1971) has even suggested that
coaching or instruction is a special form of modeling. Nevertheless, assertion training literature on modeling generally indicates that modeling is an important training component (Eisler, Hersen & Miller, 1973; Goldstein, Martens, Hubben, Van Belle, Schaaf, Wiersma & Goedhart, 1973; Hersen, Eisler, Miller, Johnson & Pinkston, 1973; Poland, 1974; Rosenthal & Reese, 1976; Young, Rimm & Kennedy, 1973). Current research generally supports that the most effective assertion training regime appears to be a combination of behavior rehearsal and modeling (Ascher & Phillips, 1975; Friedman, 1971; Hersen, Eisler, Miller, Johnson & Pinkston, 1973; Kazdin, 1974b; Lazarus, 1966a; MacDonald, Lindquist, Kramer, McGrath & Rhyne, 1975; Parr, 1974; Prince, 1975; Wagner, 1968).

Applications of Assertion Training


In short, case study literature suggests assertion training is relevant for a wide range of clinical problems. However, case studies may be viewed skeptically as descriptive accounts of individual cases. They are especially prone to sampling errors, the Hawthorne effect, and biased observation or reporting. In addition, assertion training case studies frequently do not specify the adjunct technique or techniques most advantageous in developing assertiveness, nor do they specify the conditions under which patients benefit from assertiveness training. Obviously, it would be a grievous error to assume assertion training is the treatment of choice for all individuals with such diverse problems. Clinical conditions which benefit from assertion training have been specified by Wolpe (1971, 1973). He suggests assertion training is appropriate when the clinical problem is caused by a conditioned anxiety response habit, for example, when homosexual behavior results in interpersonal anxiety which is conditioned to opposite-sexed persons (1973), or when depression is caused by "the conditioned submissiveness of the dominated" (1971, p. 365). Other researchers suggest or imply assertion training is equally appropriate when non-assertion is the result of a learning deficit (Alberti & Emmons, 1974; Eisler & Hersen, 1973; Eisler, Hersen & Miller, 1974; Laws & Serber, in press; Lange & Jakubowski, 1976; Lazarus, 1971; Neitzel & Bernstein, 1976).
Assertion training programs with hospitalized psychiatric patients have been conducted infrequently and have produced somewhat contradictory data. Weinman, Gelbart, Wallace and Post (1972) found group assertion training was not effective with chronic male schizophrenics, and Serber and Nelson (1971) found individual assertion training to be ineffective with male and female acute schizophrenics. Login and Rooney (1975) reported assertion training conducted on an individual basis was effective with chronic female schizophrenics when the training was limited to the rehearsal of a single behavior, refusing unreasonable demands. Lomont, Filner, Spector and Skinner (1969) demonstrated that group assertion training led to general improvement with non-schizophrenic inpatients, and Ascher and Phillips (1975) reported individual assertion training was effective with neurologically impaired patients when paraprofessional trainers maintained close contact with patients in their social environment. Bloomfield (1973) found assertion training to be effective with chronic schizophrenic outpatients who attended an open-ended assertion group, and Clark (1974) reported group assertion training with psychiatrically hospitalized veterans of the Viet Nam era was an efficient, economical means of developing social/behavioral skills. In brief, assertion training studies with psychiatric patients have produced somewhat ambiguous results. Factors associated with greater success of assertion training with hospital populations seem to be: (a) training in a specific and limited area, (b) outpatient status (suggesting a lesser deficit in overall functioning), and (c) a greater amount of time used in training.
In summary, case studies suggest assertion training, often used with other therapy techniques, improves behavioral functioning with a number of diverse clinical problems. Although case studies may be viewed skeptically, their heuristic value cannot be denied. Research with psychiatric patients has produced contradictory results. However, it appears that only patients functioning on relatively higher levels (non-schizophrenics or outpatient schizophrenics) benefit from training.

It may be interesting to note that with the exception of four of the preceding clinical studies, assertion training was conducted on an individual basis. Lange and Jakubowski (1976) maintain that individual assertion training may be necessary for patients who have significant emotional or behavioral problems in conjunction with, or caused by, their assertion deficits. However, assertion training is also used for individuals who function adequately, yet feel overly inhibited, anxious, or shy. Such individuals are essentially striving to improve their personal effectiveness and are generally referred to group assertion training.

**Non-Clinical Applications.** Within the past few years, group assertion training has been employed by diverse populations for a variety of problems. For example, Corby (1975) conducts and advocates assertiveness training with the elderly in retirement or nursing homes to teach them relationship initiation techniques and how to make more effective requests and refusals. McGovern, Tinsley and Liss-Levinson (1975) use assertion techniques to train individuals for job
interviews; their training package focuses on enhancing communication skills and controlling interview anxiety. Carlson and Johnson (1975) and Liss-Levinson, Coleman and Brown (1975) have developed separate sexual assertiveness training programs for women; although the formats of the programs differ, both stress self-awareness and the expression of personal preferences. Assertiveness training emphasizing system-wide communication clarification and interpersonal skill refinement was conducted by Smith (1975) for school administrators, principals and teachers. The foregoing examples of "non-clinical assertion training" are descriptive accounts which relate how assertion techniques have been systematically applied to specific problem areas. Each is reported as having been successful, yet none of the authors present empirical evidence to substantiate their evaluations. Hence, future research is necessary to determine the appropriateness and effectiveness of assertion training with the aforementioned populations.

To date, research on the non-clinical applications of assertion training has been scant. However, a few studies deserve comment. In 1975, Keating developed and implemented an assertiveness training workshop for student leaders enrolled in a student government seminar. He was interested in assessing the effects of assertion training on student leaders' assertiveness and self-concept. The workshop was comprised of eight treatment groups which met during a 5 week period for a total of 9 hours. Control groups were composed of randomly selected undergraduate students. Comparison of pre-training assertion 

6The phrase "non-clinical assertion training" refers to "health-oriented" rather than "illness-oriented" or "crisis-oriented" therapeutic interventions.
scores revealed that although student leaders had higher assertion scores than controls, only freshmen leaders had significantly higher scores than freshmen controls. Analysis of post-training treatment and control data indicated the workshop participants made significant gains on the assertion measure and on the measure of self-concept.

A second non-clinical assertion training study was conducted by Mastria (1975) in a medium-sized southern city. Mastria hypothesized that women participating in assertion training plus a police sponsored self-defense course would evince greater increases in assertiveness than women in assertion training, self-defense, or no treatment controls. Participants in assertion training plus self-defense and in assertion training only were given 4 hours of assertiveness training. Results indicated that women in both assertion training and assertion training plus self-defense significantly increased self-report assertiveness, and women in assertion training plus self-defense had a significantly higher self-concept after the training. Behavioral measures taken before and after training seemed to fluctuate erratically, and they did not correlate with the self-report measures.

Flowers and Goldman (1976) investigated the effects of assertion training on mental health paraprofessionals. They hypothesized that assertion-trained paraprofessionals would increase their assertiveness and their ability to help counselees clarify problems significantly more than untrained paraprofessionals. Paraprofessionals in both the treatment and waiting-list control groups were employed at a state mental hospital, and according to Flowers and Goldman, "in the broad sense...should not be considered untrained" (p. 150). After
10 weeks of assertion training, assertion-trained paraprofessionals obtained higher self-report assertion scores and were more effective than untrained paraprofessionals on three counselor effectiveness measures—problem clarity, goal clarity and operational clarity. A study similar to the Flowers and Goldman study was conducted by Thibodeau (1974). Thibodeau studied the effects of short-term assertion training on counselor facilitation, self-actualization, and assertiveness. His experimental and control groups were composed of beginning counseling students who volunteered to participate in the study. The assertion training groups met twice weekly for 2 weeks. In contrast to Flowers and Goldman's findings, Thibodeau's analysis of treatment and control post-training scores yielded no significant differences on a self-report measure of assertiveness, on counselor facilitative measures, or on self-actualization. He did find that pre-training assertion and self-actualization scores were positively correlated. Thibodeau stated succinctly: "It is clear the treatment did not yield desired results" (p. 718A). Although the Flowers and Goldman (1976) and the Thibodeau (1974) studies were in many ways dissimilar, the benefits of using assertion training to train counselors have yet to be established.

A rather interesting study conducted by Brockway (1976) examined the effects of assertion training on the assertiveness, self-perceived anxiety, and performance satisfaction of 21-27 year old professional women. Pre-training treatment and control group scores were very similar and revealed: (a) women evidenced average to above average levels of assertion; (b) they perceived themselves as being
unassertive; (c) their self-reported levels of anxiety were high; and (d) they were moderately satisfied with their assertive performance. Comparison of treatment and control groups post-training scores indicated: (a) assertion training participants evidenced increased overall assertiveness; (b) participants perceived themselves as being somewhat more assertive, but still within the lower range of self-perceived assertiveness; (c) the treatment group anxiety level decreased 40% (the control group anxiety increased 5%); and (d) participants' performance satisfaction increased. Brockway concluded that assertion training conducted for professional women "should consist of techniques aimed primarily at decreasing anxiety and eliminating conditional beliefs and attitudes rather than at increasing verbal or gestural assertion skills" (p. 505).

In reviewing the numerous clinical and non-clinical applications of assertion training, perhaps one should consider a caution given by Flowers, Cooper and Whiteley (1975):

Due to the current popularity of assertion training and its obvious success in many diverse situations, it is highly susceptible to misuse and misinterpretation. Some practitioners are titling any intervention that talks about assertion issues as assertion training...other modes of counseling...are being billed as assertion training to sell them...All these point to the upswing of assertion training as a fad. If assertion training is to reach its full potential as a therapeutic technique, it must be protected from the negative consequences which can arise from misuse and misunderstanding. (p. 4)

Individual versus Group Assertion Training. Research comparing the relative efficacy of individual versus group assertion training is limited to a single study conducted by Boland (1974). He found no
difference in the effects of group or individual assertion training on a self-report assertion inventory or on measures of self-reference. The lack of research in this area is somewhat surprising since prior to 1970, assertion training was conducted primarily on a "one-to-one" basis, and only within the last 7 years has group assertion training become a preferred treatment modality for most non-psychiatric aggressive and non-assertive individuals. The advantages of group assertion training are delineated by Alberti and Emmons (1974), and by Lange and Jakubowski (1976). One advantage is that participants discover they have similar problems, similar goals, and through sharing, learn their problems are not unique. Another advantage is that the group provides a broader base for social modeling than individual treatment; group participants learn from observing other members rehearse assertive responses, as well as from observing their group leader(s). A third advantage is that members generally reinforce one another's assertive efforts and reinforcement obtained from several peers simultaneously seems to have a greater impact on individuals than reinforcement given by a single trainer/therapist. A major advantage of group training is that the group provides a microcosm or "laboratory" of diverse individuals with whom to practice assertion, thus facilitating the generalization of assertiveness to extra-group individuals. The greatest advantage of group training is probably that it is a more economical form of treatment (i.e., a therapist/trainer can train more individuals in less time).

In an attempt to clarify which types of individuals derive the greatest benefits from group assertion training, Alberti and Emmons
(1974) distinguish between generally and situationally aggressive individuals and between generally and situationally non-assertive individuals. "The generally aggressive individual is characterized by behavior towards others which is typically aggressive in every type of situation" (p. 22); he conflicts with most of the individuals he encounters, is extremely sensitive to criticism, and is easily triggered into aggressive outbursts. In contrast, the situationally aggressive individual is aggressive only under certain conditions. He can usually recognize which situations cause him to respond aggressively and may seek assistance in learning alternative behaviors which are more adaptive than aggression. The generally non-assertive individual is extremely passive and, thus, is "unable to assert his rights or act on his feelings under most or nearly all circumstances" (p. 19). He experiences very low self-esteem, and nearly all social situations cause him to experience an uncomfortable level of anxiety. By comparison, the situationally non-assertive individual typically displays self-enhancing and adequate behavior; yet "certain situations stimulate a great deal of anxiety...which prevents fully adequate responses to that particular situation" (p. 19). Alberti and Emmons concur that both generally aggressive and generally non-assertive individuals are inappropriate candidates for group assertion training and should be referred to qualified therapists for more in-depth therapeutic regimes. The individuals they deem to be appropriate candidates for group training are those who are situationally aggressive or situationally non-assertive.
Situational Specific Training. Alberti and Emmons' distinction between generally and situationally non-assertive individuals implies that for some individuals, assertion is a pervasive and unitary trait, while for others it is a set of behaviors which are situation-specific. Current research supports the situational-specificity of assertion (Eisler, Hersen, Miller & Blanchard, 1975; Gormally, Hill, Otis & Rainey, 1975; Holmes & Horan, 1976; see Rice & Schroeder, 1976, for review), including factor analysis of several assertion inventories (Bates & Zimmerman, 1971; Gambrill & Richey, 1975; see: Lange & Jakubowski, 1976, for review). Specific assertive behaviors described by Lazarus (1971) are "the ability to say 'no', the ability to ask for favors or to make requests, the ability to express positive and negative feelings, [and] the ability to initiate, continue, and terminate general conversations" (p. 697). Conditions affecting the ability to evince such assertive behaviors have been investigated by several researchers. Eisler, Hersen, Miller and Blanchard (1975) demonstrated that the ability to be assertive varies according to whether the target person is male or female, whether the target person is familiar or unfamiliar, and whether the content of the assertive response is positive or negative. That is, they demonstrated that "interpersonal behavior in assertive situations varied as a function of social context" (p. 330). In exploring factors which influence assertiveness, MacDonald (1975) determined that relevant factors include:

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7 Alberti and Emmons do not directly address the issue of whether assertion is or is not a personality trait.
(1) degree of intimacy in the situation, (2) valence of the felt emotion, (3) elapsed time following the elicitation of the emotion, (4) perceived status of the other, including sex of other, (5) perceived status of self in the situation, and (6) number of observers present. (p. 60)

Three additional situational factors affecting the ability to be assertive are specified by Jakubowski and Lacks (1975). They are: (a) whether one is the initiator of an assertive response or the respondent to aggression or manipulation, (b) ability to enact an appropriate type of assertion in a given situation, and (c) whether significant reinforcers are controlled by the other person in the interaction.

Effectiveness of Assertion Training

Comparison With Other Groups. A number of studies conducted with non-assertive college students have compared the effectiveness of group assertion training with other types of groups, including experimental control groups. Joanning (1973) compared assertion training groups with traditional therapy groups and control groups. He found that in comparison to control groups, both treatments increased the frequency and quality of assertive behaviors and decreased social anxiety. Comparison of the two experimental conditions revealed that traditional therapy subjects tended to be less socially anxious while assertion trained subjects tended to be more adaptive and resourceful. Holmes and Horan (1976) compared a standard assertion training group and an assertion training group which included anger induction procedures to a Rogerian group. They found the standard assertion trained
subjects were significantly more assertive than the Rogerian subjects on a self-report measure of assertion, and the assertion plus anger induction trained subjects were less compliant than Rogerian subjects when told part of their promised deposit refund would be withheld. Hedquist and Weinhold (1970) compared a "social learning" group with an assertion training group and a discussion control group. Using journal accounts of assertive responses made outside the groups as the criteria, both treatment groups performed significantly better than the control group, yet neither proved to be superior to the other. In interpreting their results, Hedquist and Weinhold note both treatment groups were behaviorally oriented and used similar techniques. The social learning group emphasized behaviors indigenous to assertiveness and, perhaps, was not sufficiently different from the assertion group.

Comparisons of assertion training groups with no-treatment control groups, using non-assertive female and/or male college students, have consistently demonstrated that assertion trained subjects are significantly more assertive on both self-report and behavioral indices (Aiduk & Karoly, 1975; Galassi, Galassi & Litz, 1974; Krischner, 1973; Rathus, 1972, 1973; Robinson, 1974; Winship & Kelly, 1976). Similarly, Olsen (1975) found that high school females who participated in assertion training groups evidenced significantly more increases in behavioral and self-report measures of assertion than did non-participants.

One might speculate that comparisons of assertion training groups with no-treatment control groups might yield biased results since logically, subjects who chose to participate in assertion training
would have a greater investment in becoming assertive than non-participants. However, studies comparing assertion training groups with waiting-list control groups have shown that personal interest or investment alone does not account for increases in assertive behavior. For example, Buttrum (1974) compared subjects in waiting-list control groups with subjects who participated in group assertion training and found that assertion trained subjects: (a) obtained significantly higher scores on self-report measures of assertiveness, (b) were rated by peers in the natural environment as exhibiting significantly more assertive behaviors, (c) logged significantly more in vivo behavioral and emotional assertive responses, and (d) obtained significantly higher ratings under laboratory conditions on both objective (behavioral) and subjective (emotional) assertiveness.

Zeiger (1973) also used delayed treatment control groups to assess the effectiveness of assertion training and found that assertion trained subjects obtained significantly higher scores on an assertion questionnaire and on the A-S dimension of the Guilford-Zimmerman Temperament Survey. In addition, she found that assertion trained subjects were rated by non-participant cohorts as being significantly more assertive than subjects not yet involved in assertion training.

Flowers and Goldman (1976) conducted group assertion training with mental health paraprofessional counselors and compared assertion trained counselors with a waiting-list control group of counselors. They found the assertion trained counselors were not only superior to untrained counselors on several counselor-effectiveness measures but also on a self-report and a behavioral measure of assertion.
Other studies have compared assertion training groups with placebo-control or attention control groups. Placebo-control or attention control groups generally discussed current assertive difficulties and origins of assertive deficits, yet did not employ modeling, behavior rehearsal, or role-playing techniques. Both Ryan (1975) and Schinke (1975) compared assertion training groups with placebo-control discussion groups and found that assertion training participants were significantly more assertive in post-treatment video-taped situations. Other studies have consistently demonstrated that assertion training, when compared with attention control groups, results in significantly greater increases on both self-report and behavioral measures (Gormally, Hill, Otis & Rainey, 1975; Kazdin, 1976; Rathus, 1973; Winship & Kelly, 1976). In comparing assertion training groups with discussion groups, Rathus (1972) found that assertion training not only resulted in significantly greater increases on self-report and video-taped measures of assertion, but also in significantly decreased fear of social criticism and social competence. Boland (1974) found that individuals who participated in group or individual assertion training obtained significantly higher assertion scores on a self-report inventory than individuals in a discussion group, yet neither treatment nor control subjects were distinguished by galvanic skin responses indicating their level of anxiety in interpersonal situations. Similarly, Thorpe (1973) found assertion training resulted in increased assertiveness on an assertive questionnaire and on a role-play test, yet autonomic measures consisting of the "finger sweat print technique" and pulse rate readings failed to differentiate assertion trained
subjects from discussion group subjects. In contrast, McFall and Marston (1970) found that pulse readings taken before a behavioral test did not differentiate between treatment and control groups, but pulse readings taken after the test did.

With two exceptions, the preceding comparative studies used non-psychiatric, college students as experimental subjects. The exceptions were Olsen (1975), who used high school students, and Flowers and Goldman (1976), who used mental health paraprofessionals. Recently, two comparative studies have used psychiatric patients as subjects. Field and Test (1975) compared a behavior rehearsal assertion training group with a social skills training group. Group members were chronic schizophrenic adult patients from a transitional living program. Post-training video-taped role-play data indicated that patients who received assertion training responded less compliantly and had shorter response latencies and fewer disruptive pauses than patients who received social skill training. Perell, Berwick and Beigel (1974) used psychiatric outpatients as experimental subjects and compared an assertion training group with a control group. The control group discussed how to develop and maintain interpersonal relationships. Post-treatment data analysis revealed that assertion trained patients significantly increased their self-acceptance and were rated significantly more assertive, more spontaneous, and less anxious than patients in the discussion group.

In summary, studies have demonstrated that assertion training groups usually effect significantly greater increases on self-report measures of assertion than non-behavioral groups or control groups.
Studies have also shown that assertion training develops assertive behaviors discernible in role-play tests, and perhaps, discernible to participants' friends after participants have sufficient training. (Of course, friend ratings are always subject to biases and response sets.) In general, assertion training does not seem to affect autonomic indices of anxiety, even though some self-report measures decrease after training.

**Generalization of Assertiveness.** The determination of whether and to what extent treatment effects generalize beyond the laboratory or therapy room is, and will probably continue to be, one of the more difficult problems in human research. Nonetheless, the generalization of effects is the raison d'etre for assertion training and most other treatments and as such, will continue to be evaluated despite methodological problems.

The earliest reports of the generalization of assertion training are provided by case studies which generally report clients are able to transfer assertive skills to some new situations (Foy, et. al., 1975; see: Lange and Jakubowski, 1976, for review; MacPherson, 1972). Another method of assessing transfer of effects involves having assertion training participants keep diaries and, thus, monitor their extra-group assertive behavior. Hedquist and Weinhold (1970) employed the "diary" method and reported that assertion trained subjects were able to apply assertive skills in settings external to treatment facilities. Mayo, Bloom and Pearlman (1975) used a post-training/ follow-up questionnaire to determine, among other things, whether
assertive skills generalized. Questionnaires were mailed to 130 women who had participated in assertion groups they had conducted. Of the 94 respondents, over 90% reported they were able to adapt their assertion skills to novel situations or to situations similar to those rehearsed during assertion training.

As previously discussed, conclusions based on subjective case studies or on self-report inventories or daily logs are suspect. Data obtained in any of these three ways are especially vulnerable to response biases and exaggeration, and may propagate a halo effect. Furthermore, in contrast to self-report and case study claims of transfer, controlled research generally reports that the generalization of assertion is limited to the specific class of assertive behaviors studied during training sessions. For example, McFall and Lillesand (1971) found that subjects trained to refuse requests were able to exhibit refusal behavior in situations not addressed during formal training. However, they were not able to make requests (i.e., to ask a landlord to keep his promise to make repairs on their apartment). Lawrence (1970) found that subjects trained in refusal behavior learned to voice their disagreement with others' opinions but they did not learn to express their agreement with others' opinions. Similarly, Gormally, Hill, Otis and Rainey (1975) found that subjects trained to respond assertively to two individualized situations did not transfer that ability to a novel third problem area.

The data obtained by Mayo, et. al. (1970) and the case study literature provide descriptive accounts of treatment effects; they also indicate that individual or group training was distributive over
many weeks. McFall and Lillesand (1971), Lawrence (1970), and Gormally, et al. (1975) conducted controlled, therapy analogue studies. Total treatment per subject was one to two sessions lasting a total time of 20 minutes to 2 hours. The conclusion drawn from the two types of studies, descriptive/treatment-oriented versus quantitative/research-oriented may not be in conflict. Controlled analogue studies generally limit training to one type of assertion, and the entire treatment, being very brief, would not seem to facilitate the development of different types of assertion. A complete assertion training program focuses on many types of assertion, and is conducted over an extended period of time (distributive practice). Therefore, it would seem to facilitate the generalization of many types of assertive behaviors, some trained and some similar to those rehearsed during assertion training. Although this explanation may appear to be obvious, it does not seem to be addressed by current research.

The behavioral transfer of assertion skills has been investigated in three ways. One assessment method involves having subjects role-play their responses to a series of situations to be studied during assertion training. After the training is completed, the subjects are presented with the same role-play situations, plus a number of different situations not addressed during training. In contrast to Gormally, et al. (1975), Kazdin (1975, 1976) found that training effects generalized to novel role-play situations. Comparison of these two studies is difficult, since Kazdin used twice as many training sessions per subject as Gormally, et al. Furthermore,
Kazdin did not specify whether subjects had received training during the assertion sessions that was indirectly related to the new role-play situations. That is, subjects may have discussed but not rehearsed responses to situations similar to the novel situations presented during the post-training role-play test. A second assessment procedure involves having friends of assertion training participants rate participants' assertiveness before and after training. Buttrum (1974) and Zeiger (1973) found that friends of assertion trained subjects rated subjects as being significantly more assertive after four weekly sessions of training. Kirschner (1973) also used cohort ratings to assess the transfer of assertion. He did not obtain a significant pre/post training effect; however, his total training time was only 40 minutes per experimental group.

A third, rather innovative and unobtrusive method of assessing transfer of assertion skills was developed by McFall (McFall and Lillesand, 1971; McFall & Marston, 1970). He had confederate "high pressure salespersons" telephone subjects who had completed assertion training and urge them to buy magazine subscriptions (salesman) or volunteer for charity work not related to school issues (saleswoman). Unfortunately, a number of McFall's subjects "caught on" to the telephone test(s) and said so during the phone conversation; they were not included in the follow-up analysis. McFall's method has been used by Kazdin (1974b), who had confederates phone assertion trained subjects and urge the subjects to work for a worthy cause. Problems with McFall's measure are its all or none response, and at times, it is confounded by subjects' humanitarian interests.
The most promising variant of McFall's measure involves a series of seven graduated, unreasonable requests wherein a confederate asks subjects to lend him their notes during exam week (McFall & Twentyman, 1973). Evaluation of subjects' taped responses indicated some, although weak, generalization of assertion training—assertion trained subjects evidenced refusal behavior earlier in the conversation than control subjects.

Lange and Jakubowski (1976) attribute the failure to find more consistent or significant generalization of training to several factors. Some experimental studies are so rigorously controlled that they bear little resemblance to clinical assertion training. Some studies use intervention strategies of exceptionally short duration [e.g., Kirschner's (1973) total treatment time per subject was 40 minutes]. Other studies employ individuals who have little interest in becoming more assertive, such as students who earn points for being experimental subjects [e.g., McFall & Twentyman (1973) informed students of bonus points for participating "after" the lab part of the experiment was over, yet the possibilities of rumors cannot be denied]. And finally, some measures of generalization may be too crude or limited to detect specific training effects which may have transferred.

Persistence of Assertion Training. Assertion training case studies almost invariably report that gains in assertiveness are maintained, even over a 6-year period (see: Lange & Jakubowski, 1976). The problems inherent in data and conclusions drawn from case studies have been discussed previously in this paper.
1976, for review). Experimental studies report shorter follow-up periods, ranging from several weeks to one year. Kirschner (1973) reported that gains in assertiveness persisted over a 3-week follow-up and were reflected by self-report and objective behavioral measures. Buttrum (1974) had subjects record their behavioral and emotional assertive responses, in vivo, at a 6-week follow-up. Follow-up data comparing assertion trained subjects with control group subjects revealed that assertion trained subjects continued to be significantly more assertive than control subjects. Schinke (1975) found that increased assertive behavior demonstrated in a post-training role-play test persisted over a 3-month follow-up, and Kazdin (1974b, 1975, 1976) found that increases in post-training self-report of assertion were maintained 3 or 4 months after training.

In a somewhat longer follow-up, Field and Test (1975) reported severely disturbed chronic schizophrenic patients continued to respond assertively in role-play test situations 10 months after training. Boland (1974) collected self-report data on assertion trained and control subjects a year after training. He found not only that assertion trained subjects continued to respond more assertively, but also that subjects who made the greatest gains during the training sessions reported more frequent and successful application of assertive skills. Galassi, Kostka and Galassi (1975) conducted an even longer follow-up study. They found that a year after training, assertion trained subjects continued to be significantly more assertive than control subjects on two self-report measures and on two of the three
behavioral measures which had differentiated experimental and control subjects. Mayo, et al. (1975) conducted a number of assertion training groups with women. To evaluate the training, questionnaires were mailed to past participants 6 to 18 months after their respective groups were completed. Over 95% of the respondents reported they were able to maintain or increase the assertive skills they had developed during training.

In short, experimental studies, albeit few, report gains in assertion reflected by self-report measures, including questionnaires and logged accounts of in vivo assertive behaviors, are maintained at follow-up periods ranging from 3 weeks to a year. Follow-up behavioral measures are more difficult to obtain, but several investigators have used role-play tests to demonstrate that increases in overt assertive responses are maintained from 3 weeks to a year.

The Measurement of Assertion

With the exception of Shostrom's Personal Orientation Inventory (Henderson, 1975; Roszell, 1971) and the Willoughby Scale (Kazdin, 1974b, 1975, 1976), global personality measures have generally proven themselves to be insensitive to the rather specific changes which result from assertion training. Studies have indicated that measures which are inappropriate to detect changes in assertion include the Internal-External Locus of Control (Rimm, Hill, Brown & Stuart, 1974; Snyder, 1973), Jacob's Survey of Mood and Affect (Snyder, 1973), Marlow-Crowne Social Desirability Scale (Roszell, 1971; Snyder, 1973), Guilford-Zimmerman Temperament Survey (Perkins, 1972), Leary Interpersonal Check List (Lomont, Gilner, Spector & Skinner, 1969),
Repression-Sensitization Scale (Snyder, 1973), and Rosenzweig Picture Frustration Test (Snyder, 1973).

In the absence of existing suitable measures, several measures have been developed specifically to assess whether assertion participants have increased their assertion skills as a result of training. The first assertion measure, the Wolpe-Lazarus Assertiveness Questionnaire (Wolpe & Lazarus, 1966), was developed for clinical purposes. More recently, self-report measures of assertion have been developed for use with college students; these include the Rathus Assertiveness Schedule (Rathus, 1973a, 1973b), the Constriction Scale (Bates & Zimmerman, 1971), the Conflict Resolution Inventory (McFall & Lillesand, 1971), the Assertive Inventory (Lawrence, 1970), and the College Self-Expression Scale (Galassi, Delo, Galassi & Bastien, 1974; Galassi & Galassi, 1974). Two additional measures of assertiveness have been developed for use with adult non-college populations, the Adult Self-Expression Scale (Gay, Hollandsworth & Galassi, 1975) and the Assertion Inventory (Gambrill & Richey, 1975). Each of the preceding measures has advantages and disadvantages which will be reviewed briefly.

The Wolpe-Lazarus Assertiveness Questionnaire has not been widely used in research, and with the exception of two studies, (Eisler, Miller & Hersen, 1973; McFall & Marston, 1970) using a total of 76 subjects, has had little formal validation. The Bates-Zimmerman Constriction Scale and the Gambrill-Richey Assertion Inventory may be similarly criticized; neither has been used often in research studies, and both need more cross-validation and normative data. The Rathus Assertiveness Schedule and the Lawrence Assertive Inventory have been
used more frequently in research than other measures of assertion. However, Lacks and Connelly (cited in Jakubowski & Lacks, 1975) found that both the Rathus and the Lawrence scales are significantly related to social desirability, and Poland's research (1974) suggests the Rathus scale may be subject to response bias due to subjects' expectations. The McFall and Lillesand Conflict-Resolution Inventory is highly related to performance in behavioral test situations (Loo, 1971), yet it measures only one type of assertion, refusal behavior. Neither the College Self-Expression Scale nor the Adult Self-Expression Scale is significantly influenced by social desirability (Lacks & Connelly, cited in Jakubowski & Lacks, 1975). The College Self-Expression Scale does not appear to be related to aggression (Galassi, Delo, Galassi & Bastien, 1974; Galassi & Galassi, 1975), but the Adult Self-Expression Scale correlates significantly with aggression (Gay, et. al., 1975).

A criticism common to each of the preceding measures of assertion is that none have separate scales to discriminate assertion from aggression, and some seem to confound the two concepts. For example, one item on the Rathus Assertiveness Schedule is: "Most people seem to be more aggressive and assertive than I am." In response to this basic criticism of extant assertion instruments, Mauger, Firestone, Hernandez and Hook (Note 1) developed the Interpersonal Behavior Survey (IBS). The IBS contains separate assertion and aggression scales, and it also has a number of other desirable features which previous assertion scales lacked. Specifically, the IBS has validity scales to measure test taking attitudes, behavior scales which measure
specific types of assertive or aggressive behaviors, and context scales to indicate situational factors which influence assertive or aggressive responses. Because of the relative sophistication of the IBS when compared to other assertion inventories and the promising initial psychometric validation results (Mauger, et al., Note 1) the IBS was selected for use in the current study. Due to the centrality of this measure, as well as its relative newness, more than a cursory look at the IBS seems indicated.

The IBS is an experimental inventory initially developed at the University of South Florida over 3 years ago. Since its inception it has been continually refined and will be published later this year. The standardization sample, consisting of 312 females and 320 males, was obtained from university and junior college students, having a mean age of 25 years, as well as from participants in various workshops and community groups in southern Florida. Initially, the IBS contained only rationally derived and empirically derived aggression, assertion, and validity scales. Rationally derived scales were constructed from items which logically reflect the specific behavior in question. Empirically derived scales were constructed from items which differentiate between contrasting groups of subjects according to behavioral signs. Subsequent refinement of IBS scales through item factor analysis yielded assertion and aggression factor scales which are statistically purer, and, hence, more appropriate for research purposes than the original assertion and aggression scales. However, the original scales may be more useful for descriptive, clinical or diagnostic assessments and have, therefore, been retained. For a complete listing of IBS
scales, see Appendix A. Internal consistency, test-retest, and parallel form reliabilities for each of the IBS scales are presented in Appendix B. The number of items per scale is also presented in Appendix B.

Use of the IBS in research studies has necessarily been somewhat limited. Hernandez (1976) used the IBS and the Eysenck Personality Questionnaire to explore the relationships between assertion and aggression and Eysenck's personality variables (psychoticism, neuroticism, and extraversion). Her sample population included psychiatric inpatients, college students, and assaultive and non-assaultive prison inmates. Hernandez found: (a) assertion was positively correlated with extraversion, negatively correlated with neuroticism, and appeared unrelated to psychoticism; (b) aggression was positively correlated with both psychoticism and neuroticism, but it did not correlate significantly with extraversion; (c) assertiveness could be predicted by extraversion and neuroticism, but aggressiveness could not; and (d) psychoticism and higher levels of aggression were most evident in assaultive prison inmates.

Shepperson (1977) used the IBS and a video-taped role-play interaction test to explore assertive and aggressive behavior in normal and neurotic family triads. He found that normal family triads were more assertive than disturbed family triads, and that the differential levels of assertiveness were evident in IBS assertion scales and in role-play behaviors. Shepperson also unexpectedly found that disturbed family triads obtained lower IBS aggression scores and displayed less aggressive behavior in role-play situations.
than normal family triads. However, disturbed families obtained significantly higher scores on the IBS Denial and Good Impression scales, suggesting they were more defensive and made greater efforts to present themselves favorably than normal families. In addition, the normal families appeared to interact more in the role-play situation than disturbed families who maintained less eye contact and had fewer verbal exchanges.

In a third study (Mauger, et. al., Note 1; Mauger, Note 2), the IBS was administered to nursing students before and after they participated in a 10 week course on interpersonal communication. Although the course did not address assertion training directly, it did involve the study of skills indigenous to assertion training. Analysis of pre- and post-course IBS data revealed a significant decrease in hostility toward others (HS), significant increases in general assertiveness (SGR) and in defending one's rights (DA), and a trend toward decreasing general aggressiveness (GGR).

The Present Study

In summary, assertion training is a variant of behavior therapy which employs behavior rehearsal, modeling, and other cognitive and behavior modification techniques to develop assertive skills. It is used with individuals and with groups, and is reported to have diverse clinical and non-clinical applications. As with any new therapeutic technique, early assertion training research may be overly optimistic, and in some cases, it has failed to adequately delineate the conditions which benefit from increased assertiveness. Nevertheless, case study literature reports assertion training, often used in combination with
other therapeutic techniques, has been effective with a wide range of clinical problems, from depression and sexual dysfunctions to dermatological ailments. Therapy analogue studies have related increased assertiveness in unassertive individuals to decreased anxiety, increased self-confidence, and decreased fears of social competence. And, within the last 5 to 6 years, assertion training has become widely popularized as a means of increasing effective communication and developing interpersonal skills.

The current popularity of assertion training is, perhaps, best illustrated by the recent profusion of books on assertiveness, including: *Your Perfect Right* (Alberti & Emmons, 1970, revised 1974), *Don't Say Yes When You Want to Say No* (Fensterheim & Baer, 1975), *When I Say No I Feel Guilty* (Smith, 1975), *The Assertive Woman* (Phelps & Austin, 1975), *The New Assertive Woman* (Bloom, Coburn & Pearlman, 1975), *Assertive Training for Women* (Osborn & Harris, 1975), *Assertion Training: A Humanistic Behavioral Guide to Self-Dignity* (Cotler & Guerra, 1976), and *Asserting Yourself: A Practical Guide for Positive Change* (Bower & Bower, 1976). That 3 of the 8 books in the list were written specifically for women highlights the popularity of assertion training for women. Although assertion training is equally appropriate and has been used effectively with both males and females, it seems to be especially relevant for women who have been reared in a culture which socializes women to be passive and submissive, and who as "women of the 70's are caught between conformity to existing standards or role definitions and exploring the promise of new alternatives" (Phelps & Austin, 1975, p. 1).
Assertion training with groups of women has been conducted by several investigators (Burtle, Whitlock & Franks, 1974; Frieberg, 1974; Henderson, 1975; Mastria, 1975; Olsen, 1975; Rathus, 1972, 1973b; Winship and Kelley, 1976; Wolfe, 1975), and two authors, Halas (1973) and Brodsky (1973), maintain that an all women's group is preferable to a mixed-sex group for women exploring new alternatives. Both authors contend that in a mixed group, a woman can/will expect support from male members, or perhaps, from a male group leader, if she adheres to traditional female traits, such as dependency, submissiveness, and deference to male opinion. For a woman to adopt "masculine" characteristics is to risk rejection by both men and other women. They further maintain that women revert to traditional "feminine" behaviors so automatically that the reversion occurs if even one male is present in the group, including a male group leader.

Experimental literature on group sexual composition has provided some support for Halas' and Brodsky's assertions. Richey (cited in Butler, 1976) studied verbal interactions in mixed-sex groups and determined that females in mixed groups speak less frequently and for shorter durations than males. Richey also found that women in mixed-sex problem solving groups attempt fewer solutions than men, but instead offer positive comments and support to others. Similarly, Hall (cited in Butler, 1976) found that women in mixed-sex groups "are more easily interrupted, and they support and defend their own ideas less than men" (p. 56). Hence, in mixed-sex groups, women seem to adhere to traditional female behaviors. One assertion training study also lends support to Halas' and Brodsky's assertions. Brumage
and Willis (cited in Lange & Jakubowski, 1976; Brumage, Note 3) compared six single- and mixed sex assertion groups. Each group met once a week for 6 weeks; each weekly session lasted approximately 2 hours. A self-report measure of assertion and leaders' evaluations were used as change indicators. Post-training data revealed that single-sex groups (all male or all female) were more effective than single-sex groups which added members of the opposite sex after the group coalesced, which in turn proved to be more effective than mixed-sex groups. Logically, a mixed-sex group would provide males with whom women could practice assertive behaviors (and vice versa) yet the mixed-sex groups were the least effective. Brumage (Note 4) described these findings as trends deserving further exploration. She observed that "timid women" in the study preferred the all female groups, whereas "bolder women" stated preferences for mixed-sex groups. She also noted that self-disclosure appeared to be greater in single-sex groups.

Whether a male group leader (counselor or therapist) has an effect on women similar to the apparently inhibitory effect exerted by male group members, as suggested by Brodsky (1973) and Halas (1973), has yet to be determined by research and was addressed by the current study. Several psychotherapists, in addition to Halas and Brodsky, maintain the sex of the therapist influences treatment outcome and is an important consideration (Kronsky, 1971; Rice & Rice, 1973; Kimmel, Note 5). In fact, a survey of the practices and opinions of male and female psychiatrists conducted by Ivey in 1960, revealed that women psychiatrists gave consistently more positive reactions to the signi-
ficance of the sex of the psychiatrist in treating patients than did male psychiatrists who gave outspoken negative replies to the same question.

Obviously, conclusions should not be based on opinion data, yet research on the impact of therapist sex on clients is limited (see Tanney & Birk, 1976, for review). The psychotherapy/counseling research that does exist considers client reactions to same-sex versus opposite-sex counselor/client pairs in individual counseling. For example, in comparing sex of clients and counselor, Hill (1975) found that same-sex pairings had greater discussion of feelings. Hill also found, as did Howard, Orlinsky and Hill (1970), that in general, both male and female clients were more satisfied with female therapists than with male therapists following therapy. Two studies have examined client preferences based on sex of therapist. Fuller (1964) found that college females entering counseling for personal-social problems preferred female counselors significantly more often than male counselors. Boulware and Holmes (1970) asked college students to select from a series of slides which therapist they preferred for vocational problems and which they preferred for personal problems. They found the females in their sample preferred older male therapists for vocational problems and older female therapists for personal problems.

The effects of clients' pre-therapy preferences, in-therapy self-disclosure or post-therapy satisfaction on overall treatment effectiveness are open for speculation. However, several recent studies have attempted to assess how therapist/trainer sex or model sex contribute
to the effectiveness of assertion training. For instance, Frieberg (1974) conducted a therapy analogue study consisting of two group sessions of refusal training. She found that male models produced significantly greater increases in female subjects' assertiveness than female models. Similarly, Friedman (1971) reported a sex by treatment interaction and suggested that women may demonstrate more assertive behavior when models and/or role-play accomplices are male. Note, though, that Friedman's treatments were administered to subjects individually, and the entire treatment lasted only 8 to 10 minutes per subject. In contrast to Frieberg's and Friedman's studies, Poland (1974) conducted an assertion training analogue study to examine the effects of the sex of video-taped models on male and female subjects. She found no significant differences due to model or subject sex; both male and female subjects increased self-report assertion and decreased compliance after viewing either male or female model assertion films. (More complete reviews of Frieberg's, Friedman's and Poland's studies are found on pages 16-17.)

In addition to the modeling studies, two studies attempted to directly assess the effects of counselor sex on assertion training. Parr (1974) conducted an assertion training analogue study with non-assertive male and female junior high school students. Treatment was administered individually over a 6 week period, but consisted of only 48 minutes per student. Post-training self-report measures revealed significant increases in assertiveness and a significant counselor within counselor sex interaction. That is, some counselors were more effective than others regardless of their sex. Janda and Rimm (1977)
also conducted an assertion training analogue study which investigated counselor sex effects. Subjects were unassertive female college students. Trainers were male and female undergraduates who had 4 hours' training experience and followed scripts. Treatment consisted of training subjects in each of three areas, with less than 15 minutes devoted to an area. Analysis of pre- versus post-training audio-taped responses revealed that male-counselled subjects were significantly more assertive than female-counselled subjects who, in turn, were significantly more assertive than controls. However, closer inspection of Janda and Rimm's data revealed inconsistency—one male counselor was highly effective, one female was relatively ineffective, and one male and one female counselor were equally effective. Hence, neither Parr (1974) nor Janda and Rimm (1977) have provided conclusive evidence for the greater relative effectiveness of male or female assertion trainers, and both conclude additional research is necessary.

The current study responded to the lack of research substantiating or refuting Halas' (1973) and Brodsky's (1973) assertion regarding the effects of a male group leader on a group of women. The purpose of this study was to investigate the relative effectiveness of male versus female assertion trainers with groups comprised entirely of women.

In assertion training, a group leader assumes an active role in modeling, role-playing, and coaching, and consequently, may experience fatigue unless responsibilities are alternated with a second group leader. Therefore, two leaders, or co-leaders were used to conduct each group. To determine whether a single male in the position of group leader affected participants' acquisition of assertiveness, the
co-leader dyads consisted of either a male-female or female-female combination. The possibility of idiosyncratic interactions between group leaders affecting group data always exists. To minimize possible leader interaction effects which would bias group data, the two treatment conditions (male-female and female-female) were each repeated once with different group leaders, and one female served as a co-leader constant in each co-leader dyad. Therefore, four assertion training groups were conducted by four different leaders, two male and two female, plus one additional female who co-led each of the four groups.

Research suggests assertiveness is a set of situation-specific behaviors which vary as a function of social context (see pages 28-29 for review). Therefore, the present study employed a multidimensional/multilevel approach to evaluate the general effectiveness of assertion training, as well as possible differences between treatment conditions. Specifically, changes in assertiveness were evaluated by self-report measures, extra-group friend ratings, in-group self and peer assessments, and group leader appraisals. A brief review of the measures used in this study and the rationale for their selection follows.

The Interpersonal Behavior Survey. The Interpersonal Behavior Survey (IBS) developed by Mauger, Firestone, Hernandez and Hook (Note 1) was introduced in a previous section of the literature review (see pages 42-45). It was selected as the primary measure of assertiveness in the current study not only because of its greater relative sophistication, but also because unlike other inventories which frequently confound assertion and aggression, the IBS provides scales
which separate and measure both. This latter feature was especially attractive for it provided evidence of the effects of assertion training on aggression and on the qualitative distinction between the two terms. In addition, unlike other inventories which measure only global assertion or a single type of assertive behavior, the IBS provides scales which reflect general assertion, general aggression, and specific types of assertive behaviors (e.g., defending one's personal rights) and aggressive behaviors (e.g., willingness to ridicule or embarrass others).

**The Depression Adjective Checklists.** In every study there exists the possibility of extraneous variables which affect treatment outcome. A factor which is related to aggression and which tends to inhibit the acquisition and development of new behaviors is depression. According to Grinker (1964), "the depressed person...cannot use information for the purpose of action; he cannot perceive the cues of reality; he makes statements but does not care if he is understood" (p. 578). To avoid the possibility of undetected depression inhibiting the development of assertion and, thus, negatively affecting training results, it was suggested that the Depression Adjective Checklist (DACL; Lubin, 1965) be used as a covariant with the IBS change scores. The DACL was selected because of its easy administration, high face validity, and minimal time requirement—less than 3 minutes—for completion (Lubin, 1967). Further, a review of the instrument described it as "a brief, reliable, and valid self-report measure of depression... [which appears to be] the most psychometrically sound of the several brief, self-report measures of depression now available" (Goodstein,
1974, p. 65). To date, it appears that the DACL has not been used in relation to assertion training. However, it has been used to evaluate psychological factors associated with several other conditions, including pregnancy (Lubin & Gardiner, cited in Lubin, 1967), changes in mood over time in an emotionally stimulating situation (Lubin, Dupre, & Lubin, 1967), and therapeutic progress with depressed individuals and their spouses (McLean, Ogston, and Graver, 1973).

**Assertion Goals.** Participation in the current training and research was strictly voluntary. Subjects were required to seek the experience by responding to printed advertisements, and, as in a number of previous studies (Brockway, 1976; Holmes & Horan, 1976; Kazdin, 1974b, 1975, 1976), they were required to submit a deposit as a commitment to complete the training. Therefore, it seemed logical to assume that subjects who committed themselves to the program would have their own training objectives. To assess whether subjects achieved their original training objectives, that is, whether they were able to successfully apply assertive skills to their self-ascribed problem areas, an assertion goals inventory was developed. The assertion goals inventory required subjects to list their assertive objectives or goals and specific behavioral criteria relevant to each which would permit relatively objective determination of whether a goal had been obtained. One other study has employed an inventory similar to the assertion goals inventory. Parr (1974) used a specific problems inventory to assess assertion training with junior high school students and found increased problem solution at post-testing. However, Parr failed to report validities or reliabilities.
The Interpersonal Behavior Survey, Short Form. Assertion studies which had peers or cohorts in the natural environment rate assertion trainees before and after training have produced contradictory results. However, examination of methodologies indicates subjects who participated in assertion training analogue studies and who received minimal training (less than 1 hour) were not rated more assertive by peers (Kirschner, 1973; Parr, 1974). By comparison, subjects who participated in an assertion training program which met regularly for at least 4 weeks were rated by peers as being significantly more assertive after training (Buttrum, 1974; Zeiger, 1973).

In spite of the contradictory results reported in the literature, ratings of assertion trainees by peers in the natural environment afford a means of substantiating whether trainees modify their extra-group or extra-experiment behavior after participating in assertion training. The peer rating used in the current study was an abbreviated form of the IBS (IBS-S; Mauger, et al., Note 1) which was modified slightly to facilitate its use for friend ratings. The IBS-S, similar to the IBS, has three scales which reflect assertion, aggression, and validity. The assertion and aggression scales provided a means of determining whether assertion training affected trainee's peer-perceived assertion or aggression.

Females frequently respond differently to males and females, and the effects of a male versus a female trainer in a women's assertion group have not been determined. Therefore, each participant in the current research was asked (required) to have both male and female extra-group raters so that possible effects due to sex of leaders or
to sex of peer-raters could be evaluated.

**In-Group Progress Evaluations.** Logically, assertion training participants should become increasingly more assertive as their training progresses, and their increased assertiveness should/would be evident to themselves and others during training sessions. In response to the preceding speculations, the self, peer, and leader progress evaluations were developed. The self and peer progress evaluations were equivalent except for self versus other references, and both were comprised of true-false items which reflected assertive responses likely to occur during group sessions. The leader evaluations were comprised of the leaders' subjective evaluations of the overt and reported levels of each participant's assertiveness.

"Overt" meant in-group assertive behavior and "Reported" meant extra-group assertive efforts which were reported back to the group. (Validities and reliabilities were not determined for these instruments.)

**Hypotheses**

The following hypotheses were based on the preceding review of the literature. However, when there was minimal earlier supportive research or when previous research produced contradictory results, tentative hypotheses were posed. A central assumption in all of the hypotheses was that assertion training would increase assertiveness and that the increased assertiveness would be evidenced by a variety of measures. A second assumption, unless stated otherwise, was that the female-female leader condition would produce relatively greater increases in assertiveness than the male-female leader condition. A third assumption was that assertion training would not affect aggression.
Hypotheses Based on Self-Report Data.

1. It was hypothesized that the IBS would evince significant pre- to post-training increases both in general assertion and in the specific types of assertive behaviors measured by the assertion factor scales. In addition, it was tentatively hypothesized that the female-female leader condition would produce relatively greater increases in general assertion and in specific types of assertiveness than would the male-female leader condition.

2. It was tentatively hypothesized that the IBS would not evidence significant pre- to post-training variation in general aggression or in the specific types of aggression measured by the aggression factor scales. It was also hypothesized that the treatment condition would not differentially affect either general aggression or specific types of aggressive behaviors.

3. It was tentatively hypothesized that IBS difference scores on the assertion and aggression general and factor scales would not be significantly related to depressive mood, as evidenced by the DACL.

4. It was hypothesized that: (a) 3 out of 4 subjects would attain at least 2 of their 3 pre-training assertion goals by the last group session, (b) goals would be maintained at follow-up, and (c) 3 out of 4 subjects would achieve all their pre-training goals by follow-up. In addition, it was hypothesized that differences in goal attainment scores
would not differentiate between treatment conditions at post-test or at follow-up.

Hypotheses Based on Extra-Group Peer Ratings.

5. It was hypothesized that male cohorts would rate participants as being more assertive after training than before training. It was also tentatively hypothesized that male cohorts would give relatively higher assertion ratings to subjects who participated in the male-female leader condition than to subjects in the female-female leader condition.

6. It was hypothesized that female cohorts would rate participants as being more assertive after training than before training. It was also tentatively hypothesized that female cohorts would give relatively higher assertion ratings to subjects in the female-female leader condition than to subjects in the male-female leader condition.

7. It was tentatively hypothesized that neither male cohorts' nor female cohorts' ratings of trainees' aggression would vary from pre- to post-test. It was further hypothesized that neither treatment condition would differentially affect male or female cohorts' aggression ratings.

Hypotheses Based on In-Group Behavior.

8. It was hypothesized that both self and peer ratings would demonstrate that assertive behavior occurring during training sessions increased across time. It was further hypothesized that both self and peer ratings of subjects in the female-female leader condition would demonstrate relatively more
in-group assertiveness than subjects in the male-female condition.

9. It was hypothesized that the leader evaluations of overt/in-group and reported assertion would demonstrate that assertive behavior increased across time. It was also hypothesized that ratings of overt and reported assertion would be relatively higher in the female-female leader condition than in the male-female leader condition.
METHOD

Subjects

The subjects in this study were female volunteers who responded to advertisements in a local weekly newspaper or to fliers posted in publicly frequented places. The printed fliers and newspaper advertisements had identical phraseology. Both specified an assertion training program was to be conducted for women between the ages of 21 and 35 years who had difficulty expressing positive and negative feelings straight-forwardly and honestly, who felt unable to refuse unreasonable requests or to stand up for their own rights. They also indicated the training program was affiliated with university research and listed telephone numbers for those interested in participating to contact. (Appendix C contains a replication of the format used for the two advertisements.)

The women who responded to the advertisements by telephone were given individual screening interviews to determine if they were appropriate candidates for inclusion in the current assertion training research. Appropriate candidates, as recommended by Lange and Jakubowski (1976), were those judged not to be seriously depressed, suicidal, addicted to drugs or alcohol, or schizophrenic. In addition, appropriate candidates had to pass the screening criteria detailed in the following procedures section, and they had to submit a deposit to ensure commitment to complete the training program. The amount of
the deposits varied from $5.00 to $25.00 and was based on a sliding fee scale used by local community mental health centers. Upon completion of the program, all deposits were refunded, regardless of whether participants completed the program or not.

Of the 42 candidates who were interviewed, 2 were referred for more intensive therapy, 3 decided not to participate, and 37 were assigned to either of two treatment conditions and to one of four groups. Of the 37 candidates assigned to groups, 2 reneged before attending first group sessions, 3 withdrew or failed to attend a sufficient number of training sessions, and 32 (16 per treatment condition) completed the training. Due to experimental exigencies, 2 candidates aged 37 and 41 years were accepted as participants. They were assigned to different treatments, and both completed the training.

A review of the demographic characteristics of the research participants revealed that 31 of 32 were employed full-time. There were 14 single women; 8 were divorced or separated; 8 were married; and 2 were widowed. The participants' educational level appeared to be higher than population norms: 7 had high school diplomas; 3 had attended business schools; 6 had 2-3 years of college; 10 had completed undergraduate degrees; 6 had completed masters degrees, and 2 of those were close to completing doctoral degrees.

Procedure

Initial Contacts With Subjects. The first phase of soliciting and screening assertion training candidates began when an ad was placed in a weekly newspaper. When this study was originally conceived, subjects were to be solicited only through the newspaper. However,
after the ad ran for 2 weeks and elicited an unexpectedly scant response, a decision was made to supplement the newspaper ad with fliers duplicating the ad's phraseology (see Appendix C). The fliers were posted on bulletin boards in publicly frequented places. Specifically, fliers were posted in supermarkets and health food stores, state and private universities, a junior college and a technical school, nursing schools, church and community centers, post offices, public libraries, book stores, and women's organizations' offices.

Women who telephoned to inquire about the program were given a brief explanation of the rationale underlying assertion training. They were also told the training was free since it was being conducted as part of a research project, but that a refundable deposit was required to insure completion of the training. Finally, telephonees were told training sessions lasted about 2 hours and were conducted one night a week for 5 weeks at Georgia Mental Health Institute. Throughout the conversation, the experimenter attempted to answer all questions directly and honestly, omitting only that the independent variable under consideration was the sexual composition of the co-leader dyads. Women who expressed interest in participating in the training were scheduled for individual interviews designed to screen out inappropriate candidates and to collect pre-training data. Interviews were scheduled any time of the day, on any day of the week, at the candidates' convenience. However, most interviews were conducted after working hours on weekdays and on Saturday and Sunday afternoons. Interviews were conducted by a female clinical psychology intern, and all interviews followed the same progression. Therefore, for simplicity, the screening interview is described as a single event.
Initially during the interview, the candidate was asked if questions or concerns had arisen since the telephone conversation. The interviewer responded to the candidate's questions, if any, and explained that the purpose of the interview was to determine whether the training program would be beneficial for the candidate and whether the candidate would agree to participate in the training research. The interviewer then requested that the candidate read the consent form found in Appendix D. The consent summarized information on assertion training goals and procedures, the research goal, research activities, possible training risks, confidentiality of data, deposit refund, and freedom to withdraw without penalty at any time. After the candidate finished reading the consent, the interviewer attempted to clarify additional concerns voiced by the candidate.

After explaining and clarifying the training and research procedures to the candidate's satisfaction, the interviewer began to collect biographical information from the candidate, essentially reversing the questionee/questioner roles. The biographical data collected from the candidate included marital status, current living situation, educational background, employment status, vocational preference, current and past physical and emotional problems, past hospitalizations, drug and alcohol use, and assertion training expectations and goals. Attempts to dispel any unrealistic expectations were made by the interviewer. After collecting sufficient factual and behavioral data to compile a brief history, and after ascertaining the candidate did have some specific assertion goals, the interviewer decided whether the candidate was appropriate for further consideration. An inappropriate candidate, one judged to have serious emotional problems, was referred
to local mental health centers and private therapists for treatment. A candidate deemed appropriate for further consideration (i.e., judged not to have serious emotional difficulties) was asked to sign the consent form she read previously.

After signing the consent, the candidate was asked to complete a true-false questionnaire, the IBS, according to the directions on the cover sheet (see Appendix E). The IBS not only provided the primary pre-training measures of assertion and aggression, but also was used for screening candidates. A precedent for using the Denial (DE) and Infrequency (IF) scales of the IBS for screening was established by Ellen Kimmell and Dorothy Harlow (Note 5). They used the IBS as a measure of change for women participating in manager training and found that pre/post-training IBS data was, at best, ambiguous when scores on the validity scales were unusually high. Therefore, candidates who obtained elevated scores on either DE ($n > 5, I > 65$), or IF ($n > 3, I > 70$), rendering their test data to be of questionable validity, were screened out of the study during the initial interview (Mauger, Note 2).

After the candidate completed the IBS, the interviewer collected the test booklet and answer sheet and scored the DE and IF validity scales. If the candidate achieved acceptable DE and IF scores, she met the final screening criteria. If the candidate failed to achieve acceptable DE and IF scores (all candidates in the current study achieved acceptable DE and IF scores), she would have been referred to other assertion training programs in the Atlanta area.

The candidate who met the final IBS screening criterion was given
a copy of the Assertion Goals inventory presented in Appendix F. The interviewer assisted with the completion of this form by asking the candidate questions about specific problem areas. To standardize interviewer assistance, the interviewer asked about the specific assertion areas outlined in the "Check List of Possible Topics..." developed by Lange and Jakubowski (1976; see Appendix G). After the candidate outlined three (or more) assertion goals, the interviewer helped her specify and record behavioral criteria which would reveal objectively to the candidate whether her goals had been attained.

After the candidate and interviewer jointly completed the candidate's Assertion Goals inventory, the candidate was given two separate, but identical, packets. Each packet contained a double-signature consent form (see Informed Consent #2 in Appendix H), a copy of the modified IBS-S (see Appendix I), and a stamped envelope addressed to the interviewer (experimenter). The candidate was told to give one packet to a male and one to a female friend (roommate, associate, spouse, etc.) who would be willing to answer the questionnaire as it described her now and again in 6 to 7 weeks. The candidate was also told to select friend-raters who knew her well and with whom she had regular contact. The interviewer explained that although the candidate would be allowed access to her own scores and to average group scores, she would not be given access to her friends' IBS-S ratings of her.

Throughout the initial interview which lasted approximately 2 hours, the interviewer stressed the confidentiality of individual data. The interviewer also encouraged and tried to respond to all questions,
omitting only information that revealed the independent variable manipulation.

At the conclusion of the screening interview, the interviewer assigned the candidate to a group. Group assignment was made on a "first-come" basis. However, since the four groups met on different nights of the week and started on different dates, some allowances were made for week night preferences and vacation plans. The interviewer told the candidate the day, date, and time when the next assertion group would begin. If the candidate had a conflict because of the weeknight on which the group was conducted, the interviewer told her the day, date, and time the next (i.e., the second, third or fourth) group would begin. Therefore, group assignment was not strictly conducted sequentially on a "first-come" basis. Consequently, some candidates were screened for the last group before the first group started.

Although the original research proposal specified that two groups, each representing a treatment condition, would be conducted concurrently on different week nights, circumstances (i.e., the limited availability of the male co-leaders due to prior commitments) dictated the two male-female co-led groups be conducted first. Both of the male-female co-led groups had 8 participants. One of the female-female co-led groups had 7 participants and the other had 9 participants. Therefore, each treatment condition had a total of 16 participants who completed the training.

**Group Leaders.** The group leaders were five clinical psychology interns who ranged in age from 26 to 30 years. Three were doctoral
candidates and two, one male and one female, had recently received their doctoral degrees. Each had 4 to 5 years of clinical experience, 3 to 5 years experience as group therapists, and prior experience as an assertion training participant or trainer. In addition, though admittedly subjective, group leaders were of comparable physical and personal attractiveness. Three of the group leaders were single females, and two were married males. One female group leader served as a co-leader with each of the other four, thus providing a constant factor in each of the four co-leader dyads. The experimenter (also the co-leader constant) spent four 1-hour training sessions with the group leaders. During these sessions, the principles of assertion training and current research were discussed, and the exercises in the leaders' manuals were explained and rehearsed. Before the start of each new group, the experimenter had a briefing session with the appropriate group leader to review names, presenting problems and goals of each group member. In addition, co-leaders met 30 minutes prior to each training session to review material and circumvent possible difficulties. Co-leaders also met briefly after each session to review group and individual progress.

**Overview of Training.** The four assertion training groups met on a weekly basis for 5 weeks. Training sessions lasted approximately 2 hours. Participants who missed a session were encouraged to attend the following session 30 minutes early so they could have a short "make-up" session with one or both of the group leaders. Participants who were absent and who failed to cancel were contacted and encouraged to come to the following session. Data obtained from subjects who missed more than 1 of the 5 sessions were not included in any of the statistical
analyses.

Each group adhered to the same theme-oriented format, and the content of individual sessions was the same for each group. In the first session co-leaders introduced themselves to the group and explained how they became interested in assertion training. Subjects were then asked to participate in a non-verbal exercise, after which they introduced themselves to one another. A brief overview of themes to be covered during the five assertion sessions followed introductions. The main theme of the first session was learning to distinguish assertion from aggression and non-assertion from politeness. Group leaders defined these various behaviors, modeled examples of each, and distributed a printed table which compared and contrasted characteristics of assertion, non-assertion and aggression. Leaders also discussed the value of being assertive and the Assertive Bill of Human Rights (Smith, 1975), which was distributed as a handout. Group discussion and participation was encouraged, not only in the first session, but in all following sessions. At the end of the session, each participant completed a Self Progress Evaluation and one Peer Progress Evaluation for every other group participant. Group leaders completed the Leader Evaluation of Progress form, thus evaluating overt and reported participant assertion. (These three evaluation forms are presented in Appendices J, K, and L.) After progress evaluations were completed, the entire group adjourned.

In the second session, the main theme was the appropriate expression of rights and feelings, including anger, affection, and praise. Group leaders also presented a number of irrational beliefs and systems which block assertiveness and distributed related printed
material. Group leaders role-played a number of assertive situations with each other and with participants. Participants were taught a three part assertion statement. Self and Peer Progress Evaluations and Leader Evaluations were collected. Each participant completed Form A of the Depression Adjective Checklists (see Appendix M), and the group was dismissed.

Session 3 focused on the appropriate expression of anger and on handling criticism and rejection. Group leaders discussed and demonstrated anger responses. They also presented a number of concepts and related techniques which contribute to coping more effectively with criticism and rejection (e.g., the concept of active versus reactive behavior). Subjects participated in role-play exercises and suggested situations to be role-played. As always, group discussion and participation was encouraged. Self and Peer Progress Evaluations and Leader Evaluations of Progress were collected prior to adjournment.

Session 4 focused both on assertive body language and sexual assertiveness. Examples of assertive, aggressive, and non-assertive body language were demonstrated by group leaders. Subjects then participated in body language exercises wherein they role-played non-verbal expressions of emotions. Discussion of sexual assertiveness included recognizing double messages, dealing with desired or undesired sexual advances, and initiating sexual overtures. Participants were encouraged to present role-play situations. Self, Peer and Leader Progress Evaluations were collected.

Session 5 was a general review, and group leaders included a discussion of situations in which assertiveness is undesirable.
Group leaders also discussed potential negative reactions to assertive behavior. As in each of the preceding sessions, group participation was encouraged. At the close of the final session, the Self and Peer Progress Evaluations and Leader Evaluations were collected; the IBS was re-administered to participants; and each participant reviewed her pre-training Assertion Goals and indicated which of the behavioral criteria had been achieved. Participants were told that in approximately 2 weeks a copy of their pre-training Assertion Goals would be mailed to them. They were instructed to re-evaluate the behavioral criteria relevant to their pre-training goals and to mail the completed form to the experimenter as quickly as possible. Shortly before the group was dismissed, each participant was given two copies of the modified IBS-S. A stamped envelope addressed to the experimenter was attached to each IBS-S. Participants were instructed to give the questionnaires to the same male and female friends who previously completed the questionnaires. Participants were asked to stress to their raters the importance of completing and mailing the questionnaire to the experimenter as soon as possible. Participants were reminded that their deposits would be returned to them as soon as the experimenter received their follow-up Assertion Goals and their male and female friends' questionnaires. At the conclusion of the final session, the experimenter answered questions regarding the IBS and the progress evaluations. Questions regarding the independent variable were deferred until all four groups had been completed. Subjects were again reassured that all data would be kept strictly confidential and used only for research purposes.
Collection of Follow-Up Data. Approximately 2 weeks after the last session of each assertion group, a copy of each participant's pre-training Assertion Goals was mailed to her with a stamped envelope addressed to the experimenter and a note from the experimenter. The note requested that the form be completed and returned to the experimenter as soon as possible. When appropriate, it also requested that the participant inquire, and if necessary, encourage either or both of her friend-raters to complete the IBS-S, and to mail it directly to the experimenter. The note reminded each participant that immediately after the experimenter received her re-evaluated Assertion Goals and her friends' questionnaires, her deposit would be refunded to her by return mail. The notes were handwritten in belief that a personalized reminder would elicit a greater follow-up response than a printed form letter. Subjects who failed to respond to the note were contacted by telephone and encouraged to complete the form or to contact their friends. However, whether or not the goals or friends' questionnaires were returned, each participant's deposit was refunded within 30 days after her group was completed.

Test Materials

The Interpersonal Behavior Survey. The Interpersonal Behavior Survey (IBS; Mauger, Firestone, Hernandez, & Hook, Note 1) described in the literature review was the primary measure of change in this study. The IBS is a 136 item, true-false questionnaire (see Appendix E). Test-retest, parallel form, and internal consistency reliability data are presented in Appendix B. Although the IBS contains numerous rational, empirical and factor scales which measure assertive and
aggressive behaviors (see Appendix A), only eight scales were used in the current study to reflect subjects' self-report changes following assertion training. These scales were: Assertion, General Rational (SGR), Self-Confidence (SC), Initiating Assertion (IA), Defending Assertion (DA), Frankness (FR), Aggression, General Rational (GGR), Hostile Stance (HS), and Expression of Anger (EA). The SGR scale provided a measure of general or composite assertiveness, and the GGR scale provided a measure of general or composite aggressiveness. The assertion factor scales—SC, IA, DA, and FR—provided measures of different types of assertive behavior. Similarly, aggression factor scales, HS and EA, provided measures of different types of aggressive behaviors. Appendix N gives a brief description of the IBS scales used in this study. A significant number of SGR items (47 out of 55) overlap with items used in the assertion factor scales, and a significant number of GGR items (25 out of 38) overlap with items used in the aggression factor scales. However, there is no item overlap between assertion and aggression scales, and none of the factor scales share any common items. As previously noted, the Denial (DE) and Infrequency (IF) scales (described in Appendix N) were used in the current study for screening purposes.

Subjects' responses to IBS items were recorded on standard computer-type sheets. The two validity scales were scored manually by the experimenter during the screening interview. The remaining scales were scored by an optical scanner at a university in the Atlanta area. Individual scale scores were converted to McCall T scores having a mean of 50 and a standard deviation of 10. The T scores were based
on raw score means and standard deviations obtained from the female standardization sample (N = 312). [Not surprisingly, male and female raw score means and standard deviations vary widely on several of the IBS scales (Mauger, et. al., Note 1).]

**Depression Adjective Checklists.** Form A of the Depression Adjective Checklists (DACL; Lubin, 1965) was used to explore the possible relation between depression and changes in assertion or aggression reflected by post-minus pre-training IBS scores. The DACL is comprised of seven lists divided into two sets. Lists A, B, C and D (Set 1) each contain 32 non-overlapping items which differentiate between normal and severely depressed neuropsychiatric females. Similarly, lists E, F and G (Set 2) each contain 34 non-overlapping items which differentiate between normal and markedly depressed psychiatric males. The seven lists are designed so that the pattern of positive and negative adjectives on each list is the same, and hence, so that the same key can score all the checklists. To calculate a DACL score, one point for every positive (+) adjective checked is added with one point for every negative (0) adjective not checked. The higher the total score, the more likely it is that an individual is depressed. A copy of Form A plus the correct scoring key is presented in Appendix M. Raw DACL scores were converted to standard score equivalents having a mean of 50 and a standard deviation of 10 (Lubin, 1967).

**The Interpersonal Behavior Survey, Short Form.** The Interpersonal Behavior Survey Short Form (IBS-S) is comprised of the first 38 items, or Part I, of the IBS. It contains three scales: (a) Denial (DE),
(b) Short Form of General Rational Assertion (SGRS), and (c) Short Form of General Rational Aggression (GGRS). A description of these scales is presented in Appendix N. The IBS-S contains the IBS's entire DE scale (n = 9 items). The SGRS and GGRS scales are abbreviated versions of the SGR and GGR scales. Therefore, the IBS-S reflects general assertion, general aggression, and test validity. The number of items per scale, and the internal consistency, test-retest, and parallel form reliabilities are presented in Appendix B.

In the current study, the IBS-S was modified slightly to facilitate extra-group cohort ratings of subjects' pre- and post-training assertion (SGRS) and aggression (GGRS). [The validity scale (DE) was not appropriate for friend ratings since it was standardized on self-report data.] The IBS-S modification involved changing test instructions to indicate cohorts were to respond to items as they saw their friend, rather than themselves. Another modification involved changing pronoun person and gender from first person neuter gender to third person feminine gender. Appendix I contains a copy of the modified IBS-S.

Cohort responses to the IBS-S were recorded directly on the IBS-S forms and were scored manually. Unlike the participants' IBS scores, the modified IBS-S scores were not converted to T scores for analysis. Raw scores were considered more appropriate since normative data based on friends' ratings is unavailable.

Assertion Goals. The Assertion Goals inventory (see Appendix F) was used to determine whether participants were able to apply assertion skills developed through assertion training to the pre-training
problems they specified during the initial screening interview. It was also used to determine whether participants were able to maintain their assertion skills at a 2 week follow-up, thus having prevented the recurrence of pre-training assertion problems. To complete the Assertion Goals inventory, each candidate described three or more assertion goals. After specific goals were delineated, the experimenter and the candidate jointly determined behavioral criteria relevant to each goal. Behavioral criteria were used to determine whether specific assertion problems were resolved and, hence, whether goals were achieved. Although candidates were allowed to list more than three goals, only the three specified by the candidate as being most important to her were used for analysis. The Assertion Goals inventory was scored as follows: after completing assertion training, each subject reviewed her pre-training goals and indicated whether or not behavioral criteria were met by either placing a "✓" or an "x" respectively beside each goal's criterion behaviors. Criterion behaviors that were achieved were assigned a value of 1; those that were not achieved were assigned a value of 0. Criterion behaviors relevant to each goal were summed and averaged, yielding a score of 0 to 1. Scores less than .5 indicated a goal had not been achieved, and scores of .5 or more indicated a goal had been achieved. The total number of goals achieved provided a goal attainment score ranging from 0 to 3 for each subject.

In-Group Progress Evaluations. Two rating forms, the Self Progress Evaluation and the Peer Progress Evaluation, were developed as a means of detecting overt, in-group changes in assertion occurring across time. The two forms are essentially identical except for self
versus other reference. The items were selected from the Assertion, General Rational Scale (SGR) of the IBS and were modified to reflect assertive behaviors likely to occur during group sessions. The Self Progress Evaluation is presented in Appendix J, and the Peer Progress Evaluation is presented in Appendix K. On both forms, "true" responses to items 1, 3, 4, 6, 7 and 8 are summed with "false" responses to items 2 and 5. The resultant self score and the averaged or mean peer score give behavioral indices of in-group assertive behavior.

Leader Evaluation of Progress. The form designated as the Leader Evaluation of Progress was designed to assess group leaders' on-going, subjective evaluations of each participant's overt, in-group assertion and her reported, extra-group assertion. The form (see Appendix L) is comprised of a series of Likert-type scales ranging from 1 (lowest) to 9 (highest) levels of assertion. To complete the form, the group leaders recorded participants' names in the appropriate blanks along which were two scales labeled "overt" and "reported." Both leaders circled one number on each scale to indicate their subjective appraisals of each participant's overt and reported assertion. Co-leader evaluations were averaged, so that each participant received a mean overt assertion score and a mean reported assertion score.

Statistical Analyses

A summarization reviewing the types of data analyzed in the current study and when each was collected is presented in Table 1. Note that Table 1 is representative of all four assertion training groups. The analyses used to test each hypothesis are presented in roughly the same order as the hypotheses. The accepted level of
significance for each analysis was $p<.05$. However, due to the exploratory nature of this study, nonsignificant results with $p<.06$ and $p<.07$ were reported as trends.

Analyses of Self-Report Data. The eight general and factor assertion and aggression scales were analyzed concurrently in a multivariate analysis of variance (MANOVA). The MANOVA was used to determine whether overall effects could be attributed to differences between: (a) sex of leaders, (b) pre- versus post-training scores, and/or (c) pre- versus post-training scores x sex of leaders.
After analyzing for overall effects, separate univariate analyses of variance for repeated measures (ANOVA's), with groups nested within treatment conditions, were conducted on each of the IBS assertion (SGR, SC, IA, DA, FR) and aggression scales (GGR, HS, EA). For each ANOVA, the sources of variation were: (a) sex of leaders, (b) group (sex of leaders), (c) pre/post, and (d) sex of leaders x pre/post.

To determine whether depressive mood affected changes in assertion or aggression, the post-minus pre-training difference scores of each of the IBS scales were adjusted for differences due to DACL scores. The adjusted scores for each of the assertion and aggression scales were then subjected to separate covariant analyses of variance. Sources of variation in the covariance analyses were: (a) sex of leaders, (b) group (sex of leaders), and (c) DACL.

To determine whether the predicted number of participants achieved 2 of their 3 possible pre-training goals by the last session, a Chi-Square was conducted on the composite post-training Assertion Goals data. The Sign Test compared post-training and follow-up goal attainment scores to determine whether subjects maintained their goals at follow-up. A second Chi-Square was conducted on the composite follow-up data to determine whether the predicted number of participants achieved or maintained "All" their pre-training goals. In the latter Chi-Square, the category "All" was considered to be 2 of 2 or 3 of 3 goals since three participants only set 2 goals.

To determine possible treatment or group within treatment differences in goal attainment, analysis of variance procedures were applied to post-test goals data. A second, identical ANOVA was conducted on follow-up data to determine the possible existence or per-
sistence of treatment or group within treatment effects at follow-up.

Analyzes of Extra-Group Peer Ratings. The IBS-S was analyzed like the IBS. That is, male cohorts' ratings of trainees' assertion (SGRS) and aggression (GGRS) were analyzed concurrently with female cohorts' ratings of trainees' assertion and aggression in a MANOVA. The MANOVA again tested whether overall effects were due to differences between: (a) sex of leaders, (b) pre- versus post-training scores, and/or (c) pre- versus post-training scores x sex of leaders.

After completing the MANOVA, the male cohorts' SGRS (assertion) and GGRS (aggression) ratings and the female cohorts' SGRS and GGRS ratings were each analyzed separately by univariate ANOVAs for repeated measures, with groups nested within treatment conditions. The sources of variation were: (a) sex of leaders, (b) group (sex of leaders), (c) pre/post, and (d) sex of leaders x pre/post.

Analyzes of On-Going Group Behavior. The Self Progress Evaluation, Peer Progress Evaluation and Leader evaluations of overt and reported assertion were all analyzed according to the same procedures. Each was subjected to a repeated measures ANOVA. Due to participant absenteeism resulting in incomplete sets of observations and the relatively small group n's, the groups within treatment conditions were combined. Therefore, sources of variation were: (a) sex of leaders, (b) times (5), and (c) time x sex of leaders. Significant F ratios for main effects were tested for deviations from linearity by using orthogonal polynomials according to the procedures specified by Bruning and Kintz (1968). Significant F ratios for interactions were analyzed for trends by a standard computer package, the General Linear Models Procedure of the Statistical Analysis System (SAS).
RESULTS

Due to the cumbersome nature of the present research findings, only data directly referred to are presented in tables in the Results section. Supporting evidence is presented in Appendices 0 through W.

Evaluation of Self-Report Data

IBS Assertion and Aggression Scales. Multivariate analysis of the eight IBS assertion and aggression scales revealed that: (a) there was no overall effect due to the sex of the leaders \( F(8,51) = .37, p = .93 \), (b) there was a significant overall effect due to pre- versus post-training scores \( F(8,51) = 2.83, p < .01 \), and (c) there was no overall effect due to a sex of leaders x pre- post-training interaction \( F(8,51) = .97, p = .46 \). That is, the IBS scales showed significant pre- to post-training variations, but overall, the sex of the leaders did not differentially contribute to those variations.

Subsequent univariate analyses of IBS assertion scales consistently revealed significant pre- to post-training variations on all five scales. However, analyses did not support sex of leader x pre/post interactions. The results of the univariate analyses are summarized and reported in Appendix 0, Table A. Examination of the means presented in Table 2 shows that the pre- to post-testing variations in assertion were invariably positive. That is, from pre- to post-testing, General Assertiveness increased significantly \( (p < .01) \), as did Self Confidence.
(p<.05), Initiating Assertion (p<.01), Defending Assertion (p<.01),
and Frankness (p<.01).

Table 2
Summary of Pre- and Post-Training Means
for IBS Assertion Scales

<table>
<thead>
<tr>
<th>Sex of Leaders</th>
<th>Pre Means</th>
<th>Post Means</th>
<th>Change</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>General Rational Assertion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F&lt;sup&gt;a&lt;/sup&gt;</td>
<td>42.81</td>
<td>55.56</td>
<td>12.75</td>
<td>N.S.</td>
</tr>
<tr>
<td>F - F&lt;sup&gt;a&lt;/sup&gt;</td>
<td>48.25</td>
<td>54.94</td>
<td>6.69</td>
<td>N.S.</td>
</tr>
<tr>
<td>Total</td>
<td>45.53</td>
<td>55.25</td>
<td>9.72</td>
<td>&lt;.01</td>
</tr>
<tr>
<td></td>
<td>Self Confidence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>45.06</td>
<td>52.69</td>
<td>7.63</td>
<td>N.S.</td>
</tr>
<tr>
<td>F - F</td>
<td>47.69</td>
<td>51.19</td>
<td>3.50</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Total</td>
<td>46.38</td>
<td>51.94</td>
<td>5.56</td>
<td>&lt;.01</td>
</tr>
<tr>
<td></td>
<td>Initiating Assertion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>44.25</td>
<td>54.13</td>
<td>9.88</td>
<td>N.S.</td>
</tr>
<tr>
<td>F - F</td>
<td>50.13</td>
<td>54.25</td>
<td>4.12</td>
<td>N.S.</td>
</tr>
<tr>
<td>Total</td>
<td>47.19</td>
<td>54.19</td>
<td>7.00</td>
<td>&lt;.01</td>
</tr>
<tr>
<td></td>
<td>Defending Assertion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>44.25</td>
<td>53.94</td>
<td>9.69</td>
<td>N.S.</td>
</tr>
<tr>
<td>F - F</td>
<td>47.63</td>
<td>54.38</td>
<td>6.75</td>
<td>N.S.</td>
</tr>
<tr>
<td>Total</td>
<td>45.94</td>
<td>54.16</td>
<td>8.22</td>
<td>&lt;.01</td>
</tr>
<tr>
<td></td>
<td>Frankness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>45.75</td>
<td>56.06</td>
<td>10.31</td>
<td>N.S.</td>
</tr>
<tr>
<td>F - F</td>
<td>47.86</td>
<td>54.94</td>
<td>7.08</td>
<td>N.S.</td>
</tr>
<tr>
<td>Total</td>
<td>46.81</td>
<td>55.50</td>
<td>8.69</td>
<td>&lt;.01</td>
</tr>
</tbody>
</table>

<sup>a</sup>Means based on n = 16.
<sup>b</sup>Means based on N = 32.
Of the five univariate analyses of the IBS assertion scales, only the analysis of Initiating Assertion (IA) revealed a significant effect due to differences between groups nested within sex of leaders (p<.05). The group means for initiating assertion are presented in Table 3. Note that the mean Initiating Assertion scores were consistent from pre- to post-testing across the four groups. That is, all group means increased at post-testing, and the rank order of the group means was the same at pre- and post-testing, as well as when pre- and post-testing means were combined as overall [(pre + post)/2] means. Therefore, initial differences between groups did not appear to influence Initiating Assertion differences between groups differentially at post-testing.

Table 3
Summary of Group Means for Initiating Assertion

<table>
<thead>
<tr>
<th>Sex of Leaders</th>
<th>Gp.</th>
<th>n</th>
<th>Pre-IA Mean</th>
<th>Post-IA Mean</th>
<th>Pre + Post Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>M - F</td>
<td>1</td>
<td>8</td>
<td>45.38</td>
<td>56.50</td>
<td>50.94</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>8</td>
<td>43.13</td>
<td>51.75</td>
<td>47.44</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>7</td>
<td>42.71</td>
<td>51.29</td>
<td>47.00</td>
</tr>
<tr>
<td>F - F</td>
<td>4</td>
<td>9</td>
<td>55.89</td>
<td>56.56</td>
<td>56.22</td>
</tr>
</tbody>
</table>
In contrast to the assertion scales, univariate analyses of the three IBS aggression scales did not reveal significant pre- to post-training variations. However, the analyses did reveal a significant sex of leaders x pre/post interaction for Expression of Anger (p<.05) and a sex of leaders x pre/post trend for General Aggression (p<.07). The results of these univariate analyses are summarized in Appendix P, Table B. In addition, the aggression scales' means are presented in Table 4. Examination of the means revealed that Expression of

Table 4
Summary of Pre- and Post-Training Means for IBS Aggression Scales

<table>
<thead>
<tr>
<th>Sex of Leaders</th>
<th>Pre Means</th>
<th>Post Means</th>
<th>Change</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Rational Aggression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F&lt;sup&gt;a&lt;/sup&gt;</td>
<td>46.38</td>
<td>52.75</td>
<td>6.37</td>
<td>&lt;.07</td>
</tr>
<tr>
<td>F - F&lt;sup&gt;a&lt;/sup&gt;</td>
<td>49.94</td>
<td>49.63</td>
<td>-.31</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48.16</td>
<td>51.19</td>
<td>3.03</td>
<td>N.S.</td>
</tr>
<tr>
<td>Hostile Stance</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>48.06</td>
<td>53.56</td>
<td>5.05</td>
<td>N.S.</td>
</tr>
<tr>
<td>F - F</td>
<td>50.44</td>
<td>51.69</td>
<td>1.25</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>49.25</td>
<td>52.63</td>
<td>3.38</td>
<td>N.S.</td>
</tr>
<tr>
<td>Expression of Anger</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>45.13</td>
<td>51.00</td>
<td>5.87</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>F - F</td>
<td>51.50</td>
<td>48.63</td>
<td>-2.87</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>48.31</td>
<td>49.81</td>
<td>1.50</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

<sup>a</sup>Means based on n = 16.
<sup>b</sup>Means based on N = 32.
Anger increased from pre- to post-test in the male-female leader condition. In the female-female leader condition, Expression of Anger decreased from pre- to post-test. Similarly, General Aggression tended to increase from pre- to post-test in the male-female condition, but it remained relatively constant from pre- to post-test in the female-female condition.

**Depression Adjective Checklist and IBS Change Scores.** When the IBS post- minus pre-training differences scores were adjusted for Depression Adjective Checklist (DACL) scores and subjected to covariance techniques (see Appendix Q, Table C), significant sex of leader effects were found for General Aggression difference scores ($p<.05$) and for Expression of Anger difference scores ($p<.01$). However, neither the General Aggression nor the Expression of Anger difference scores were significantly related to the DACL. In contrast, when Initiating Assertion difference scores were adjusted for DACL scores, covariance analysis revealed a significant sex of leaders effect ($p<.01$), and a significant positive relation between Initiating Assertion difference scores and DACL scores ($p<.05$). The Initiating Assertion difference score means adjusted for DACL were 11.09 for the male-female leader condition, and 3.31 for the female-female condition.

**Assertion Goals.** By the last assertion training session, 27 of the 32 participants achieved at least 2 out of 3 possible goals; 4 achieved only 1 out of 3 goals; and 1 achieved no goals. A Chi-Square analysis applied to the post-training data indicated that the probability of 27 participants achieving 2 or 3 goals by chance at post-test when 3 out of 4, or 24 out of 32 participants, were predicted to
achieve at least 2 of their pre-training goals was $0.30 > p > 0.20$ ($X^2 = 1.17$, df = 1).

Comparison of post-training scores with follow-up scores indicated 10 participants achieved one or more additional goals after completing training, and none had regressed to their pre-training goal status. These data were analyzed by the Sign Test and were significant at the .01 level.

By follow-up, 25 of the 32 participants had achieved "all" their pre-training assertion goals; 6 had achieved 2 out of 3 goals; and 1 participant achieved 1 out of the 2 goals she set. Chi-Square analysis of follow-up data indicated that the probability of 25 participants achieving "all" their pre-training goals by chance when 24 were predicted to achieve "all" their goals was $0.70 > p > 0.50$ ($X^2 = 0.17$, df = 1).

Post-test goal attainment data subjected to a simple ANOVA (see Appendix R, Table D) revealed a significant sex of leaders effect ($p < 0.05$). Comparison of treatment means revealed participants in the male-female leader condition achieved an average of 2.00 goals by post-test, whereas participants in the female-female condition achieved an average of 2.56 goals. A second ANOVA was conducted on follow-up goal attainment data (see Appendix R, Table D). It also revealed a significant sex of leaders effect ($p < 0.05$). Examination of goal attainment means revealed that participants in the female-female leader condition achieved an average of 2.89 goals by follow-up; those in the male-female condition achieved an average of 2.50 goals. Therefore, although participants in both conditions increased the number of goals they attained from post-test to follow-up, the initial post-test disparity between treatment means persisted, with the female-female
leader condition associated with greater goal attainment scores.

**Evaluation of Extra-Group Peer Ratings**

Subjection of the male and female cohorts' assertion and aggression IBS-S ratings to a MANOVA determined: (a) there was a significant overall effect due to sex of leaders \( F (4,46) = 5.87, p < .01 \), (b) there was no overall effect due to pre- versus post-training ratings \( F (4,46) = 1.40, p = .24 \), and (c) there was no overall effect due to sex of leaders x pre- versus post-training ratings \( F (4,46) = .27, p = .89 \). The overall sex of leaders effect appeared to be caused by differences in randomization and did not appear to affect treatment outcome (see Table 5). After analyzing for overall effects, four univariate ANOVAs for repeated measures were conducted on male and female cohorts' ratings of assertion (SGRS) and aggression (GGRS). The results of these ANOVAs are presented in Appendix S, Table E; they are summarized as follows.

Analysis of male cohorts' assertion ratings revealed significant variation due to pre- versus post-training ratings \( p < .05 \), but not to pre- versus post-training ratings x sex of leaders \( p = .45 \). That same analysis revealed a tendency or trend for male cohorts to give differential ratings according to sex of leaders \( p < .06 \). Examination of the means presented in Table 5 indicates that male cohorts gave participants higher assertion ratings at post-test than at pre-test. The means also indicate that the male cohorts' tendency to give higher assertion ratings to participants in the female-female condition was consistent at both pre- and post-test.

In contrast to male cohort ratings, analysis of female cohorts'
Table 5

Summary of Pre- and Post-Training Means for IBS-S Cohort Ratings of Assertion and Aggression

<table>
<thead>
<tr>
<th>Sex of Leaders</th>
<th>Pre Means</th>
<th>Post Means</th>
<th>Pre + Post Means</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female Cohorts' Assertion Ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>8.33(15)(^a)</td>
<td>9.23(13)</td>
<td>8.75(28)</td>
<td>N.S.</td>
</tr>
<tr>
<td>F - F</td>
<td>8.53(15)</td>
<td>9.83(12)</td>
<td>9.11(27)</td>
<td>N.S.</td>
</tr>
<tr>
<td>Total</td>
<td>8.43(30)</td>
<td>9.52(25)</td>
<td>---</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>Female Cohorts' Aggression Ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>3.53(15)</td>
<td>4.15(13)</td>
<td>3.82(28)</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>F - F</td>
<td>1.13(15)</td>
<td>1.08(12)</td>
<td>1.11(27)</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Total</td>
<td>2.33(30)</td>
<td>2.68(25)</td>
<td>---</td>
<td>N.S.</td>
</tr>
<tr>
<td><strong>Male Cohorts' Assertion Ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>6.67(15)</td>
<td>8.92(13)</td>
<td>7.71(28)</td>
<td>&lt;.06</td>
</tr>
<tr>
<td>F - F</td>
<td>8.67(15)</td>
<td>9.83(12)</td>
<td>9.19(27)</td>
<td>&lt;.05</td>
</tr>
<tr>
<td>Total</td>
<td>7.67(30)</td>
<td>9.36(25)</td>
<td>---</td>
<td>&lt;.05</td>
</tr>
<tr>
<td><strong>Male Cohorts' Aggression Ratings</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>M - F</td>
<td>1.60(15)</td>
<td>2.00(13)</td>
<td>1.79(28)</td>
<td>N.S.</td>
</tr>
<tr>
<td>F - F</td>
<td>2.53(15)</td>
<td>2.91(12)</td>
<td>2.79(27)</td>
<td>N.S.</td>
</tr>
<tr>
<td>Total</td>
<td>2.07(30)</td>
<td>2.44(25)</td>
<td>---</td>
<td>N.S.</td>
</tr>
</tbody>
</table>

\(^a\)Numbers in parentheses indicate the number of ratings on which a mean is based.

Assertion ratings failed to find significant effects due to sex of leaders (p = .60), pre- versus post-testing (p = .71), or sex of leaders x pre/post (p = .71). The female cohorts' pre- and post-training mean ratings are presented in Table 5. Although post-training
mean ratings were larger, they did not vary significantly from pre-
training ratings.

Analysis of male cohorts' aggression ratings revealed no signifi-
cant effect due to pre- versus post-training ratings (p = .42) or to a
sex of leaders x pre/post interaction (p = .98). Similarly, female
cohorts' ratings of aggression did not differ significantly from pre-
to post-test (p = .63), nor did they differ because of a pre/post x
sex of leaders interaction (p = .59). However, female cohorts' aggres-
sion ratings did vary significantly according to sex of leaders (p<.01).
That is, female cohorts gave consistently higher aggression ratings to
participants in the male-female leader condition (see mean aggression
ratings in Table 5).

**Evaluation of In-Group Behavior**

Subjection of peer ratings to an ANOVA (see Appendix T, Table F)
revealed a significant effect for time (p<.05), but not for sex of
leaders x time interaction (p = .46). Mean peer ratings across time
are presented in Figure 1. A series of analyses (see Appendix U, Table H) using orthogonal polynomials to test for deviations from
linearity revealed that peer ratings across time had a significant
linear component (p<.05), a significant quadratic component (p<.01),
and a significant cubic component (p<.05). Review of Figure 1
suggests peer ratings had greatest increase (linear) from sessions
1 to 3 and then leveled out and began to decline.
Subjection of self ratings to an ANOVA (see Appendix T, Table G), revealed a significant effect for time (p<.01) but not for time x sex of leaders (p = .52). Mean self ratings across sessions are presented in Figure 2. Tests for trends (see Appendix U, Table I) revealed that
increases in self-rated assertion followed a linear progression (p<.05).

Analysis of leaders' ratings of overt assertion revealed a significant main effect for time (p<.01) and a significant time x sex of leaders interaction (p<.05), as presented in Appendix V, Table J. Figure 3 presents a graph of mean ratings of overt assertion. It illustrates that overt assertion increased in both treatment conditions over time, but it increased relatively more over time in the female-female leader condition. The mean ratings of overt assertion were analyzed for trends separately for each treatment (see Appendix W, Table K). The male-female leader condition increases over time were linear (p<.01), as were the female-female condition increases (p<.01).

Figure 3
Leaders' Ratings of Overt Assertion
Time x Sex of Leaders Interaction
*p<.05

Analysis of leaders' ratings of extra-group, reported assertion (see Appendix V, Table J) revealed a significant effect for time (p<.01), but not for time x sex of leaders (p = .48). Figure 4 presents the mean ratings of reported assertion across sessions. Analysis for trends
(see Appendix W, Table L) indicated reported assertion increased in a linear progression ($p<.01$).

**Figure 4**

Leaders' Ratings of Reported Assertion

* $p<.01$
The current study employed a multidimensional/multilevel approach to evaluate the effectiveness of assertion training as well as the relative effectiveness of women's assertion groups led by male-female or female-female assertion trainer dyads. That is, the study assessed the effectiveness of women's assertion training groups which did or did not have a male group leader present. The multidimensional/multilevel evaluation included: standardized and individualized self-report measures; male and female extra-group cohort ratings; objective, in-group self and peer assessments; and subjective leader appraisals of overt and reported assertion. Hypotheses were proposed in relation to the dependent variables under consideration; however, they were based on key assumptions. The central assumption in the present study was that assertion training would increase assertiveness, as reflected by the dependent measures. A second assumption was that with the exception of male cohort ratings and the rather crude assertion goals inventory, the female-female leader condition would produce greater relative increases in assertion than the male-female condition. A third assumption was that aggression would not be affected by treatment conditions or training.

In general, results supported hypotheses relevant to the first assumption. Assertion training increased assertiveness, as evidenced
by IBS assertion scales, the assertion goals inventory, male extra-group cohort ratings, and in-group assessments by self, peers, and group leaders. In fact, only the female extra-group cohort ratings failed to show a significant pre- to post-training effect. In contrast, results generally did not support hypotheses relevant to the second and third assumptions. That is, greater relative increases in assertion in the female-female condition, as opposed to the male-female condition, were detected by leaders' appraisals of overt assertion, but not by IBS assertion scales, extra-group cohort ratings, self or peer assessments, or leader appraisals of reported assertion. In addition, contrary to original predictions, the goals inventory and two IBS aggression scales evidenced a sex of leaders x pre-versus post-training interaction. Participants in the female-female leader condition achieved significantly more goals by post-test than did participants in the male-female condition. Although participants in both conditions increased their scores from post-test to follow-up, initial differences between treatment condition goal attainment scores persisted at follow-up.

Also contrary to original predictions, aggression was affected by a sex of leaders x pre/post interaction. Participants in the male-female condition increased their Expression of Anger and General Aggression scores from pre- to post-testing, whereas participants in the female-female condition decreased their Expression of Anger scores and achieved relatively consistent General Aggression scores at post-testing.

One final measure, the DACL, was incorporated in the present
research to detect depression which might negatively affect participants' pre- to post-training increases in assertion (or aggression). The DACL was significantly related to changes in only one IBS scale, Initiating Assertion; the relation was positive.

To facilitate clarification and elaboration of the present research findings, they will be discussed sequentially, in roughly the same order as the hypotheses and results. Additional consideration about the current research and implications for future research follow.

Interpretation of Self-Report Based Findings

Increases in the IBS general and factor assertion scales from pre- to post-testing provide evidence which is consonant with previous assertion training research. Namely, that assertion training increases self-report, questionnaire measures of assertiveness. Earlier studies used measures which reflected only general assertion or refusal behavior. The IBS used in the current study demonstrated not only that assertion training increased general assertiveness, but also that it contributed to increasing specific types of assertive responses, including: (a) willingness to be candid (Frankness), (b) comfort in assuming a leadership role (Initiating Assertion), (c) comfort in giving and receiving praise and in making requests or refusals (Self Confidence), plus (d) willingness to defend personal rights and to resist exploitation by others (Defending Assertion).

For all practical purposes, research on the effects of assertion training on aggression has been essentially nil. One study which employed a rather haphazard measure was conducted by Hartsook, Olch,
and deWolf (1976). To determine whether assertion training affected aggression, they devised an aggression scale by separating the items from an assertiveness inventory into two scales based on assertive or aggressive content. Comparison of pre- and post-training scores indicated that endorsement of aggressive items decreased at post-test, but the decrease was not significant. The subjects in the Hartsook, et. al. study were all females, and the assertion groups were co-led by females.

It is possible that the IBS used in the present study provides the first substantive evidence regarding the effects of assertion training on aggression. The current research revealed a significant sex of leaders x pre/post interaction for the Expression of Anger scale, and a sex of leaders x pre/post trend for General Aggression. Subjects in the male-female condition increased their Expression of Anger and General Aggression scores from pre- to post-test. Subjects in the female-female condition decreased their Expression of Anger scores and obtained relatively consistent (i.e., slightly lower) General Aggression scores. Test-retest reliabilities for the IBS (see Appendix B) support that the effects of the sex of leaders x pre/post interaction on aggression were not caused by random variation. Furthermore, although Hartsook, et. al. (1976) used a contrived measure, they obtained a similar, albeit nonsignificant, post-training decrease in aggression with women's assertion groups co-led by females. Therefore, the Hartsook, et. al. study provides at least weak evidence for the current findings.

Data provided by the IBS assertion and aggression scales
suggest that the presence of a male group leader does not inhibit the development of assertion in women, as suggested by Halas (1973) and Brodsky (1973). However, the male group leader appears to have other potentially negative effects on women—his presence seems to foster an increased inclination in women to be easily angered and argumentative (Expression of Anger). It may contribute to a tendency in women to increase their overall aggressiveness (General Aggression). An explanation of the effects of the sex of leaders x pre/post interaction on aggression is purely speculative. Perhaps the male group leader symbolized an outcast or scapegoat to the women which in some way mobilized an aggressive response. Or, perhaps, females who observed and tried to imitate male modeled assertion developed aggressive rather than assertive behaviors. Regardless of the explanation, this seems to be an area ripe for future research.

With the exception of one IBS scale, results failed to support a relation between the DACL and changes in assertion or aggression from pre- to post-test. The DACL was included as a covariant in the current study since depression "as a self-perpetuating interpersonal system" (Coyne, 1976, p. 39) affords secondary gains to the depressed person which strengthen pathological behaviors and inhibit the development of alternatives. Since depression inhibits new behavior, it might be inferred that a relation between the DACL and assertion would be negative. That is, as depression increased, the development of assertive behaviors would decrease. Support for that inference was provided by Frey (1976). He demonstrated that assertive and depressive behaviors were incompatible. However, the only IBS
change score significantly related to the DACL was Initiating Assertion, and the relation was positive.

The relation between the DACL and Initiating Assertion is suspect not only because it was positive, but also because the DACL was not related to changes on other IBS assertion scales. However, a possible explanation for the positive DACL/Initiating Assertion relation may be inferred from a recent study. Sheslow and Erickson (1975) used the DACL and self-reported activities to differentiate depressed and non-depressed college students. They found that depressed college students reported engaging in social activities more frequently and in solitary activities less frequently than nondepressed controls. They also noted the disparity between clinically depressed individuals, who typically withdraw and lose interest in people and things, and depressed college students, who, for example, engage in athletics with peers significantly more often than nondepressed students. Subjects in the current research were not clinically depressed. If Sheslow and Erickson's results are applied to this study, increased participation in social activities could be expected with increased DACL scores. Of the four assertion factor scales, the one which seems to reflect social activities most (i.e., participation and involvement with others in group settings) is Initiating Assertion. Therefore, although the positive relation between the DACL and Initiating Assertion seems improbable, the possibility of it being noncoincidental exists.

There are several possible reasons why the DACL was not related to changes on the other IBS scales. McNair (1974) criticizes the
DACL as providing scores indicative of "a complex and unknown combination of unpleasant affects, including [but not limited to] depression" (p. 66). Hence one might question whether the lack of relation between the DACL and the post- minus pre-training assertion scale variations was because the DACL measured affects other than depression. Another possible explanation of the lack of relation between the DACL and assertion scales is that the DACL reflects short-term or transient depression. During a 5 week period, depression could vary widely. Hindsight suggests that if the DACL, with its convenient multiple forms, were administered prior to each group session, it would probably account for variations in participation across sessions. The DACL has been applied similarly by Holmes (1967), who attempted to correlate DACL scores with inter-group interactions. Holmes did not achieve significant correlations, but he administered the DACL after group sessions. The group experience could have affected the moods of its participants and thus, have affected DACL scores. In addition, Holmes' subjects were acute psychiatric inpatients involved in an on-going, open-ended therapy group.

The Assertion Goals inventory provided a relatively crude, unsophisticated but uncomplicated index of participants' ability to apply assertion skills to self-ascribed, pre-training objectives. Like other self-report measures, the inventory may be criticized as being highly susceptible to biased reporting. It is also possible that the inventory contributes to a Hawthorne Effect—that is, delineation of goals and specific behavioral criteria may contribute as much to goal attainment as the training procedures themselves.
Nevertheless, the raison d'être for most treatment or training programs is the development of expertise or insight which can be applied to situations or problems in a natural (or extratreatment) environment. In addition, one might argue that the degree of goal attainment was more significant than implied by the statistical analyses. That is, participants established behavioral goals which they had not attained on their own during their life-time. Yet at post-test, 27 of 32 participants achieved at least 2 of 3 possible goals, and at follow-up, 25 of 32 achieved "all" their initial goals. When insufficient knowledge exists on which to base predictions, as was the case for goal attainment scores, standard practice dictates that the probability level be set at $p = .5$. If goal attainment data is resubjected to Chi-Square analyses with expected cell frequencies set at 16 and 16, the probability of 27 out of 32 participants achieving at least 2 goals by post-test is $p < .001$ ($X^2 = 15.13$, df = 1). The probability of 25 out of 32 participants achieving "all" their goals by follow-up is $.01 > p > .001$ ($X^2 = 10.13$, df = 1). Hence, one might well conclude the Assertion Goals inventory afforded the most conclusive evidence of the value and effectiveness of the assertion training program.

Hypotheses based on the expected frequencies of goal attainment at post-test and at follow-up were supported by the current results. The hypothesis which predicted goals would be maintained from post-test to follow-up was also supported. Relative differences in goal attainment scores which differentiated treatment conditions at post-test or follow-up were not predicted since the inventory was initially
believed to be too simple to detect such differences. Yet, contrary to original predictions, the assertion inventory revealed that participants in the female-female leader condition achieved significantly more goals at post-test and at follow-up than participants in the male-female condition. This unexpected finding may be interpreted in several ways. The male group leader may have an inhibitory effect on women's ability or desire to generalize from the training group to the natural environment. The female-female leader condition may facilitate participants' generalization of assertion since it provides two female assertion models instead of one provided in the male-female condition. Finally, the sex of leaders effects may have resulted from uncontrolled extraneous variables not considered in the present study.

**Interpretation of Extra-Group Cohort Ratings**

As hypothesized, neither male or female cohorts' ratings of participants' aggression varied significantly from pre- to post-training, nor did the ratings determine a significant sex of leaders x pre/post interaction. Female cohorts did give participants in the male-female condition significantly higher aggression ratings than they gave to participants in the female-female condition, but the differential ratings were consistent at pre- and post-test and did not appear to affect treatment outcome.

Female cohort ratings of participants' assertion did not vary significantly from pre- to post-test, nor did the ratings detect a sex of leaders x pre/post interaction. In contrast, male cohorts rated participants as significantly more assertive after training, regardless of treatment conditions. Although male assertion ratings
did not establish a significant sex of leaders x pre/post interaction, there was a trend for male cohorts to give consistently higher pre- and post-training assertion ratings to participants in the female-female condition.

In short, cohorts did not perceive significant variations in participants' levels of aggression from pre- to post-training. Male cohorts perceived participants as significantly more assertive after training than before, but female cohorts did not perceive that variation. The difference in male and female cohorts' pre/post assertion variations may be related to several factors. The IBS-S may not have had adequate discriminatory power (i.e., it may have had too low a ceiling) to detect increases in assertion. A maximum raw score on the cohort assertion ratings (SGRS) was 13 points. Maximum pre-training scores of 12 or 13 points were given to participants by 7 female cohorts, but only by 3 male cohorts. Therefore, 7 female cohort ratings could not reflect increased assertion at post-test.

A review of the Assertion Goals inventories suggested another factor which may have contributed to differences in male and female cohorts' assertion ratings. The 93 assertion goals used for analyses in this study were separated according to content and counted. Approximately 31 goals (or 33%) specifically focused on being more assertive in situations with males, including employers, co-workers, friends, lovers, spouses, repairmen, and potential acquaintances. In contrast, approximately 12 of 93 goals (or 13%) focused on assertion with other women, including mothers, daughters, friends and co-workers. One might conclude that participants had greater difficulty being assertive with males and so, concentrated their energies in that area. The possibility
also exists that the male cohorts were the same males delineated in the goals. For example, a participant's goal was to negotiate housework responsibilities with her husband, and her husband served as her male cohort rater.

Problems associated with collecting valid cohort ratings were legion. For example, two female cohorts independently returned blank post-training IBS-S's with notes stating essentially that they had not seen their respective friends for extended periods of time and, consequently, felt unqualified to complete the post-training questionnaire. Another female cohort went abroad after pre-test; her participant friend had to contact her through the American Embassy in Berlin to get the post-test IBS-S rating completed. Other participants did not interact regularly with males (e.g., a widowed nursing professor) or dissolved relations with male cohorts during the 5 week training period (e.g., a bitterly dissolved engagement to be married). Still other cohorts did not return the pre-training IBS-S's until after the training had been completed.

In general, participants were conscientious and tried to facilitate the return of their cohorts' ratings. However, it became increasingly evident that participants had little influence with many of their friend raters. Cohort ratings would be easier to collect on college campuses or in areas where individuals adhere to similar schedules and live in relatively close proximity than in a sprawling urban/suburban environment.

**Interpretation of In-Group Assertive Behavior**

The Self and Peer Progress Evaluations were designed to reflect
assertive behaviors likely to occur during training sessions. Both
indicated that: (a) assertion increased across sessions, (b) the
greatest increases occurred from sessions 1 through 3, and (c) by
session 4, in-group assertion either began to decline (see peer
ratings, Figure 1, p. 89) or to stabilize itself (see self ratings,
Figure 2, p. 89).

The stabilization or slight decline in assertive behavior after
the third session may have resulted from a ceiling effect of the
evaluations rather than from an actual level of assertion. The eval­
uations were comprised of only eight possible assertive responses or
behaviors, and one of the eight did not occur in any of the training
sessions. The "absent" response was: "When I (she) was interrupted,
I (she) asked the other person to wait until I (she) had finished
speaking" (see Appendices J and K, item 7). It appeared that parti­
cipants were too polite to interrupt a speaker. There seemed to be
lesser problems with other items. For example, item 8 stated: "I
(she) asked questions when I (she) did not fully understand something."
Participants who understood concepts or lecture material did not ask
questions as frequently and consequently, received lower self and
peer assertion ratings. Therefore, the maximum score which could be
attained on an individual self or peer rating was essentially 7 points,
or even as low as 6 points, yet the average self ratings for sessions
3, 4, and 5 were all at least 5 points.

Besides a possible ceiling effect, another limitation of the
Self and Peer Progress Evaluations exists. The true-false evaluations
were designed to determine objectively whether or not specific behav­
iors occurred. For example, a participant either did or did not
apologize for her words or actions during a group session (see Appendices J and K, item 5). Yet, as noted by one of the participants, "Sometimes I hear an apology in a tone of voice or see an apologetic expression, even though no real apology was made." Therefore, the second limitation of the self and peer evaluations was that they did not permit subjective appraisals of nonverbal components of in-group assertion. Hypothetically, the participant who sheepishly raised her hand for permission to speak received the same credit for participating in group discussions as one who boldly voiced an unpopular point of view (item 1).

Subjective Leader Evaluations of Progress supplemented the more objective self and peer evaluations. The leader evaluations required a subjective appraisal of the overall level of assertion demonstrated by each participant during training sessions. They also required a subjective appraisal of the level of assertion each participant displayed in reports of extra-group experiences wherein assertion was an appropriate response. Analyses of leaders' evaluations indicated both overt and reported assertion increased over time, but the levels of overt assertion increased more rapidly in assertion groups co-led by females than in assertion groups co-led by a male and a female. The effects of the sex of leaders x pre/post interaction on overt assertion ratings were especially interesting. Theoretically, the leaders' subjective appraisals of overt assertion should parallel the more objective self and peer evaluations since both were concerned with in-group behavior. Because the evaluations were not parallel and subjective appraisals are especially prone to response biases, the effect of the interaction on overt assertion may be questioned
as a coincidental occurrence. However, the leaders' evaluations involved assigning numerical values to levels of assertion along a continuum, ranging from lowest (1) to highest (9). Consequently, the leader evaluations did not have the ceiling effect problem which plagued the objective ratings. In addition, leader evaluations permitted appraisals of assertion to be based on both verbal and nonverbal components of assertion. Therefore, subjective ratings of overt assertion indicating assertion increased more rapidly in the female-female condition may reflect in-group assertion more accurately than self and peer ratings. The leader evaluations of overt assertion tentatively support Halas' (1973) and Brodsky's (1973) claims that a male group leader inhibits a group of women, yet additional research is needed before solid support for their claims can be made.

Additional Research Considerations

The preceding sections of the discussion reviewed results and instruments as they related to the hypotheses proposed in the current study. In the course of conducting this research, additional factors became evident--factors which may have had direct or indirect influence on research findings but which were not predicted or evaluated by the current study. Specifically, those factors are related to the subjects who participated in training and research, and to possible effects of the screening interview.

Subjects in the current study were self-selected and self-referred. Therefore, the subject solicitation process tended to eliminate or screen clinically passive individuals [described by Alberti and Emmons
(1974) as generally non-assertive individuals] before they became involved in the screening interview. None of the candidates who participated in the interviews were disqualified because of excessively elevated IBS validity scores, indicating invalid test profiles. Acceptable validity scores were not obtained by Kimmel and Harlow (Note 5) with females in management training programs. Contrast of the current subject population with Kimmel and Harlow's management suggests the present subjects were less defensive and more willing to admit to common human frailties. The acceptable IBS validity scores may also be interpreted as reflecting the relative normalcy (i.e., the absence of serious pathology) of the present subject population. A study conducted by Hartsook, Olch and deWolf (1976) assessed the characteristics of female assertion training volunteers. They concluded that women who requested assertion training were "in the most respects...integrated and autonomous" but that they were "overly concerned with the approval of others and moderately inhibited in expressing their feelings" (p. 326).

In short, although research procedures were designed to screen individuals with serious emotional problems, invalid test profiles, or general non-assertiveness, none of the volunteers evidenced such problems. One other screening criteria which had not been anticipated in this study seems relevant. Pre-training measures might establish a maximum pre-training assertion score. In the current study, one subject specifically wanted to decrease her assertiveness. In addition many subjects appeared to be assertive before ever participating in the training program. A review of the pre-training General Assertion scores of the IBS revealed that 13 out of 32 subjects or approxi-
mately 40% of the participants, achieved average or above average assertion scores before training. Consequently only 19 out of 32, or slightly more than half of the subjects achieved below average assertion scores and could be called non-assertive prior to training.

It may be puzzling that such a high proportion of assertive subjects felt they needed assertion training. Recently, however, Brockway (1976) conducted an assertion training program for professional women. She found, among other things, that her female professionals were assertive by objective standards before training, but that they perceived themselves as being non-assertive. She also found that while assertion training increased measures of assertion, the most substantial post-training effects were in the area of decreased self-perceived anxiety. Brockway concluded that assertion training with professional women should concentrate on the counter-conditioning and restructuring of beliefs and values which contribute to negative self-appraisals and low self-esteem.

Subjects in the present study had many characteristics in common with Brockway's subjects. The majority of the current subjects, 31 out of 32, were employed; 4 had supervisory positions; 1 was a partner in a business; and 1 owned her own business. In addition, a relatively large proportion of them achieved average or above average assertion scores at pre-test. Nevertheless, the current subjects expressed a need to participate in the training and generally felt they were non-assertive. Hence, it seems that a number of the current subjects, like Brockway's subjects, had somewhat inaccurate self perceptions.

Two design factors may have had effects on experimental results. The first factor dealt with subjects' perceptions and/or interactions
with their respective group leaders. That is, the female co-leader constant in each group also conducted the pre-training screening interviews. Therefore, prior to the first group sessions, subjects had conversed and specified training objectives with the female leader constant, but not with the other leader. The co-leader constant may have been perceived as an ally, or prior acquaintance, and that "prior knowledge" may have intensified solidarity in the the female-female group, while highlighting the presence of an "outcast" or "different" leader in the male-female condition. Although the screening tactics were consistent with all subjects, those in groups co-led by males would seem to be most affected by this procedure.

The second design factor which may have affected experimental results concerned the possible practice effects on the leader constant. That is, the leader constant may have become more effective in the latter groups. However, the leader constant had several years' previous experience as an assertion trainer, and it was felt that the likelihood of a practice effect was minimal.

Recommendations for Future Research

Since recommendations for future research have been noted throughout the Discussion section, only the main ones will be recapitulated here.

Research on assertion training seems to consistently report increases in self-report and behavioral role-play measures of assertion. Extra-group measures or ratings of trainees' assertion seem to consistently produce contradictory results. Although the collection of extra-
group cohort measures is difficult, additional research in this area with more discriminating and/or sensitive measures would help clarify the effectiveness of assertion training.

The increased aggression in women's assertion groups led by a male-female leader dyad and the decreased (or relatively unchanged) aggression in groups led by female-female leader dyads is an area which should interest researchers. One might question whether the same interaction would be replicated in similar assertion training studies, or whether it would be present in other types of women's groups led by males. Future research might also explore possible effects of the sex of group leaders on women in assertion training. The present study suggests that effects may be present but in less obvious and more subtle forms than previous studies have investigated. For example, if the process measures of in-group behavior are expanded and refined, they may reflect differences due to sex of group leaders. The possibility of detecting differences with process measures would seem to be enhanced by administering the DACL before training sessions and using it as a covariant measure.

Finally, in investigating the effects of therapist sex on clients, other characteristics might also be considered in an additive fashion (e.g., sex plus age, or sex and age plus leadership style). It seems probable that the effects of the sex of the therapist will be discerned only as they interact with other dimensions or characteristics of the therapist/group leader.
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APPENDIX A

Interpersonal Behavior Survey Scales

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<tr>
<th>Type of Scale</th>
<th>Scale Name (Scale Abbreviation)</th>
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<td><strong>Validity</strong></td>
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<tr>
<td></td>
<td>Infrequency (IF)&lt;sup&gt;a&lt;/sup&gt;</td>
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<td>Aggression, General Rational (GGR)&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>Physical Aggression (PH)</td>
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<td>Denying Rights of Others (DR)</td>
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<td>Verbal Aggression (VE)</td>
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<td>Overt Hostility (HO)</td>
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<td>Self-Confidence (SC)&lt;sup&gt;b&lt;/sup&gt;</td>
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<td>Frankness (FR)&lt;sup&gt;b&lt;/sup&gt;</td>
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Appendix A, continued

Interpersonal Behavior Survey Scales

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<td>Assertion, Heterosexual</td>
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\(^a\)Scales used to screen assertion training candidates.  
\(^b\)Scales used to assess self-report changes in assertion or aggression.  
\(^c\)Scales modified for cohorts' ratings of subjects' assertion and aggression.
APPENDIX B

Interpersonal Behavior Survey Scale Reliabilities

<table>
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<th>Scale</th>
<th>Internal Consistency Reliability</th>
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Interpersonal Behavior Survey Scale Reliabilities

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^a Computed by coefficient alpha, n = 150.
^b Computed by product-moment correlation, n = 53.
^c Computed by product-moment correlation, n = 43.
^d Coefficient alpha cannot be calculated unless n > 2.
APPENDIX C

Newspaper Advertisement and Flier Soliciting Volunteer Subjects

ASSERTION TRAINING

For women between the ages of 21-35 who have difficulty expressing positive or negative feelings straightforwardly and honestly, who feel unable to refuse unreasonable requests, and who feel unable to stand up for their own rights.

894-5927 or 894-5928 Days
296-0811 Evenings and Weekends
University Research Affiliate
APPENDIX D

Informed Consent

The purpose of this study is to determine the relative effectiveness of assertion training groups. The four basic procedures which will be used in the five assertion training sessions are: (1) teaching participants to distinguish assertion from aggression and nonassertion from politeness; (2) helping participants identify and accept their own personal rights, as well as the rights of others; (3) reducing illogical and emotional obstacles which block assertive responses, such as excessive anxiety or guilt; and (4) developing assertive skills through practice and by observing others.

If you agree to participate, you will be asked to complete a questionnaire, the Interpersonal Behavior Survey, now and again after the 5 week training period. The questionnaire will take approximately 30-45 minutes to complete. Your scores on this questionnaire will be kept strictly confidential and will be used only for research purposes. You will also be given two abbreviated copies of the same questionnaire now and again after training. These are to be given to two individuals who know you well and who are willing to answer them as they see you now and after you complete assertion training. One copy should be given to a male, and one to a female. Results of these questionnaires will be kept strictly confidential and will be used only for research purposes. In addition, you will be asked to specify your pre-training assertive goals. At the last group session and again two weeks after the last session, you will be asked to determine if you have achieved your goals. This information will also be held strictly confidential and used only for research purposes. Finally, you will be asked to evaluate your own and others' in-group assertive behavior after each of the sessions. This information will be used only for research and will be held strictly confidential.

Although the risks involved in assertion training are minimal, some participants occasionally experience negative reactions from friends who are surprised when participants do not behave "like they always did." However, negative reactions usually subside as friends become accustomed to a more honest and direct, assertive manner of responding.
Appendix D, continued

If you are willing to participate in this research, please indicate this by signing the statement which appears below. Please be aware that you are free to change your mind and withdraw from the study at any time without penalty. Your deposit will be returned to you after the 5 week training program is completed and your follow-up data is collected.

I have read and understand the statement at the top of this page and agree to participate in this research study. I understand that my test scores and evaluations will be kept confidential and used only for research purposes. I also understand that I may question any of the training or research procedures and may withdraw from the study at any time.

Witnessed by: ___________________________  Your Signature ___________________________

__________ Today's Date __________
APPENDIX E

INTERPERSONAL BEHAVIOR SURVEY

BY

Paul A. Mauger, Ph.D., Gregory Firestone, M.A., Suzanne K. Hernandez, M.A., and David Hook, M.A.

INSTRUCTIONS

Read each of the following items carefully and decide how well it describes you. There are NO right or wrong answers. If you feel that it describes you pretty well or is correct most of the time, fill in the space marked T (or a) on your answer sheet. If you feel that the item described is very much unlike yourself or is wrong most of the time, fill in the space marked F (or b).

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Appendix E, continued

PART I

1. I say what I want to say in most situations.
2. When I play in a game, I really don't care whether I win or lose.
3. Much of the time I am too easily influenced by my friends.
4. I rarely lose my temper.
5. Sometimes I decide to finish a task tomorrow, even when I know I should probably do it today.
6. I give up too easily when others say I can't succeed.
7. It is very important to me to be able to speak my mind.
8. It is never all right to harm someone else.
9. I frequently interrupt people who bore me by talking too much.
10. Sometimes getting into trouble is worth it because it upsets my family so much.
11. Sometimes I blame others when things go wrong.
12. There are times when I would enjoy making someone I dislike look foolish in front of others.
13. I usually do not speak until spoken to by others.
14. I try not to give people a hard time.
15. I don't believe I have a right to get back at a member of my family who treats me unfairly.
16. I probably would sneak into a movie theater if I knew I wouldn't be caught.
17. I would speak out in a meeting to oppose those who I feel are wrong.
18. I never deliberately hurt another person's feelings.
19. I get mad easily.
20. If a friend was unable to keep a promise to do something, I would probably be understanding rather than angry.
Appendix E, continued

21. I get embarrassed easily.
22. Sometimes I feel like swearing.
23. I am quick to give my opinions in class discussions.
24. Sometimes I take my anger out on my friends.
25. Because I hide my true feelings from others, most people don't know when they have hurt me.
26. I often avoid members of the opposite sex because I fear doing or saying the wrong thing.
27. Some people think I have a violent temper.
28. I make sure that people know where I stand on an issue.
29. I don't try to get even when another person does something against me.
30. I enjoy making people angry.
31. There are times when I'm not completely honest with people about my true feelings.
32. There are times when I would enjoy hurting people I love.
33. I have questioned public speakers on occasion.
34. I often worry that others will not approve of my conduct.
35. I often become angered and upset by members of my family for no good reason.
36. I never make fun of people who do things I feel are stupid.
37. I don't like to hurt other people's feelings, even when I have been hurt.
38. Sometimes I get angry.

PART II

39. I rarely criticize other people.
40. I find it difficult to compliment or praise others.
Appendix E, continued

41. I resent having members of my family give me orders.
42. When I am praised for doing something better than others, I feel uncomfortable.
43. I don't worry about what others think of me.
44. I sometimes feel that my opinion is not very important.
45. I tend to help many of my friends make decisions.
46. When I see a person doing a bad job on something, I usually speak right up and let him or her know.
47. I seldom argue with others.
48. I am not sure that I could be a good leader.
49. I feel that I am good at handling group discussions.
50. I usually tell people off when they disagree with me.
51. I dislike watching violent TV shows.
52. I have at times embarrassed a friend just to get his or her reaction.
53. Sometimes you can't help hurting others to get ahead.
54. At times I have hit my girlfriend (wife) or boyfriend (husband) during an argument.
55. I have made fun of a teacher or boss who I thought was stupid.
56. I enjoy giving orders and being the boss.
57. I don't like to speak to people with authority, such as teachers, policemen, or bosses.
58. When a close and respected relative annoys me, I usually hide my true feelings.
59. I am regarded by others as a good leader.
60. When arguing with my girlfriend (wife) or boyfriend (husband), I never give in until I have won.
61. I would not hit back if a friend hit me first.
Appendix E, continued

62. I find it easy to express my love and affection to others.
63. I would enjoy making a fool of a teacher or boss who had previously cut me down in front of other people.
64. I don't like to win when I have to hurt people in order to do it.
65. I am likely to go along with what others want to do.
66. I don't like to see anyone punished.
67. When a friend does something which hurts me deeply, I would rather get even than let him or her know of my deep hurt.
68. I have seldom taken the lead in organizing projects.
69. I often apologize for myself.
70. A person who says something stupid deserves to be put down.
71. I take care of my own needs and don't worry much about others.
72. I frequently pretend not to notice people I know unless they speak to me first.
73. If after leaving a store I discovered that I had been short-changed, I would go back and ask for the rest of my change.
74. I need to learn to stop letting people push me around.
75. In most situations I would rather listen than talk.
76. I usually say something to a person who I feel has been unfair.

PART III

77. I feel that in life you push or you're shoved.
78. I would have a hard time telling someone that I no longer wish to date him or her.
79. I often allow people to push me around.
80. If I had a brother or sister who did poorly in school, I would make sure that he or she knew that I was smarter.
81. I think that you can get ahead in the world without having to step on others.
Appendix E, continued

82. I seem to lose a lot of arguments.
83. There are times when force is necessary to get things done.
84. If I like a teacher at school or a supervisor at work, I usually tell him or her.
85. I find it difficult to say no to a salesman.
86. When playing a team sport, such as basketball, I feel that it's okay to take out my anger physically on my opponents.
87. I tend to follow the suggestions of others when I am with a group of people.
88. If I were interrupted in the middle of an important conversation, I would ask the person to wait until I had finished.
89. I find it difficult to stand up for my own rights.
90. I would not return a defective item for fear the store manager would claim I broke it.
91. I just don't know what to say when someone says something nice to me.
92. I am afraid to refuse to do favors for friends for fear that they will not like me.
93. I would be afraid of being in a fist fight.
94. Rather than ask for a favor, I will do without.
95. I would not question a salesperson about the price of an article, even if it seemed too high.
96. I would state what I think is right, even if someone I respect had just said something different.
97. I enjoy being involved in a good argument.
98. It's not right to hurt others even if they hurt you first.
99. Sometimes I feel embarrassed when I receive praise, even though I've earned it.
100. I often imagine myself beating or killing a person or animal.
Appendix E, continued

101. I can usually convince others that my ideas are right.

102. I find it hard to express my true feelings when I am fond of a member of the opposite sex.

103. Even if I were very angry with someone, I wouldn't make fun of him or her.

104. I would hesitate to return food in a restaurant, even if it were burnt.

105. Even if someone is unfair, I usually don't say anything to that person.

106. There are times when I would like to pick fist fights.

107. I usually agree readily with the opinions of others.

108. If someone were annoying me during a movie, I would ask that person to stop.

109. Sometimes I make fun of people who look very different from me.

110. If my family is misinformed on a subject, I try to inform them of the facts.

111. I would find it difficult to ask people for money or donations, even for a cause I believe in strongly.

112. If I were unfairly criticized by a friend, I would quickly express my feelings.

113. When someone gives me a present, I become embarrassed and uneasy.

114. I keep quiet when people are unreasonable.

115. I find it difficult to ask a friend for a favor.

116. People often take advantage of me.

117. Sometimes I say nasty things when people don't understand what I'm trying to do.

118. I will give in on an issue just to avoid trouble, even though I know I am right.

119. I seldom disagree with others.
Appendix E, continued

120. I dislike reducing my girlfriend (wife) or boyfriend (husband) to tears.

121. I have a hard time saying no to friends' requests.

PART IV

122. Sometimes when I'm depressed, I get upset with my friends.

123. Sometimes I lose an argument because I'm afraid of hurting the other person's feelings.

124. Generally, I don't disagree with members of my family because I don't want to hurt their feelings.

125. There have never been times when I have cheated while competing with a friend.

126. I rarely tease others.

127. I find it hard to ask members of my family to do favors for me.

128. I do my best to prevent my friends from taking unfair advantage of me.

129. When I am angry with members of my family, I let them know it.

130. I usually stick up for my opinion in a family argument.

131. I would not ask even a good friend to lend me money.

132. If I were proud of something I did, I would be sure to let others know about it.

133. If a friend of mine damaged some of my best records, I would ask him or her to replace them.

134. I try to make sure that people do not take advantage of me.

135. I readily accept the leadership of others in making group decisions.

136. I would remind a friend who forgot to pay back money he or she had borrowed from me.
APPENDIX F

Name: ____________________________
Group Number: ____________________
Address: __________________________
Phone: work- ______________________
       home- ________________________
Today's date: ______________________

ASSERTION GOALS

Please specify concisely what you would like to accomplish by participating in assertion training.

Example 1: Be more assertive with my mother.
Example 2: Tell people when they annoy me or make me angry instead of getting involved.

1.
2.
3.
4.
5.

How will you know when you have achieved your goals? Please be as concrete and specific as possible.

Example 1: Tell her how I feel about her probing questions. Refuse to take her shopping every Friday.
Example 2: Tell my roommate how I feel about her general messiness. Talk to my boss about my feelings about working overtime; request pay for overtime work.

1.
2.
3.
4.
5.
APPENDIX G

Interview Questions About Particular Assertion Problems
(From Responsible Assertive Behavior
by A. Lange and P. Jakubowski, 1976)

Topics

1. Being assertive with people who demand personal favors.
2. Being assertive with people who request that you spend more time with them and whose requests are excessive or whose company is unpleasant.
3. Being assertive with people who request that you participate in a worthy cause.
4. Being assertive with people who ask for your help or assistance.
5. Giving yourself permission to need help and to make requests of others.
6. Being assertive with high status professionals who are very busy and/or condescending.
7. Going beyond assertion and negotiating a behavior-change contract with others.
8. Maintaining assertion in the face of someone's aggression and personal attack.
9. Being assertive with people who force their views and values on you.
10. Being assertive with repair people who overcharge, do not properly do the work, or do not show up for the appointment.
11. Negotiating money and work expectations with people who work for you at home.
12. Being assertive with high pressure high sales personnel.
13. Getting the service you deserve in stores and restaurants.
15. Presenting yourself at a task meeting where others ignore, discount, or put down your ideas.
Appendix G, continued

Topics

16. Negotiating salary increases, changes in job title or job function.
17. Being assertive in job interviews.
18. Presenting discrimination complaints to a business or educational employer.
20. Being assertive with intimates who are passive and shift all the responsibility to you.
21. Expressing feelings of hurt, anger, and disappointment with people who are close to you.
22. Expressing feelings of love, affection, and tenderness.
23. Asking for a personal commitment in a relationship.
24. Renegotiating the marriage contract or intimate relationship.
25. Being assertive and tender in sexual relationships.
27. Responding to people who impose sex-role expectations on you.
29. Talking positively about your accomplishments.
30. Accepting compliments.
31. Giving compliments and expressing positive feelings.
32. Handling social conversations.
APPENDIX H

INFORMED CONSENT

The following confidential form is part of a research project currently in progress. The person whose name appears below on this sheet has consented to participate in the research and has given her permission to be rated by someone who knows her fairly well. If you are willing to assist in this research, you will be asked to complete a short questionnaire according to how you perceive ________ at this time. You will be asked to complete a second questionnaire in approximately 6 weeks. This form and the questionnaire should be completed and returned by mail to the addressee on the front of the pre-stamped envelope, as quickly as possible. Please answer honestly and truthfully, as you truly see your friend. Keep in mind that there are no right or wrong answers, and that your questionnaire answers will be kept strictly confidential and used only for research purposes.

Signature of Research Participant: ________________________________

Signature of Participant's Friend: _______________________________ Today's Date: __________

Your cooperation is greatly appreciated.

Sincerely,

Laura L'Herisson, M.A.
Psychology Intern
APPENDIX I

Your initials: ________
Today's date: ________

INTERPERSONAL BEHAVIOR SURVEY - SHORT

by
Paul A. Mauger, Ph. D., Gregory Firestone, M.A.,
Suzanne K. Hernandez, M.A., and David Hook, M.A.
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INSTRUCTIONS

Read each of the following items carefully and try to decide how well it describes _________________. There are NO right or wrong answers. If you feel that an item describes her pretty well or is correct most of the time, then circle "T" (True). If you feel that an item description is very much unlike her or is wrong most of the time, then circle "F" (False). Try to answer all the items as best you can. If you feel that you cannot answer either T or F to a particular item, then leave it blank and go to the next item. After completing this questionnaire, please initial, date, and mail it along with the signed Informed Consent (if a Consent has not already been submitted) to the addressee on the front of the pre-stamped envelope. Your promptness in completing and returning these forms will be greatly appreciated.

Circle One

T  F  1.  She says what she wants to say in most situations.

T  F  2.  When she plays in a game, she really doesn't care whether she wins or loses.

T  F  3.  Much of the time she is too easily influenced by her friends.

T  F  4.  She rarely loses her temper.

T  F  5.  Sometimes she decides to finish a task tomorrow, even when she knows she should probably do it today.

T  F  6.  She gives up too easily when others say she can't succeed.

T  F  7.  It is very important to her to be able to speak her mind.

T  F  8.  She feels it is never all right to harm someone else.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>F</td>
<td>9. She frequently interrupts people who bore her by talking too much.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>10. She feels that sometimes getting into trouble is worth it because it upsets her family so much.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>11. Sometimes she blames others when things go wrong.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>12. There are times when she would enjoy making someone she dislikes look foolish in front of others.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>13. She usually does not speak until spoken to by others.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>14. She tries not to give people a hard time.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>15. She doesn't believe she has a right to get back at a member of her family who treats her unfairly.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>16. She probably would sneak into a movie theater if she knew she wouldn't be caught.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>17. She would speak out in a meeting to oppose those who she feels are wrong.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>18. She never deliberately hurts another person's feelings.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>19. She gets mad easily.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>20. If a friend was unable to keep a promise to do something, she would probably be understanding rather than angry.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>21. She gets embarrassed easily.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>22. Sometimes she feels like swearing.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>23. She is quick to give her opinions in class discussions.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>24. Sometimes she takes her anger out on her friends.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>25. Because she hides her true feelings from others, most people don't know when they have hurt her.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>26. She often avoids members of the opposite sex because she fears doing or saying the wrong thing.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>27. Some people think she has a violent temper.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>28. She makes sure that people know where she stands on an issue.</td>
</tr>
</tbody>
</table>
### Appendix I, continued

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>F</td>
<td>29. She doesn't try to get even when another person does something against her.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>30. She enjoys making people angry.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>31. There are times when she's not completely honest with people about her true feelings.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>32. There are times when she would enjoy hurting people she loves.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>33. She has questioned public speakers on occasion.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>34. She often worries that others will not approve of her conduct.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>35. She often becomes angered and upset by members of her family for no good reason.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>36. She never makes fun of people who do things she feels are stupid.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>37. She doesn't like to hurt other people's feelings, even when she has been hurt.</td>
</tr>
<tr>
<td>T</td>
<td>F</td>
<td>38. Sometimes she gets angry.</td>
</tr>
</tbody>
</table>
APPENDIX J

Name: ______________________________
Date: ______________________________
Session: ____________________________
Gp. No.: ____________________________

SELF PROGRESS EVALUATION

Please decide whether the following items described your feelings or behaviors during the group session which just ended. Circle either "T" (true) or "F" (false) for each of the 8 following items.

T  F  (1) I generally participated during the group discussions.
T  F  (2) I usually waited for others to speak to me before I spoke to them.
T  F  (3) I was quick to give my opinions in group discussions.
T  F  (4) When I was praised for something, I responded verbally to the compliment.
T  F  (5) I apologized for things I did or said during the group session.
T  F  (6) When someone did well, I complimented her or him.
T  F  (7) When I was interrupted, I asked the other person to wait until I had finished speaking.
T  F  (8) I asked questions when I did not fully understand something.
APPENDIX K

Gp. No.: __________________________
Date: __________________________
Session: _________________________
Person being evaluated: ______________

PEER PROGRESS EVALUATION

Please decide whether the following items described feelings or behaviors during the group session which just ended. Circle either "T" (true) or "F" (false) for each of the following 8 items.

T  F  (1) ___________ generally participated during the group discussions.

T  F  (2) ___________ usually waited for others to speak to her before she spoke to them.

T  F  (3) ___________ was quick to give her opinions in group discussions.

T  F  (4) When ___________ was praised for something, she responded verbally to the compliment.

T  F  (5) ___________ apologized for things she said or did during the group session.

T  F  (6) When someone did well, ___________ complimented her or him.

T  F  (7) When ___________ was interrupted, she asked the other person to wait until she had finished speaking.

T  F  (8) ___________ asked questions when she did not fully understand something.
APPENDIX L

Initials: ____________  
Group No.: ____________  
Session No.: ____________

LEADER EVALUATION OF PROGRESS

The following 1 to 9 point scales should reflect your current post-session appraisals of either overt, in-group assertiveness or self-report, extra-group assertiveness. Please circle the numbers most indicative of each participant's in-group levels of assertiveness.

<table>
<thead>
<tr>
<th>Participants' Names</th>
<th>LOW</th>
<th>HIGH</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>OVERT</td>
<td>REPORTED</td>
</tr>
<tr>
<td></td>
<td>1-2-3-4-5-6-7-8-9</td>
<td>1-2-3-4-5-6-7-8-9</td>
</tr>
</tbody>
</table>
APPENDIX M

CHECK LIST

DACL FORM A

By Bernard Lubin

Name______________________________________________Age________Sex________
Date_________________________Highest grade completed in school_______

DIRECTIONS: Below you will find words which describe different kinds of moods and feelings. Check the words which describe How You Feel Now--Today. Some of the words may sound alike, but we want you to check all the words that describe your feelings. Work rapidly and check all of the words which describe how you feel today.

<table>
<thead>
<tr>
<th>Key</th>
<th>1. ( ) Wilted</th>
<th>0 17. ( ) Strong</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>2. ( ) Safe</td>
<td>+ 18. ( ) Tortured</td>
</tr>
<tr>
<td>+</td>
<td>3. ( ) Miserable</td>
<td>+ 19. ( ) Listless</td>
</tr>
<tr>
<td>+</td>
<td>4. ( ) Gloomy</td>
<td>0 20. ( ) Sunny</td>
</tr>
<tr>
<td>+</td>
<td>5. ( ) Dull</td>
<td>+ 21. ( ) Destroyed</td>
</tr>
<tr>
<td>0</td>
<td>6. ( ) Gay</td>
<td>+ 22. ( ) Wretched</td>
</tr>
<tr>
<td>+</td>
<td>7. ( ) Low-spirited</td>
<td>+ 23. ( ) Broken</td>
</tr>
<tr>
<td>+</td>
<td>8. ( ) Sad</td>
<td>0 24. ( ) Light-hearted</td>
</tr>
<tr>
<td>+</td>
<td>9. ( ) Unwanted</td>
<td>+ 25. ( ) Criticized</td>
</tr>
<tr>
<td>0</td>
<td>10. ( ) Fine</td>
<td>+ 26. ( ) Grieved</td>
</tr>
<tr>
<td>+</td>
<td>11. ( ) Broken-hearted</td>
<td>0 27. ( ) Dreamy</td>
</tr>
<tr>
<td>+</td>
<td>12. ( ) Down-cast</td>
<td>+ 28. ( ) Hopeless</td>
</tr>
<tr>
<td>0</td>
<td>13. ( ) Enthusiastic</td>
<td>+ 29. ( ) Oppressed</td>
</tr>
<tr>
<td>+</td>
<td>14. ( ) Failure</td>
<td>0 30. ( ) Joyous</td>
</tr>
<tr>
<td>+</td>
<td>15. ( ) Afflicted</td>
<td>+ 31. ( ) Weary</td>
</tr>
<tr>
<td>0</td>
<td>16. ( ) Active</td>
<td>+ 32. ( ) Droopy</td>
</tr>
</tbody>
</table>

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## APPENDIX N

**Description of Interpersonal Behavior Survey**

**Scales Used in Current Study**

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Validity Scales</strong></td>
<td></td>
</tr>
<tr>
<td>De</td>
<td><strong>Denial</strong> indicates the tendency not to admit to common, but socially unacceptable weaknesses, e.g., endorsing such items as &quot;I never lose my temper.&quot;</td>
</tr>
<tr>
<td>IF</td>
<td><strong>Infrequency</strong> indicates the tendency to endorse items which were not endorsed by over 10% of the normative group. High IF score suggests scoring errors, reading difficulties, an all-true, all-false, or random response pattern.</td>
</tr>
<tr>
<td><strong>Aggression Scales</strong></td>
<td></td>
</tr>
<tr>
<td>GGR (GGRS)¹</td>
<td><strong>Aggression, General Rational</strong> is a general scale whose items were selected because they logically indicate aggressiveness. It provides a global measure of aggression.</td>
</tr>
<tr>
<td>HS</td>
<td><strong>Hostile Stance</strong> items which indicate a disregard for the feelings of others and a willingness to ridicule or embarrass others.</td>
</tr>
<tr>
<td>EA</td>
<td><strong>Expression of Anger</strong> contains items which reflect one's willingness to argue and one's tendency to be easily angered.</td>
</tr>
</tbody>
</table>
Appendix N, continued

<table>
<thead>
<tr>
<th>Scale</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assertion Scales</strong></td>
<td></td>
</tr>
<tr>
<td>SGR (SGRS)(^2)</td>
<td>Assertion, General Rational is a general scale whose items were selected because they logically indicate assertiveness. It provides a global measure of assertion.</td>
</tr>
<tr>
<td>SC</td>
<td><strong>Self-Confidence</strong> contains items which reflect one's comfort in giving and receiving praise and one's willingness to request assistance or to refuse unreasonable demands from others.</td>
</tr>
<tr>
<td>IA</td>
<td><strong>Initiating Assertion</strong> contains items which indicate one's desire to assume leadership and one's feelings of comfort in a leadership role.</td>
</tr>
<tr>
<td>DA</td>
<td><strong>Defending Assertion</strong> contains items which reflect one's willingness to defend his/her personal rights and to resist being exploited by others.</td>
</tr>
<tr>
<td>FR</td>
<td><strong>Frankness</strong> contains items which indicate one's willingness to disclose his/her feelings, even though the feelings may be negative.</td>
</tr>
</tbody>
</table>

\(^1\)Short Form of General Rational Aggression (GGRS) is an abbreviated version of the GGR scale; it is comprised of approximately 1/2 of the GGR items.

\(^2\)Short Form of General Rational Assertion (SGRS) is an abbreviated version of the SGR scale; it consists of approximately 1/4 of the SGR items.
APPENDIX 0

Table A

Summary of Mean Squares from Univariate Analyses of Variance of IBS Assertion Scales

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>df</th>
<th>General Rational Assertion MS</th>
<th>Self-Confidence MS</th>
<th>Defending Assertion MS</th>
<th>Frankness MS</th>
<th>Initiating Assertion MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>68.57</td>
<td>5.15</td>
<td>48.48</td>
<td>1.47</td>
<td>93.24</td>
</tr>
<tr>
<td>Gp (Sex of Leaders)</td>
<td>2</td>
<td>160.93</td>
<td>52.61</td>
<td>51.66</td>
<td>39.46</td>
<td>383.88*</td>
</tr>
<tr>
<td>Pre/Post</td>
<td>1</td>
<td>1511.27**</td>
<td>495.06*</td>
<td>1080.77**</td>
<td>1207.56**</td>
<td>784.00**</td>
</tr>
<tr>
<td>Sex of Leaders X Pre/Post</td>
<td>1</td>
<td>147.02</td>
<td>68.06</td>
<td>34.52</td>
<td>42.25</td>
<td>132.25</td>
</tr>
<tr>
<td>Error</td>
<td>58</td>
<td>92.32</td>
<td>103.26</td>
<td>59.04</td>
<td>70.65</td>
<td>116.03</td>
</tr>
</tbody>
</table>

*p<.05.

**p<.01.
APPENDIX P

Table B

Summary of Mean Squares from Univariate Analyses of Variance of IBS Aggression Scales

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>df</th>
<th>General Rational Aggression MS</th>
<th>Hostile Stance MS</th>
<th>Expression of Anger MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>3.67</td>
<td>5.13</td>
<td>74.59</td>
</tr>
<tr>
<td>Gp (Sex of Leaders)</td>
<td>2</td>
<td>125.66</td>
<td>174.74</td>
<td>28.90</td>
</tr>
<tr>
<td>Pre/Post</td>
<td>1</td>
<td>147.02</td>
<td>182.25</td>
<td>36.00</td>
</tr>
<tr>
<td>Sex of Leaders X Pre/Post</td>
<td>1</td>
<td>178.89*</td>
<td>72.25</td>
<td>306.25**</td>
</tr>
<tr>
<td>Error _w</td>
<td>58</td>
<td>52.76</td>
<td>89.47</td>
<td>77.62</td>
</tr>
</tbody>
</table>

*p<.07, Trend.
**p<.05.
APPENDIX Q

Table C

Analyses of Covariance of Post-Pre IBS Change Scores with Depression Adjective Checklists (DACL)

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>df</th>
<th>Post-Pre Gen/Rat'l Assertion MS</th>
<th>Post-Pre Self-Confidence MS</th>
<th>Post-Pre Defending Assertion MS</th>
<th>Post-Pre Frankness MS</th>
<th>Post-Pre Initiating Assertion MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>236.12</td>
<td>165.62</td>
<td>29.68</td>
<td>69.13</td>
<td>410.25**</td>
</tr>
<tr>
<td>Gp (Sex of Leaders)</td>
<td>2</td>
<td>80.54</td>
<td>26.05</td>
<td>112.05</td>
<td>77.75</td>
<td>118.56</td>
</tr>
<tr>
<td>DACL</td>
<td>1</td>
<td>3.00</td>
<td>29.30</td>
<td>7.05</td>
<td>3.10</td>
<td>296.26*</td>
</tr>
<tr>
<td>Error</td>
<td>27</td>
<td>95.68</td>
<td>90.14</td>
<td>87.55</td>
<td>92.61</td>
<td>60.16</td>
</tr>
</tbody>
</table>

*p<.05.
**p<.01.
Appendix Q, continued

Analyses of Covariance of Post-Pre IBS Change Scores with Depression Adjective Checklists (DACL)

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>df</th>
<th>Post-Pre Gen/Rat'1 Aggression MS</th>
<th>Post-Pre Hostile Stance MS</th>
<th>Post-Pre Expression of Anger MS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>235.79*</td>
<td>106.90</td>
<td>476.37**</td>
</tr>
<tr>
<td>Gp (Sex of Leaders)</td>
<td>2</td>
<td>54.61</td>
<td>89.54</td>
<td>16.24</td>
</tr>
<tr>
<td>DACL</td>
<td>1</td>
<td>22.35</td>
<td>.25</td>
<td>9.94</td>
</tr>
<tr>
<td>Error</td>
<td>27</td>
<td>48.89</td>
<td>74.92</td>
<td>72.32</td>
</tr>
</tbody>
</table>

*p<.05.
**p<.01.
APPENDIX R

Table D

Analyses of Variance for Goals Obtained at Post-Testing or at Follow-Up

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Post-Test</th>
<th></th>
<th></th>
<th>Follow-Up</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MS</td>
<td>F</td>
<td></td>
<td>MS</td>
<td>F</td>
</tr>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>2.52</td>
<td>3.99*</td>
<td></td>
<td>1.10</td>
<td>3.99*</td>
</tr>
<tr>
<td>Gp (Sex of Leaders)</td>
<td>2</td>
<td>.13</td>
<td>.20</td>
<td></td>
<td>.00</td>
<td>.01</td>
</tr>
<tr>
<td>Error</td>
<td>28</td>
<td>.63</td>
<td></td>
<td></td>
<td>.28</td>
<td></td>
</tr>
<tr>
<td>*p&lt;.05.</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>
## APPENDIX S

### Table E

Summary of Univariate Analyses of Variance of Cohorts' IBS-S Ratings of Assertion and Aggressions

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>df</th>
<th>Female Cohort Ratings</th>
<th>Male Cohort Ratings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Assertion MS</td>
<td>Aggression MS</td>
</tr>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>2.54</td>
<td>101.93***</td>
</tr>
<tr>
<td>Gp (Sex of Leaders)</td>
<td>2</td>
<td>7.87</td>
<td>6.93</td>
</tr>
<tr>
<td>Pre/Post</td>
<td>1</td>
<td>17.20</td>
<td>1.56</td>
</tr>
<tr>
<td>Sex of Leaders X Pre/Post</td>
<td>1</td>
<td>1.25</td>
<td>1.96</td>
</tr>
<tr>
<td>Error</td>
<td>49</td>
<td>9.25</td>
<td>6.90</td>
</tr>
</tbody>
</table>

*p<.06, Trend.

**p<.05.

***p<.01.
APPENDIX T

Table F
Analysis of Variance for Peer Ratings

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>1.83</td>
<td>.97</td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>8.91</td>
<td>4.74*</td>
</tr>
<tr>
<td>Time X Sex of Leaders</td>
<td>4</td>
<td>1.00</td>
<td>.53</td>
</tr>
<tr>
<td>Error&lt;sub&gt;w&lt;/sub&gt;</td>
<td>137</td>
<td>1.88</td>
<td></td>
</tr>
</tbody>
</table>

*p<.05.

Table G
Analysis of Variance for Peer Ratings

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>.07</td>
<td>.03</td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>24.98</td>
<td>10.84*</td>
</tr>
<tr>
<td>Time X Sex of Leaders</td>
<td>4</td>
<td>.92</td>
<td>.40</td>
</tr>
<tr>
<td>Error&lt;sub&gt;w&lt;/sub&gt;</td>
<td>136</td>
<td>2.30</td>
<td></td>
</tr>
</tbody>
</table>

*p<.01.
### APPENDIX S

**Table H**

Analyses of Peer Ratings, Using Orthogonal Polynomials to Test for Deviations of Linearity

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Linear</th>
<th></th>
<th>Quadratic</th>
<th></th>
<th>Cubic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MS</td>
<td>F</td>
<td>MS</td>
<td>F</td>
<td>MS</td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>15.49</td>
<td>4.18*</td>
<td>16.83</td>
<td>7.22**</td>
<td>11.57</td>
</tr>
<tr>
<td>Time X Sex of Leaders</td>
<td>1</td>
<td>.47</td>
<td>.13</td>
<td>.23</td>
<td>.10</td>
<td>5.67</td>
</tr>
<tr>
<td>Error</td>
<td>30</td>
<td>3.73</td>
<td></td>
<td>2.33</td>
<td></td>
<td>2.19</td>
</tr>
</tbody>
</table>

*p<.05.

**p<.01.
Appendix U, continued

Table I

Analyses of Self Ratings, Using Orthogonal Polynomials
to Test for Deviations of Linearity

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Linear</th>
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<th>Quadratic</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MS</td>
<td>F</td>
<td>MS</td>
<td>F</td>
</tr>
<tr>
<td>Time</td>
<td>1</td>
<td>35.11</td>
<td>7.39*</td>
<td>11.25</td>
<td>2.44</td>
</tr>
<tr>
<td>Time X Sex of Leaders</td>
<td>1</td>
<td>1.52</td>
<td>.32</td>
<td>11.90</td>
<td>2.58</td>
</tr>
<tr>
<td>Error</td>
<td>30</td>
<td>4.75</td>
<td></td>
<td>4.61</td>
<td></td>
</tr>
</tbody>
</table>

*p<.05.
### APPENDIX V

#### Table J

Analyses of Variance of Leaders' Evaluation of Overt and Reported Assertion

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Overt Assertion</th>
<th>Reported Assertion</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>MS  F</td>
<td>MS  F</td>
</tr>
<tr>
<td>Sex of Leaders</td>
<td>1</td>
<td>.02 .02</td>
<td>.01 .00</td>
</tr>
<tr>
<td>Time</td>
<td>4</td>
<td>36.77 33.51**</td>
<td>55.19 49.34**</td>
</tr>
<tr>
<td>Time X Sex of Leaders</td>
<td>4</td>
<td>4.52 4.12*</td>
<td>.55 .49</td>
</tr>
<tr>
<td>Error_w</td>
<td>137</td>
<td>1.09 1.12</td>
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</tr>
</tbody>
</table>

*p<.05.*  
**p<.01.*
## APPENDIX W

### Table K

**Test for Trends for Overt Assertion According to Treatments**

<table>
<thead>
<tr>
<th>Source</th>
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<th>M - F Linear</th>
<th>F</th>
<th>F - F Linear</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>1</td>
<td>7.79</td>
<td>7.96*</td>
<td>1</td>
<td>33.40</td>
<td>27.58*</td>
<td></td>
</tr>
<tr>
<td>Error</td>
<td>67</td>
<td>.98</td>
<td></td>
<td>70</td>
<td>1.21</td>
<td></td>
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</tr>
</tbody>
</table>

*P<.01.

### Table L

**Test for Deviations from Linearity for Reported Assertion**

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>MS</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>1</td>
<td>62.13</td>
<td>23.10*</td>
</tr>
<tr>
<td>Time X Sex of Leaders</td>
<td>1</td>
<td>.80</td>
<td>.30</td>
</tr>
<tr>
<td>Error</td>
<td>30</td>
<td>2.69</td>
<td></td>
</tr>
</tbody>
</table>

*P<.01.
Laurea Ann L'Herisson was born September 16, 1949, in Shreveport, Louisiana. She attended public schools in Coushatta, Louisiana, and graduated as salutatorian from Coushatta High School in May 1967. She entered Louisiana State University in the spring of 1968; in the fall semester of the same year she joined the Honors Division of the College of Arts and Sciences. In addition to the regular course work of the 1970 spring semester, she participated in an undergraduate psychology practicum sponsored by the Honors Division, wherein she worked part-time on the Adolescent Unit of Central Louisiana State Hospital. That spring she also coauthored a research project "Manifest Aggression as a Function of Race and Sex: Three Studies," which she presented at the Southwestern Psychological Association Convention. During her senior year she conducted research and wrote an honors thesis on "Sexual Behavior and Drug Use as Related to Birth Order and BIB of the Single Female." As an undergraduate she was invited to join three honorary societies—Psi Chi (psychology), Mu Sigma Rho (Arts and Sciences) and Phi Kappa Phi (university). She received a Bachelor of Arts degree in Psychology with honors in May, 1971.

Ms. L'Herisson entered graduate school in the fall of 1971, in the Department of Psychology at Louisiana State University. At that
time, she received a stipend from the Veterans Administration and subsequently worked as a psychology trainee at the Veterans Hospital in New Orleans. Her Veterans Administration work/study program continued until the fall of 1973, when she was awarded a fellowship from the Institute of Insurance Marketing Foundation. She also served as a teaching and research assistant. She received a Master of Arts in 1974, for research entitled "The Effects of Dynamics Training on Participants in the Dynamics Workshop of the...[School of Life Insurance]." Her intermediate research was on "Changing Person Perception and Problem Attribution: The Home Office versus the Field Force." She completed an internship at Georgia Mental Health Institute in Atlanta, Georgia in 1976, and subsequently completed an advanced internship in 1977 at the same institution. The Doctor of Philosophy degree is anticipated in August, 1978.
EXAMINATION AND THESIS REPORT

Candidate: Laura Ann L'Herisson

Major Field: Psychology

Title of Thesis: Effects of the Sex of Group Leaders on Women Participants in Assertion Training

Approved:

[Signatures]

Major Professor and Chairman

Dean of the Graduate School

EXAMINING COMMITTEE:

[Signatures]

Date of Examination:

5/9/78