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SEX DIFFERENCES IN SELF-EFFICACY AND OUTCOME EXPECTATIONS REGARDING ASSERTIVENESS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By

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1984

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Certainly, no effort such as graduate school and dissertation can be survived alone. Numerous people have been instrumental in providing challenge, support, mentoring, and friendship along the way. In particular thanks go to the following people:

To the other two "Arps Dwellers", Mike Gribble and Terry Goodrick, who were great company, frequent distractions, and wonderful sources of discussion on any number of topics.

To Denise Hatter and Scott Meier, who not only patiently endured the task of rating the audiotaped behavioral test, but actually volunteered to do so.

To Dr. Nancy Betz and Dr. David Hothersall, who served as both members of the dissertation committee, but also as models for teaching in the last several years.

To Steve Geiger for serving as weekend research consultant, and all around support in completing the last stages of this project.

To the staff members at the Counseling Center at SIU, who, among other things, have been more supportive of dissertation work than any intern could ask for.

To Gail Hackett, who often provided the different perspective I needed in keeping focused on this and other research.

To Robelyn Marlow, for her endless hours of challenge and support, as well as reminding me that one can laugh along the way.
To my numerous Columbus friends who have been great companions on this journey, especially in this last year.

To my parents, who have believed all along that this day would come, and who have done innumerable things to help insure that it did.

And finally, to my advisor and mentor, Dr. Bruce Walsh, who has provided continual challenge, encouragement, insight, and advocacy through the last five years — much thanks.
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CHAPTER ONE
INTRODUCTION

In the last two decades, researchers and practitioners alike have become increasingly interested in the study of gender differences in behavior. The differential expectations for the behaviors of each sex; perceptions of personal attributes of the different sexes; and the various psychological characteristics which are believed to be correlated with "sex roles" have emerged as popular research questions in the literature on gender differences. Much of this research has focused upon the ways in which learned, or assigned, sex roles seem to limit the personal, social, and vocational development of men and women.

Numerous approaches to understanding gender differences have been proposed. One such method conceptualizes psychological differences between men and women in terms of the dimensions of instrumentality and expressiveness (Carlson, 1972; Bem, 1974). Other formulations have drawn upon the writings of Bakan (1966) and describe gender differences in terms of agentic and communal qualities. Chodorow (1971) explains such differences in terms of "being" and "doing"; suggesting that boys are socialized to earn their identities through action, competence, and achievement, while girls acquire their identities through the roles they assume (e.g.
wife, mother, nurturer, etc.). Regardless of the particular terms one chooses to use, the basic conceptualization of these differences is clear: the "masculine" domain is represented by action, competence, and an orientation toward the self; while the "feminine" domain is oriented toward nurturance, expressiveness, and relationships with others. As such, instrumentality has come to be associated with the masculine role, while expressiveness has been used to designate the feminine role.

Such beliefs about the differing roles of men and women have been developed and maintained through sex-roles and sex-role stereotyping. Numerous investigations have examined the specific traits or qualities associated with the masculine and feminine sex roles. Among the most well known is the research of Sandra Bem (1974). Bem asked college students to rate 200 personality traits, determining whether they were masculine, feminine, or neutral characteristics. The Bem Sex Role Inventory represents the results of that investigation; and is comprised of 20 masculine, 20 feminine, and 20 non-sexed-typed traits. As might be expected, many of the traits of the BSRI which were categorized as either masculine or feminine expressed instrumentality or expressiveness corresponding to those sex roles.

Not only might masculine and feminine characteristics be described in terms of their instrumentality or expressiveness, research has also suggested that masculine and feminine qualities differ in terms of their social desirability. When people are asked
to rate traits according to their social desirability, feminine traits are typically rated as less desirable than masculine traits. For example, feminine traits on the BSRI include gullible, childlike, and shy; on other inventories, conceited, sneaky, cries easily, and difficulty making decisions are qualities used to describe women (Brooks-Gunn & Matthews, 1979). On the other hand, very few undesirable traits are used to describe men: sloppy, loud, and rough are the most common.

Much research suggests that men and women are evaluated very differently in our society. Goldberg (1968) found that articles believed to be written by females were rated much more negatively than when the exact same articles were believed to be written by men. In a similar investigation, Fidell (1976) demonstrated that hypothetical females candidates for a job were viewed less favorably than male candidates presenting precisely the same credentials.

Not only are men and women evaluated differently in terms of competence and personal attributes, but research from the mental health profession suggests that practitioners view the mentally healthy male and female very differently as well. One early study in this area asked psychotherapists to describe the "optimally integrated" male and female. Results indicated that needs for dominance and achievement were rated high for males, while needs for nurturance and succorance were believed to be more characteristic of females (Neulinger, Stein, Schillinger, & Welkowitz, 1970). The classic study by Broverman and her colleagues revealed a very similar
Clinicians were asked to complete a Stereotype Questionnaire describing a healthy, mature, and socially competent adult (sex unspecified), man, and woman. Their findings suggest that "healthy women differ from healthy men by being more submissive, less independent, less adventurous, more easily influenced, less aggressive, less competitive, more excitable in minor crises, having their feelings more easily hurt, being more emotional, more conceited about their appearance, less objective, and disliking math and science" (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970). Additionally, while there was no difference between ratings of the mentally healthy adult and mentally healthy male, the description of the mentally healthy female was less healthy than either of the other two. Essentially, such ratings put women in a double bind. They could either be healthy and masculine, or less healthy and feminine. More recent writings have pointed to the Broverman research as indicative of a double standard of mental health (Sherman, 1978). The finding that the mental health of men is typically rated more positively than that of women is one which has been supported by subsequent investigations with other practitioners (Fabrikant, 1974; Fabrikant, Landau, & Rollenhagen, 1973; Tanney & Birk, 1976); with counselors in training (Maslin & Davis, 1973); and with college students (Brooks-Gunn & Fisch, 1979).

To summarize, the above research basically suggests that: 1) there are different traits and qualities ascribed to men and women (i.e., "sex roles"); 2) women tend to be perceived as less competent,
less independent, and less assertive than men; 3) on the average, ratings of women and the qualities assigned to them are more negative, or undesirable than for men; and 4) women are typically rated as less mentally healthy than either the mentally healthy adult or mentally healthy male.

If we return for a moment to the concept of instrumentality versus expressiveness, it would appear that the primary problem for women exists in terms of instrumentality, largely due to the fact that this dimension tends to favor men. Women may not tend to act in instrumental ways, either because: 1) they don't know how to act; or 2) they choose not to act in ways that promote competence and achievement (Hackett, personal communication, 1983). The former reason would imply a skill deficit, potentially correctable through training and/or rehearsal. On the other hand, there may be numerous reasons why women would choose not to act in ways that are generally viewed as positive and/or adaptive. It is possible that a woman possesses the knowledge of how to act, but lacks the confidence that she can successfully execute the desired behavior. Alternatively, a woman may know how to act, possess the necessary self-confidence, but choose not to engage in the behavior because of expected undesirable consequences. Thus, lack of instrumental behaviors in women may be due to skill deficits; low self-efficacy expectations; anticipation of negative outcomes; or some combination thereof. The present study seeks to explore the influences of each of these variables on decisions regarding instrumental behaviors by both men and women.
Why investigate such an issue? Many of the psychological problems faced by women, and presented in therapy may eventually lead back to instrumentality. Three treatment concerns often discussed in writings on the "psychology of women" are: depression, lack of assertiveness, and achievement-related difficulties.

**Achievement Motivation and Fear of Success.** Many discussions of sex differences in achievement motivation implicitly deal with the dimensions of instrumentality and expressiveness. As mentioned previously, psychotherapists have described the "healthy" male personality as representing socially valued behaviors such as independence, assertiveness, and achievement orientation; while the "healthy" female personality is believed to possess traits such as submissiveness, dependency, and noncompetitiveness (Broverman et al., 1970). Rychlak and Legerski (1967) propose that the model male should possess ascendent-dominant characteristics; while the model female should be retiring and passive. In light of such expectations regarding men's instrumentality and women's passivity, it is not surprising that many authors have begun to look at sex differences in achievement motivation as well (Bardwick, 1971; Glancy, 1970; Horner, 1972; Lipman-Blumm & Leavitt, 1976; Tresmer, 1977; Wood & Greenfield, 1976).

One of the most influential models for achievement motivation in women has been proposed by Horner (1972). Horner introduced to the literature, the concept of a "motive to avoid success" or a "fear of success". She considered this "motive to avoid success" as a special
type of achievement related anxiety which presumably is more common in women. As such, fear of success tends to inhibit women's achievement-directed, or instrumental, behaviors. Horner investigated fear of success by asking men and women to write stories regarding the outcome of the following stimulus situation: "After first term finals, Anne/John finds that s/he is at the top of her/his medical school class." Each of these stories was scored for the presence or absence of fear of success imagery.

Horner hypothesized that there may be several types of fear of success imagery, with the following three themes occurring most often in subjects' responses: 1) social rejection or the fear of losing friends as a result of success; 2) internal fears and negative affect, including fear of the loss of femininity; and 3) bizarre or hostile responses, including denial. In her initial investigation, Horner found that women were significantly more likely to report fear of success imagery in response to the "Anne" story, than men were in response to the "John" cue. Consequently, one inference which was made was that women are more likely to experience fear of success.

The wealth of research stimulated by Horner's early work suggests that her conceptualization of the achievement problems of women struck a familiar chord. Subsequent investigations have examined a wide range of variables concerned with fear of success. While there have been numerous methodological criticisms of the fear of success literature, (primarily regarding the use of TAT type measures); one of the major contributions that Horner's
conceptualization has offered is in addressing the influence of outcome expectations in the inhibition of instrumental responses.

It is likely that sex-role stereotypes and socialization play a role in the development of men's and women's outcome expectations, and particularly with regard to instrumental and expressive behaviors. Some of the researchers who further pursued the fear of success construct have manipulated sex-role appropriateness and social sanction in their experimental designs. In an adaptation of Horner's design, Monahan, Kuhn and Shaver (1974) crossed the gender of their subjects with the gender of the character in the Anne/John medical school story. Results indicated that both sexes present more fear of success in response to the Anne cue than they did in response to John. Cherry and Deaux (1978), not only crossed the sex of subjects with the sex of the actor in the story, but also manipulated the educational situation. In this investigation, Anne and John were either in medical school or nursing school; and subjects wrote as many fear of success stories for John in nursing school as they did for Anne in medical school. Such a finding would suggest that fear of success relates strongly to beliefs about gender inappropriate behavior; beliefs which are held by both men and women, though the nature of those beliefs may differ.

Lockheed (1975) made adaptations in Horner's original design by manipulating social sanction; subjects were either told that all of Anne's classmates in medical school were men, or that half of Anne's classmates in medical school are women. Both men and women reported
significantly fewer fear of success themes for Anne when half of her classmates were women than when all of her classmates were men. The authors concluded that women classmates provided the necessary social sanction for subjects to be comfortable with Anne's success in a traditionally male profession.

In summary, research designed to investigate the concept of fear of success suggests that when a person is a woman, both male and female subjects predict unpleasant consequences for her following success. When the person is a male, success brings about mostly positive consequences. While investigations more recent than Horner's indicate that the incidence of fear of success in men is higher than she initially hypothesized, some authors (Tresmer, 1976) suggest that the negative imagery expressed by males may be of a different nature from the imagery expressed by women. Such a finding may reflect differences in the socialization of men and women regarding sex-role appropriate behaviors.

**Depression and Learned Helplessness.** Epidemiological research in the United States and United Kingdom reveals that 20 - 30% of all women will experience depressive episodes at some point during the course of their lives, and many of these women will experience moderate to severe episodes. Additionally, the data suggests that depression is disproportionately more prevalent among women, and that women exceed men in their rate of treatment for depression (Weissman & Klerman, 1977). In light of such statistics, it is understandable why some authors believe depression to be one of the most serious
problems facing women today (Jakubowski, 1977).

Many theories have been proposed in attempting to explain these data. Some of these explanations question whether or not the findings are real; often it is speculated that the data is an artifact which may be more appropriately explained by women's idiosyncratic perceptions of life stress, or women's greater willingness to express psychological symptoms of distress, or by the higher rate in which women seek medical help than do men (Klerman & Weissman, 1980). Other explanations assume that the data represents a true phenomenon and subsequently seek to describe it either in terms of physiological/genetic reasons (Klerman & Barrett, 1973; Kety, Rosenthal, Wender, Schulsinger, & Jacobsen, 1975; Kidd, Reich & Kessler, 1974); or psychosocial reasons such as loss (Paykel, 1975), faulty cognitions (Beck, 1970, 1976); and reinforcement (Ferster, 1974; Lewinsohn, 1974).

One of the most widely discussed explanations for the higher incidence of depression in women makes use of findings from the animal laboratory of Martin Seligman and his colleagues (1971, 1973). The learned helplessness theory of depression is based upon the assumption that observation of the causes and cures of learned helplessness in the laboratory (Seligman, 1973) can be applied to depression. According to research done by Seligman and his associates (Seligman, Maier, & Solomon, 1971; Thorton & Jacobs, 1971), an organism learns to be helpless when it is repeatedly exposed to stressful conditions in which any behavior that the
organism engages in will have no utility in reducing the stress. When the organism is later placed in a different stressful situation where it is able to act in ways that will eliminate the stress, it fails to take the initiative to do so. Instead, the organism withdraws and passively endures the stress. It may undereat, and will not defend itself when attacked, etc.

How is the phenomenon of learned helplessness applied to depression in humans? Seligman (1973) theorized that clinical depression, like learned helplessness will occur when individual clients are unable to control important events in their lives. He further suggests that people who have had extensive experiences in mastering environmental stresses and have developed a wide range of coping responses may be less vulnerable to serious incidences of depression. An emphasis on mastery and coping is an effort toward prevention of the kind of stresses that may lead to an episode of helplessness, or even depression.

According to Jakubowki (1977), Seligman's theory has at least four important implications for women and depression:

1) It helps to explain why women are more likely than men to become depressed. Women are socialized to be more dependent, passive, and nonassertive than their male counterparts. The result may be that women are more likely than men to learn to depend upon others and thus, not utilize what opportunities they do have to acquire that wide base of coping skills. Women are often more likely to be told that there exist situations which they are not capable of
handling, and thus they may avoid these situations. If they avoid them, they will never master them. When placed in the situation, they experience a sense of helplessness.

2) The theory suggests that when a woman's failure to act in an assertive (instrumental) manner makes her feel powerless and subsequently depressed, assertion training might be a useful treatment for the depression.

3) The learned helplessness hypothesis helps us to better understand women's feelings of fatalism. It helps to explain why it is often difficult to convince nonassertive clients that it is important and possible for them to act assertively and take control of their lives. Often women have learned through repetition that they cannot positively affect other persons or their environment. Consequently, when they are in a new situation where they are able to act assertively, they are most likely to react to that new stressful situation with learned helplessness and possibly, with feelings of depression.

4) The theory suggests that assertiveness training might be a source of prevention of depression. People who have learned that they are capable of acting assertively in a stressful situation feel in control of their own behavior. They often possess a sense of being in charge of their lives; that they are not puppets who are subject to the demands and expectations of others.

Not only does Jakubowski review the ways in which learned helplessness potentially serves as a useful model of depression in
women, but she also establishes a link between women's depression and their need for instrumental behaviors such as assertion. She states:

When people do not feel that their behavior can make an impact on others - in other words, when they do not feel interpersonally effective - their resulting feelings of anger, helplessness, and hurt may evolve into a wide variety of psychological problems. Although a person needs many skills to be interpersonally effective, one essential skill is the ability to be assertive (p.147).

**Assertion.** Assertion has been a widely research topic in the last two decades. While these investigations are far too many to review in the context of this chapter, it is important to note some of the variables under investigation by researchers in this area. Some authors have chosen to focus on sex differences in assertion; on perceptions of those who behave assertively (Gormally, 1982; Hull & Schroeder, 1979; Kelly, Kern, Kirkly, Patterson, & Keane, 1980); and perhaps most often, on different approaches to assertion training (Eisler, Hersen, & Miller, 1973; Galassi, Galassi, & Litz, 1974; Galassi, Kostka, & Galassi, 1975; Hedquist & Weinhold, 1970; McFall & Lillesand, 1971; McFall & Marston, 1970; Rimm, 1973).

Many believe that assertion training is particularly important for women since women are typically socialized and rewarded for being nonassertive, and punished for being either aggressive or even assertive. Problems arise because although assertion is a positive human behavior which should be equally appropriate for either men or
women, women are more likely to be punished for assertive behaviors because they violate assumptions based upon sex-role stereotyping (Bem, 1973; Broverman et al., 1970). Assertion is more likely to be confused with aggression when demonstrated by women, and therefore is viewed as stereotypic male behavior. Because the stereotypic male is aggressive, independent, active, competitive, etc., it is easier for men to be assertive because it is in keeping with the male stereotype. According to Jakubowski (1980), "it is harder for women to be assertive since their assertion runs counter to both the female sex-role stereotype and their prior sex-role socialization" (p.148). One implication is that when women are not acting assertively, we may need to again distinguish between reasons of low skill, self-efficacy, and expectancies regarding outcome. Concerns with violating norms about sex-role appropriate behavior would suggest that outcome expectations may play an important role in the inhibition of women's assertive responses. In the past, nonassertiveness has typically been attributed to skill deficits (see McFall & Lillesand, 1971; McFall & Twentyman, 1973; Jakubowski, 1978) and/or irrational beliefs (Alberti & Emmons, 1970; Schwartz & Gottman, 1976). Only recently, have practitioners and researchers become more interested in factors other than skill or dysfunctional beliefs, which may serve to inhibit behavior. Cianni-Surridge and Horan (1983) stated that "nonassertiveness does not necessarily stem from cognitive or behavioral skill deficits, but rather such 'passive' behaviors may be a perfectly defensible outcome of rational decision-making" (p.209).
Such rational decision-making might take into consideration results from investigations of perceptions regarding individuals who demonstrate assertive behavior. Kelly et al., (1980) found that assertive women were rated less favorably than men, while Gormally (1982) indicated that when raters were the targets of negative assertion, they tended to view the assertive individual more negatively. Hull and Schroeder (1979) found that while males' and females' responses to the assertive behavior of a female confederate were generally pleasant, there were also more negative effects. Assertive behavior was seen as fair, assertive, nonrevengeful, and friendly; but was also rated as dominant, unsympathetic, and aggressive. While nonassertion by a female was seen as the least potent response, it was also rated as the most pleasant.

Fiedler and Beach (1978) conducted a study in which they investigated the applicability of an expectancy/decision model to assertiveness. While their study was limited by its definition of assertiveness as refusing an unreasonable request, results suggested that participants did consider the consequences of being assertive when making a decision about how to act. This finding was consistent, irrespective of subjects' levels of assertiveness. The authors suggest that whether or not an individual chooses to behave assertively depends upon his/her estimation of the probabilities that bad consequences will occur and good consequences will not.

A review of the investigations described above tends to lend some support to the notion that outcome expectations may play an
important role in an individual's decisions to behave assertively. Such outcome expectations may stem from past experience with the negative effects of assertive responses; from estimates of the probability that bad consequences will occur; or from anticipation of assumed negative consequences resulting from violating expectations for sex-role-appropriate behaviors.

Thus far, this chapter has reviewed literature on a wide range of topics relevant to the understanding of gender differences, and more specifically, to those concerns of particular interest to women. As may be gathered from this review, attempts at integrating the literature on sex-role stereotyping, socialization practices, and the mental health concerns of women are time consuming, yet potentially important to our further understanding of gender differences. There is a clear need for theory which is broad enough to perhaps unify and integrate existing concepts such as those mentioned above, and simultaneously provide us with a more comprehensive understanding of women's and men's personal and social development.

Social learning theory has been recommended as one such alternative (Galassi & Galassi, 1978). Essentially, it is believed that existing models, such as those which focus on skill deficits, irrational beliefs, or anxiety management, fail to adequately address more complex interpersonal behaviors. As has been mentioned throughout this chapter, there is evidence that researchers ought to be looking at not only at performance skills, but at expectations regarding personal self-efficacy and outcome expectations as well
Bandura's theory is one which conceptualizes the relationships between self-efficacy expectations, outcome expectations, and behavior. Bandura distinguishes between the two types of expectancies in the following way:

An efficacy expectation is a judgment of one's ability to execute a certain behavior pattern, whereas an outcome expectation is a judgment of the likely consequences such behavior will produce. The expectation that one can jump six feet is an efficacy judgment; the social recognition, applause, trophies and self-satisfactions anticipated for such a performance constitute the outcome judgments. In the exposition of the theory, these two expectancy systems were defined as follows: "An outcome expectation is defined as a person's estimate that a given behavior will lead to certain outcomes. An efficacy expectation is the conviction that one can successfully execute the behavior required to produce the outcomes" (1977, p. 193).

In the above definition of self-efficacy expectations, Bandura further suggests that "successfully" refers to the execution of the behavior pattern and not to its effects, outcomes, or emotional accompaniments. This is an important distinction to make with regard to his theory.
While much of Bandura's writing has focused upon self-efficacy expectations, he does acknowledge that self-efficacy is regarded as an influential, though obviously not the sole determinant of behavior. The social learning theory of causality, in which the efficacy subpostulate is imbedded, deals with multiple determinants operating as reciprocally interlocking factors in the acquisition and regulation of behavior (1978, p.237).

One such determinant is that of outcome expectations. Numerous investigators have attempted to conceptualize act-outcome (Irwin, 1971; Bolles, 1975; Maier & Seligman, 1976; Rotter, 1966) in terms of beliefs or expectancies that certain behaviors will or will not give rise to specific outcomes.

In understanding the role of outcome expectations, it is important to clarify the complex interaction on factors which constitute such expectations. Vroom (1964) suggests that initially, we need to make a distinction between components concerned with outcomes, and those concerned with expectancies. More specifically, outcomes can be discussed in terms of valences, while expectancies can be characterized by varying degrees of strength. Together, these outcomes and expectancies join together in creating force on an individual to perform an act.

In Vroom's system, an outcome is positively valent when the person prefers attaining it to not attaining it, whereas it is negatively valent when the person prefers not attaining it to
attaining it. Outcomes may also have valences of zero, which indicate that an individual is indifferent to attaining them or not attaining them.

On the other hand, expectancies are defined as "momentary beliefs concerning the likelihood that a particular act will be followed by a particular outcome" (Vroom, 1964, p.17). The strength of an expectancy is determined by the subjective certainty that the act will or will not be followed by the outcome. As such, maximal strength is associated with the belief that the act will be followed by the outcome, while minimal strength is evidenced by the subjective certainty that the act will not be followed by the outcome. Strength of expectancies may range from zero (minimal) to one (maximal).

The concept of force refers to the fact that valences and expectancies combine together in determining an individual's choices. According to Vroom,

behavior on the part of the person is assumed to be the result of a field of forces each of which has direction and magnitude. The force on a person to perform an act is a monotonically increasing function of the algebraic sum of the products of the valences of all outcomes ad the strength of his(her) expectancies that the act will be followed by the attainment of these outcomes" (Vroom, 1964, p.18).

Vroom's discussion of outcomes and expectancies has some implication for the likelihood of individuals engaging in any
behavior, and in this context, in instrumental behaviors. First, he suggests that an outcome with a high positive or negative valence will have no effect on the production of force unless there is some expectancy (greater than zero) that the outcome will be attained by the act. Secondly, the alternative case is true: the strength of the expectancy will have no effect upon force (and behavior) if the valence of an outcome is zero (i.e., the person is indifferent to the outcome). Because force is determined by the product of valences and expectancies, when either of these two components is zero (has no influence), individuals will not be "pushed" to engage in the behaviors in question.

Vroom's discussion of outcome expectancies can be useful in further an understanding of the outcome expectations as explicated in the social learning model. In a special issues of Advances in Behaviour Therapy and Research addressing perspectives on self-efficacy theory, Bandura (1978) was asked to more clearly differentiate the expectancy systems operating in social learning theory. One way in which he attempted to make such a distinction was via a discussion of Seligman's learned helplessness model:

In Seligman's conceptual analysis, learned helplessness occurs because the organism learns that its outcomes are independent of its responses....Self efficacy theory distinguishes between two different expectancy sources of futility. People can give up trying because they seriously doubt that they can realize the required level of
performance. Or they may be assured of their capabilities but give up trying because they expect their efforts to produce no results in an environment that is unresponsive or consistently punishing. These two separate sources of futility have quite different causes and remedial implications. To change efficacy-based futility requires development of competencies and a sense of personal effectiveness. In contrast, to change outcome-based futility necessitates changing the social environment so that people are rewarded for using the competencies they already possess" (Bandura, 1978, p.238).

It is from a statement such as this one that the utility of social learning theory emerges as a broadly based model for understanding gender differences in instrumental behavior. Using Bandura's conceptualization of the influences of self-efficacy and outcome expectations, and Vroom's system for describing outcomes and expectancies, it is possible to begin to develop some predictions about those factors which may serve to encourage, or inhibit, instrumental behaviors in women and men.

Bandura (1978) provides a matrix (Figure 1) which is useful in making predictions about behavior, based upon self-efficacy expectations, outcome expectations, and the interaction of the two. Initially, the theory would predict that individuals with low self-efficacy expectation are more likely to either fail to attempt behaviors, or readily give up their efforts should they fail to
produce results than individuals with high self-efficacy expectations.

<table>
<thead>
<tr>
<th>OUTCOME EXPECTATIONS</th>
<th>SELF-EFFICACY</th>
<th>EXPECTATIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>+</td>
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<td>Not Act</td>
</tr>
</tbody>
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Act

Figure 1.

Individuals with low, and/or negative, outcome expectations are less likely to engage in instrumental behaviors that those individuals with high, and/or positive, outcome expectations. The interaction of self-efficacy and outcome expectations also provides predictions regarding action:

Social learning theory hypothesizes that those of low efficacy will give up readily should their efforts fail to produce results, but efficacious individuals will intensify their efforts, and if necessary, they will seek to change the environmental contingencies (Bandura, 1973). Should change be difficult to achieve, given suitable alternatives, they will desert environments that are unresponsive to their efforts and pursue their activities.
elsewhere (Bandura, 1978, p.239).

Bandura suggests then, that individuals with low self-efficacy tend to abandon their efforts when met with failure or undesirable outcomes, whereas highly self-efficacious individuals, when met with undesirable outcomes, are more likely to maintain their behaviors, while attempting to change the environment. Only when such attempts continue to fail, will these more efficacious individuals choose to withdraw from the situation.

These are general predictions based upon social learning theory as proposed by Bandura. Additionally, Vroom's discussion of outcome expectancies provide more specific predictions regarding the influence of outcome expectations on actions. Information from this outcome-expectancy theory would suggest that there will be no force to motivate individuals to engage in behaviors if:

1. there is no expectancy that the outcome will be attained by some act, regardless of the valence of the outcome;

2. the valence of the outcome is zero (e.g., indifferent), regardless of the strength of expectancy regarding its attainment.

Force directing an individual toward a behavior will exist when there is a positively valent outcome ($0 \times 1$). Force which directs an individual away from a behavior will exist when there is a negatively valenced outcome, also accompanied by an expectancy greater than zero.

These are general predictions about behavior based upon social learning and outcome-expectancy theories. The purpose of the present
research is to investigate the utility of social learning theory as a model for understanding gender differences in instrumental behavior. Such predictions are useful to this type of research; however, it is first necessary to select some context in which to investigate these gender differences. As mentioned previously in this chapter, Galassi and Galassi (1978) have proposed that social learning theory might function as a new way in which to understand the development of nonassertion. And, as has been established in this review, assertion is one instrumental behavior which has commonly been used in describing differences between the sexes; as sex-role stereotypes have labelled women as "passive", "unassertive", and "dependent", while men are "assertive", "aggressive", "competent", and "independent" (Bem, 1974; Broverman et al., 1970). In short, women are socialized to assume a more "expressive" role, while "instrumental" behaviors are classified as masculine, or belonging to men.

It is interesting to note that assertion is one area in which there appear to be few actual skill differences between men and women when tested in the lab, yet "lack of assertiveness" has historically been viewed as much more prevalent among women. In the last two decades, research investigating the efficacy of assertiveness training programs, many of them designed specifically for women, has become quite popular. However, it must be noted that much of the literature in this area approaches the assertiveness problem from the perspective of skill deficits; and in turn, suggests skill training
as the solution (Blechman, 1980). On the other hand, practitioners who work with women with this presenting problem have become concerned that assertion training which focuses on the development of assertive behaviors, may not adequately address their concerns. Why not? Perhaps, lack of assertiveness may be attributed to more than simply skill deficits; expectations regarding self-efficacy and outcomes may also be instrumental variables in women's choices to act assertively in their environments.

The specific purpose of the present investigation was to explore the influences of skill, self-efficacy expectations, and outcome expectations on individuals' choices regarding assertive behaviors. Possible gender differences with respect to these variables was also a subject of this investigation. Certainly the literature on sex-role stereotyping and socialization would suggest that assertion may be a more socially inappropriate behavior for men than for women. As such, outcome expectations regarding assertive behaviors may be more influential in women's choices than men's. On the other hand, there are authors who suggest that soft, positive assertions by men may be as much in violation of sex-role expectations, as are negative assertions by women (Hess, Bridgwater, Bornstein, & Sweeney, 1980). While outcome expectations may emerge as more important (than either skill or self-efficacy) for men in some very specific situations (e.g., positive or soft assertions); one major hypothesis in this study asserts that overall, outcome expectations are more influential when women make choices involving assertion. Nonetheless, the
current study also attempted to look at situational influences related to choices, self-efficacy, and outcome expectations regarding assertion.

**Summary.** The literature on gender differences in complex interpersonal behavior is in need of a broadly based theory which will attempt to unify and integrate numerous concepts proposed by researchers. At the same time, such a theory should also provide some implications for the work of practitioners. Bandura's social learning theory (1977) has been proposed as one such model. Social learning theory is designed to distinguish between the influences of self-efficacy expectations and outcome expectations, yet in light of the inevitable interaction of the two also offer predictions regarding an individual's behavior. While much of the mental health literature has focused upon skill deficits as the major source of an individual's difficulties, the examination of sex-role stereotyping and social learning theory would indicate that self-efficacy and outcome expectations may also be influential in the inhibition of instrumental behaviors, particularly for women.

The purpose of the present study was to investigate the relationships among the variables of performance, self-efficacy expectations, and outcome expectations, particularly as they interact in influencing men's and women's decisions to engage in instrumental behaviors. While it has been suggested that the literature on achievement motivation, learned helplessness and assertion share many common concerns regarding the effects of
sex-role stereotyping, negative outcome expectations, etc., assertion situations served as the focus of this investigation. This was so for a number of reasons: 1) Of the three areas, assertion has been the most widely researched; 2) it has the most immediate and tangible applications for practitioners; 3) behavioral and self-report measures of performance are most readily available; and 4) of the three areas, it is the most easily operationalized and tested within the context of social learning theory. As such, assertion behavior logically appeared to be a reasonable place to begin to investigate the applicability of social learning theory in understanding more complex social behaviors.
CHAPTER TWO
REVIEW OF SELECTED LITERATURE

The intent of this chapter is to review the research literature which is relevant to the purposes of the present study. The introduction to this research, which was provided in chapter one, briefly reviewed critical literature in the areas of sex-role stereotyping; differential perceptions of the competence and mental health of men and women; achievement motivation; learned helplessness; assertion; and social learning theory. This integrative approach to the literature served to establish the framework from which the hypotheses in the current investigation were developed. Rather than continuing to review such a wide body of literature, the focus of this chapter is on an examination of the assertion literature. The present study sought to examine the utility of social learning theory in understanding men's and women's decisions regarding assertion; as such, the literature reviewed here primarily comes from the research on assertion.

Defining Assertion

It is, of course, critical that in any research, the construct(s) under study should be carefully defined. Unfortunately, the interpretability of the assertion literature has often been called into question because of the great variance in definitions
used in its research. In the last two decades in particular, "assertion" has been a popular term, yet its meaning may be highly individualized (MacDonald, 1982). Some of the earliest definitions of assertion chose to focus on its relationship to anxiety. Salter (1949) describes differences between excitatory and inhibitory personalities; the excitatory personality being one who is relaxed, spontaneous, and direct in responding to the environment. Additionally, the excitatory personality is free of anxiety. Salter addresses six techniques for increasing excitation which appear strikingly similar to those utilized in assertion training: feeling talk, the deliberate utterance of spontaneously felt emotions; contradiction, expressing feelings which differ from someone else's; deliberate use of "I" statements; expression of agreement when praised; and improvisation.

Wolpe (1958, 1969) generally concurred with Salter's notion that assertive behavior consisted of the expression of any emotion other than anxiety. Moreover, for Wolpe this implied that interpersonal anxieties or neuroses might be effectively treated with assertiveness training.

Other authors have attempted to define assertion in terms of its specific verbal and nonverbal components. Most notable and often cited is the work of Eisler, Miller, and Hersen (1973) who differentiated between high and low assertive subjects by rating roleplayed behavior on the dimensions of duration of looking, smiles, duration of reply, latency of response, loudness of speech, fluency
of speech, compliance of content, content requesting new behavior, and appropriateness of affect. Similarly, Serber (1982) discusses the nonverbal components of loudness, fluency, body expression, eye contact, facial expression, and proxemics in developing an operational definition of assertion.

Some authors have focused primarily on verbal content in defining assertion. Rathus (1973, 1975) presented numerous behavioral dimensions of assertion which emphasize the kinds of statements made by individuals, such as commendations, rectifications, feeling talk, disagreements, refusals and appropriate self-disclosure. Friedman (1969) operationally defined assertion in terms of the specific comments an individual makes in response to an interruption. Threats, demands to stop, insults, strong disagreements, and requests to stop were viewed as assertive responses; while sarcasm, statements of interference; milder disagreements, expression of irritation, and requests for help connoted nonassertion. The McFall program of research (McFall & Marston, 1970; McFall & Lillesand, 1971; McFall & Twentyman, 1973) has typically restricted assertion to only those situations involving the refusal of unreasonable requests.

Another approach to understanding assertion focuses on the influence of environmental settings; a term which broadly includes the variables of target person gender and familiarity, and assertion type. Galassi, DeLeo, and Galassi (1974) developed the College Self-Expression Scale to measure three types of assertion (positive,
negative, self-affirmation) in a variety of contexts. The results of a factor analytic study suggested that only one of nine factors dealt entirely with an environmental setting; with the items of that factor primarily representing situations involving parents.

The notion that assertion is a situationally specific behavior is one which has been widely circulated through the assertion literature, and has been supported by the results of several investigations (Eisler, Hersen, Miller, & Blanchard, 1973; Epstein, 1980; Fiedler & Beach, 1978; Kirschner & Galassi, 1983; Mathison & Tucker, 1982). This approach to defining assertion is discussed in detail at a later point in this chapter because of its relevance to the methodology utilized in the present study.

Perhaps two of the broadest definitions of assertion come from Lazarus (1973) and MacDonald (1982). Lazarus suggests that:

The main components of assertive (or expressive) behaviors may be divided into four separate and specific response patterns: the ability to say no; the ability to ask for favors or to make requests; the ability to express positive and negative feelings; the ability to initiate, continue, and terminate general conversations (Lazarus, 1973, p.697).

MacDonald (1982) discussed a procedure in which students in an English course were asked to generate definitions for assertion, aggression, and submission. Definitions for these three terms were also reported from several dictionaries. The following summary definitions of these constructs were produced as the result of a
content analysis. Assertion was broadly defined as "the open expression of preferences (by words or actions) in a manner causing other people to take them into account"; while aggression is characterized by "the hostile expression of preferences (by words or actions) in a manner coercing other people to take them into account. "The act of yielding humbly, and allowing one's own preferences to be overlooked" constituted the general definition of submission.

In summary, the assertion literature presents a broad range of approaches to defining the construct: some which utilize emotional/affective criteria; some which are behaviorally referenced; others which focus primarily upon content; and still others which seek to define assertion in terms of environmental variables. The problem remains one of developing a definition which allows for comparison of research; yet one which is operationally defined well enough to minimize threats to the internal validity of the investigation. This concern emerges repeatedly in the course of this literature review.

Assessing Assertion

Numerous instruments for measuring assertion have been developed over the years, and reflect both self-report and behavioral methods. As one might gather, some of the abovementioned issues related to defining assertion quickly become recognizable in the development of instruments intended to measure such a construct. This portion of the literature review briefly discusses both the self-report and behavioral measures of assertion most frequently cited in the
literature, as well as the results of a number of studies investigating the reliability and validity of such measures.

Galassi and Galassi (1978) provided a critical review of the literature in this area, and specifically addressed the assessment of assertion. Some of the more notable self-report measures include: the Adult Self-Expression Scale (Gay, Hollandsworth, & Galassi, 1975); the Assertion Inventory (Gambrill & Richey, 1975); the Assertiveness Inventory (Alberti & Emmons, 1974); the College Self-Expression Scale (Galassi, DeLo, Galassi, & Bastien, 1974); the Conflict Resolution Inventory (McFall & Lillesand, 1971); the Rathus Assertiveness Schedule (Rathus, 1973); and the Wolpe-Lazarus Assertiveness Questionnaire (Wolpe & Lazarus, 1966).

The Galassi (1978) paper reported that the most extensive validation studies have been done on the Adult Self-Expression Scale, the Gambrill and Richey Assertion Inventory, the Conflict Resolution Inventory, the College Self-Expression Scale, and the Rathus Assertiveness Schedule.

The College Self-Expression Scale (CSES) was developed to represent a variety of situations in which subjects could respond to the degree of difficulty of engaging in assertive behaviors. Its usefulness stems from its attempt to represent a wide range of assertions (positive, negative, self-affirmation) with a range of target persons. Additionally, it was developed specifically for use with a college population. Galassi, Galassi, and Litz (1974) reported two-week test-retest reliability coefficients of .89 and .90.
for the CSES. Concurrent validity was tested utilizing the relationship between resident assistants' ratings of dorm members' assertiveness and those members' CSES scores (Galassi & Galassi, 1974). Research has indicated that behavioral roleplays are able to differentiate between high, low, and moderate scorers on the CSES (Galassi, Hollandsworth, Radecki, Gay, Howe, & Evans, 1976). Additional studies have demonstrated both the construct (Galassi, DeLo, Galassi, & Bastien, 1974) and concurrent (Kirshner & Galassi, 1983) validity of the CSES.

In an investigation intended to study the factor structure of the College Self-Expression Scale, Galassi and Galassi (1979) found that this self-report measure is "multifactored, that the factor structure is relatively stable within the same population, and that sex differences influenced the factor structure less than population differences" (p.117). Factor I represents items which are concerned with self-affirmation and negative assertions which often occur when an individual is angry because his or her rights have been violated. Factor II generally reflects a hypersensitivity to how others will evaluate the individual, and as such, is described as an "evaluative" dimension. Factor III is concerned with positive assertions such as the expression of compliments to others and disclosures of liking and love. Items which focus on the volunteering of one's opinions tend to be represented by Factor IV. Factor V is concerned with negative assertions which most commonly include expression of anger, annoyance, or displeasure. Positive assertions which involve the
expression of compliments and appreciation for others constitute the sixth factor in the analysis. The last factor, Factor VII, represents items which deal with the expression of anger or disagreement in interactions with parents. The Galassi (1979) concluded that "although the CSES can be conceptualized as containing several common factors, the moderate percentage of total variance (30-41%) accounted for suggests the presence of a substantial amount of unique factor variance in the CSES. These findings support a situation-specific rather than a trait theory of assertive behavior" (Galassi & Galassi, 1979, p.126).

The Rathus Assertiveness Schedule (1973) is another self-report measure whose norm group is college students. While, like the CSES it also presents a variety of behaviors, persons, and situations; a major problem is its lack of items reflecting positive assertions such as love, affection, and compliments. Similarly, it presents situations involving more distant or less familiar target persons, and gives fewer items to those contexts involving more intimate target persons such as family, partners, and friends.

Perhaps the most important contribution of the Gambrill-Richey Assertion Inventory is its effort in differentiating between the frequency of assertive behavior and an individual's level of discomfort produced by performing the behavior. Very limited validity data is available on the GRAI, and test-retest reliability coefficients are reported to be .87 (frequency) and .81 (discomfort).
One alternative to the use of self-reports measures of assertion, or at least to solely relying of such data from subjects, is the availability of several behavioral measures of assertion. Perhaps the two most often cited behavioral tests are the Behavioral Assertiveness Test (Eisler, et al., 1973) and the College Women's Assertion Sample (MacDonald, 1974).

The Behavioral Assertiveness Test was originally developed by Eisler and his colleagues in order to differentiate between high and low assertive subjects using specific behavioral categories. Subjects in the investigation were 30 male inpatients psychiatric patients, and were asked to roleplay a series of 14 assertiveness situations with a female confederate. Roleplays were videotaped and later rated by trained judges on the measures: duration of looking, smiles, duration of reply, latency of response, loudness of speech, fluency of speech, compliance content, content requesting new behavior, affect, and overall assertiveness. Results suggested that the BAT as operationalized in this study was able to discriminate between the low and high assertive groups on five of the nine behavioral measures. Additionally groups divided on the basis of the overall assertiveness score on the BAT also differed significantly on the Wolpe and Lazarus self-report measure.

While this particular behavioral test has served as a model for use in other investigations, several concerns might be raised about the results of this research. First, the focus of this study was on inpatient psychiatric patients, and as such, the question of
generalizability to other populations who are more often the targets of assertion research, must be raised. Secondly, the confederate used in the roleplays was female, and participants in the research were male. As will be discussed later in this review, sex of target person may be an important variable in understanding assertive behavior. On a similar note, the authors description of the roles played by this woman clearly adhere to sex-role stereotypic assumptions about women's behavior (e.g., "a female role model was employed in test situations as the patient's wife, sales clerk, waitress, etc..."). Interpretations about the assertion skill of subjects and the interactions between subject and confederate must be considered in light of these variables.

In an extension of this research, Eisler, Hersen, Miller, and Blanchard (1975) examined the effects of social context on assertive behavior in interpersonal situations. Once again, male inpatient psychiatric patients (n=60) were asked to roleplay situations with a confederate. In this particular study, however, the gender of the confederate, familiarity with the subject, and type of assertion were systematically varied. The results of the study supported the hypothesis that an individual's assertiveness is related to the context of the interaction. These authors found that male subjects were more likely to respond assertively toward women than men in situations which required them to "stand up for their rights," and were more likely to offer praise and appreciation to females than males in situations requiring positive assertions. Once again, the
The College Women's Assertion Sample (CWAS) is a behavioral measure which utilizes 52 roleplaying situations in assessing subjects' assertion. Rationale for the development of the item pool was based upon two assumptions: 1) that behavior should be measured in calibrated situational contexts, given that the probability of observing a given behavior is strongly affected by the situation within which the behavior is observed; and 2) situational contexts would be meaningful only if they were done by a sample from the population to be assessed (MacDonald, 1978). The manual for the CWAS provides operationally defined scoring criteria for each of the 52 roleplays.

The CWAS has been the target of numerous reliability and validity studies. MacDonald (1978) reports that interrater reliabilities have been consistently high, and that test-retest reliabilities have also been quite good (r=.80's). Support for the convergent and discriminant validities of the CWAS is evidenced by the MacDonald (1978) and the Kern and MacDonald (1980) research. This latter investigation was designed to examine the relationships among several measures of assertion. Investigators asked 120 undergraduate women to complete several behavioral and self-reports measures of assertion and anxiety. Participants were tested and then retested at one of three intervals: one week, four weeks, or ten
weeks. Behavioral measures included the CWAS (assertion); a modified Timed Behavior Checklist, the average latency of responding to CWAS items, and the average duration of responses to the CWAS items (anxiety). Self-report measures of assertion included the Conflict Resolution Inventory (CRI), the CSES, and a global self-rating of assertiveness. Anxiety measures included the Fear of Negative Evaluations Survey (FNE; Watson & Friend, 1969), the Self-Report Inventory of Anxiety, Scale II of the Social Reactions Inventory (SRI), a global self-rating of anxiety, and the Autonomic Perceptions Questionnaire (APQ). Participants were tested and retested individually, and scores for each of these measures were collected. Results indicated significant Pearson-r's between test-retest for all groups with one exception: the ten week global rating of assertiveness. These significant correlations thus provided evidence of the temporal stability of these measures. While all of the assertion inventories utilized in the present study showed evidence of convergent validity, only the CWAS demonstrated significant discriminant validity as well.

Galassi and Galassi (1978) suggested that while the CWAS is significantly correlated with self-report measures of assertion, one of its weaknesses is evidenced by the significant correlation between the CWAS and a paper and pencil measure of aggression. The authors suggest that this correlation may reflect the "underlying submission-aggression continuum upon which the instrument was constructed" (p.20). Conversely, the strengths of the CWAS include
the following: 1) the development of an item pool which was derived
from the responses of a sample from the population for whom the
instrument was developed; 2) the development of 52 situations which
reflect a wide range of situationally specific assertion contexts;
and 3) the more than adequate reliability and validity data which has
been generated thus far for this instrument.

The Validity of Assertion Measures

In general, the research on the overall relationships between
self-report and behavioral measures of assertion has been fairly
disappointing. This section reviews some of the recent literature
which has investigated the relationships between self report and
behavioral measures; as well as relationships between roleplaying
measures and in vivo measures of assertion.

Numerous authors have agreed that despite the increased use of
roleplay measures of assertion, the validity of such measures is
still quite uncertain. Studies done with male inpatient psychiatric
patients have provided some support for the use of behavioral
measures in differentiating between high and low assertives (Eisler,
et al., 1973; Eisler, et al., 1975). The data for college students
is much less promising in making such a discrimination. For both
psychiatric patients and college students, the relationship between
role-playing and naturalistic assertion appears to be a weak one
(Hersen & Bellack, 1977). Other research has focused upon those
variables not typically under study which may affect subjects'
performances on behavioral tests of assertion. In one such study,
Jenkins, Adams, and Rahaim (1981) examined the effects of personal investment in roleplay situations and found that subjects reported differential investment in high and low investment contexts. Moreover, all subjects, regardless of self-reported level of assertiveness, demonstrated qualitatively better assertive responses in high-investment than in low-investment situations. Such results suggest that extraneous variables may differentially effect subjects' performances on behavioral measures of assertion.

Cochran (1981) utilized a sample of community adults (mean age=41 years) in examining the relationships between self-report and behavioral measures of assertion. Participants were asked to complete the Rathus Assertiveness Schedule, the Social Anxiety and Distress Scale, the Fear of Negative Evaluations Survey and the Dysfunctional Attitude Scale. Additionally, the Behavioral Assertiveness Test-Revised (Eisler et al., 1975) was administered to all subjects. Canonical correlations were performed on two sets of variables: self-report and behavioral measures. The author summarized the association between these two sets of measures by describing two independent domains:

"The first, in terms of self-report, seems to index an affective component to assertion. Behavioral measures that accompany this component are nonverbal in nature, and seem to reflect the way a response is delivered. A second, independent relationship between self-report and behavior involves cognitive aspects of assertion, 'irrational
beliefs', and behavioral measures which assess primarily the content of the response" (p. 8).

Another study which sought to examine the relationships between self-report and behavioral measures of assertion was conducted by Nesbitt (1979). This investigation attempted to assess the utility of the Rathus Assertiveness Schedule and the College Self-Expression Scale in predicting subjects' performances in situations requiring positive assertion. Participants were 40 male undergraduates who were pretested on the RAS and the CSES, and then randomly assigned to one of four experimental conditions: videotaped modeling, practice control, bibliotherapy, or positive thinking control group. Participants were also pretested on a behavioral measure which consisted of three different situations requiring positive assertion responses. All responses to the behavioral assertion test were videotaped and later rated by two graduate student judges. Following the pretests, subjects were exposed to experimental conditions and then posttested on the behavioral test, the RAS, and the CSES. Two weeks later, a third administration of the RAS and CSES served as a followup assessment. Results of this investigation suggested that total RAS score, total CSES score, and scores on items believed to measure positive assertion were all poor predictors of individuals' abilities to demonstrate positive assertion in a behavioral setting. Moreover, the best predictor of an individual's actual performance on the
behavioral test was his own assessment of his overall level of assertiveness. The author concluded that how individuals think they would respond and how they actually do respond when confronted with an actual assertion situation were not highly correlated. It is important to note, however, that conclusions in this particular investigation are limited by the population sampled (undergraduate males) and by the type of assertion under study (positive expressions).

Schwartz and Gottman (1976) found no significant differences in the behavioral competence of high, medium, and low assertive individuals found in the college population. Consequently these authors proposed that nonassertion in college students may not reflect skill deficits as has often been suggested in the literature; but rather, that students failed to demonstrate assertiveness because of dysfunctional cognitive habits or beliefs.

In a study which further examined the relationship between behavioral competence and self-evaluation, Alden and Cappe (1981) found significant differences between nonassertive and assertive subjects on a variety of measures. Fifty male and female subjects completed the Gambrill-Richey Assertion Inventory (GRAI) and the Irrational Beliefs Inventory. Following completion of these instruments, subjects were asked to roleplay four assertion situations involving unreasonable requests, requests for new behavior, and the expression of
differing opinions. Participants were instructed to respond "as assertively as possible" on the roleplay test, rather than as they normally would, because the investigators were most interested in a measure of optimal behavioral performance. Following each of the four roleplays, participants rated their levels of anxiety in that particular context. Each roleplay was videotaped and later rated by two undergraduate trained judges. Additionally, subjects were asked to rate their own performances, and the videotaped performances of three models (assertive, aggressive, nonassertive) for assertive content, effectiveness, anxiety, and likeability.

Results of this investigation indicated that nonassertive individuals reported a lower probability of engaging in assertion; greater anxiety during roleplay testing; and a greater likelihood of endorsing irrational beliefs. What is perhaps most interesting however, is the finding that assertive and nonassertive subjects did not differ significantly on behavioral measures of assertion. While behavioral differences did not exist, nonassertive subjects tended to rate themselves as less assertive, less effective, and more anxious than their assertive counterparts. Similarly, nonassertive subjects' ratings of themselves tended to agree with observers' ratings of them, while assertive subjects were more likely to rate themselves much more positive than did the observers. Finally, assertive and nonassertive subjects did not significantly differ
In their ratings of the three videotaped models. In general, subjects tended to rate the aggressive and nonassertive models as less effective and less likeable than the assertive model. In summary, this research tends to lend support to the hypothesis that nonassertion in college students may be more often a function of stringent cognitive self-evaluations than of actual skill deficits.

The literature discussed previously in this section has focused on the relationships between self-report and behavioral measures of assertion. There is also a substantial body of research which has investigated the relationships between roleplay measures of assertion and more realistic behavioral measures such as contrived in vivo tests and observations of naturalistic behavior. For example, Bellack, Hersen, and Turner (1978) report two studies in which they sought to examine the validity of roleplay tests for social skills. The first of these studies investigated the relationship between components of the Behavioral Assertion Test-Revised (BAT-R) and ratings of overall response effectiveness and quality which were independently made by mental health experts. Five female psychiatric inpatients roleplayed two positive and two negative assertion scenes which were videotaped and later rated for nonverbal and content dimensions of assertion. Additionally, ten mental health experts rated these performances for response quality and effectiveness. The results of a stepwise multiple
regression analysis on these data suggested that BAT-R response components on positive scenes were less predictive of effectiveness and quality ratings than were the BAT-R components for the negative scenes. It is possible that positive scenes are more difficult to rate using behavioral criteria, or perhaps, there are more important components for predicting positive assertion which are not included in the particular behavioral measure utilized in this study.

In the second experiment, Bellack et al. (1978) asked ten male and ten female psychiatric patients to respond to eight scenes on the BAT-R. Subjects' behaviors in a standardized interview and during group therapy were also recorded and rated for assertive content. The intent of this second study was to utilize more naturalistic measures of assertion (interview and group therapy) to validate the BAT-R measure. Two issues in doing so became apparent: 1) the interview and group therapy contexts differed from the BAT-R both in content (assertion) and form (roleplay vs. non-roleplay); and 2) response components assessed in these three situations were not identical, nor were they directly translatable. Consequently, the only BAT-R component which was consistently related to responses on the other two measures was 'response latency.'

The authors concluded that these two studies provide somewhat mixed impression regarding the external validity of the BAT-R. The initial study indicates that, in combination,
several of the components on the BAT-R are predictive of quality and effectiveness ratings made by mental health experts, though clearly more so for negative assertions than for positive ones. Results also indicated that this particular roleplay measure of assertion is quite limited in its generalizability in light of the particular situations used; sampling from a psychiatric population; and its limited range of interpersonal cues. The limitations of this particular behavioral measure have several implications for research in this area:

"specific components which make major contributions to the efficacy of response will vary considerably according to the type of response (positive or negative assertion; male or female); contributions of components within a response class will vary according to specific definitions of response adequacy (e.g., effectiveness, quality); and response components predict response adequacy much better in combination than individually. Effective analysis of social skill requires both situation-specific and response-specific definition" (Bellack et al., 1978, p.461).

Rakos, Mayo, and Schroeder (1982) utilized a slightly different procedure in investigating the validity of a roleplaying test of assertion. Male and female introductory psychology students were asked to complete a ten-item measure in which they predicted the likelihood of responding assertively toward a male protagonist.
Subjects were also presented with a behavioral roleplaying test in which ten items identical to those on the self-report measure were presented via audiotape. Responses to each of the ten roleplays were then audiotaped and later rated only for verbal content (requests; refusals). Lastly, during the course of the investigation, subjects were confronted with four in vivo situations (of which they were unaware). Two of these situations called for the refusal of unreasonable requests while the other two required subjects to request behavior change on the part of the protagonist. Responses to these situations were audiotaped and then later rated for verbal content and overall assertiveness as well as for several nonverbal components of assertion.

Findings suggested that performances on roleplay measures of assertion bear little relationship to behavior observed in more naturalistic situations. At all levels of self-reported assertiveness, roleplay measures were generally not useful in predicting in vivo assessments of assertion. According to Rakos and colleagues (1982), the only meaningful relationship between in vivo and roleplay assertion was for males who self-reported a high level of assertion. In these cases, verbal content from the brief roleplay situations was highly correlated with ratings of overall assertiveness and verbal content from the in vivo measures.

In a similar study, Higgins, Frisch, and Smith (1983) provided a comparison of roleplayed and natural responses to identical assertion situations. Female undergraduate students were assigned to one of
three experimental groups: informed roleplay, uninformed roleplay, and \textit{in vivo} behavior. Subjects in both roleplay groups were informed that the situations presented were contrived, that the protagonist in each situation was a confederate of the experimenter, and that the task was for them to respond as "realistically" as possible. In addition, subjects in the "informed" group were also told that the investigators were particularly interested in their assertiveness skills. All subjects then participated in situations which involved conversational interactions and requests to borrow class notes. Results indicated that members of both roleplay conditions responded more assertively than did subjects in the \textit{in vivo} condition; and that subjects who were additionally informed about the assertiveness focus demonstrated even greater levels of assertive behavior in their roleplays. A major implication of this research is that roleplay measures are likely to produce assessments of assertion which are more inflated than those from naturalistic observations. Generalizations from this investigation are of course limited to female undergraduates; and perhaps more importantly, to a very narrow stimulus situation and response class (request to borrow class notes; refusal).

One other investigation examining the relationship between contrived \textit{in vivo} and roleplay measures of assertion was developed by Gorecki, Dickson, Anderson, and Jones (1981). These authors utilized a $2 \times 2$ factor design to investigate the external validity of a roleplay test of assertion. Thirty-two male and female
undergraduates completed the Conflict Resolution Inventory (CRI) and were assigned to high- and low-assertive groups on the basis of their scores. Subjects were then randomly assigned to one of two assessment conditions: roleplay or in vivo. The in vivo measure presented subjects with three different situations which essentially called for negative assertions or self-affirmations. In the roleplay condition, subjects listened to the same three situations presented on audiotape, and were asked to imagine that the situation were actually happening. Subjects' responses in both conditions were audiotaped and later rated by two judges on five dependent measures of assertion: assertive content; requests for new behavior; affect; response duration; and indices of anxiety (or speech disturbances).

Four hypotheses were generated by the authors (Gorecki et al., 1981): 1) high assertives in the roleplay condition would behave more assertively than high assertives in the contrived condition; 2) low assertives who roleplayed would behave more assertively than low assertives in the in vivo condition; 3) high assertives who roleplayed and high assertives in vivo would behave more assertively than low assertives in either assessment condition; and 4) high assertives would report more positive self-statements and fewer negative self-statements than low assertives, regardless of assessment condition.

In general, results supported most of the hypotheses mentioned above. Participants who were high-assertives in the roleplaying condition demonstrated more assertive content and requests for new
behavior than did low assertives in the same condition. Low
assertives who roleplayed also displayed significantly more anxiety
than did their high assertive counterparts. As predicted, high
assertives in the roleplaying condition reported more positive
self-statements and fewer negative self-statements than low
assertives who roleplayed. In general, roleplay subjects were rated
as significantly more assertive than subjects in the in vivo
conditions; while no significant differences on any of the five
dependent measures were reported between high and low assertives in
the in vivo group. These findings tend to support the research of
Bellack et al. (1979) which suggested that there is little
consistency between roleplay behavior and performance in more natural
settings. These authors caution researchers about making
generalizations from roleplay to in vivo or from self-report to in
vivo behavior.

In summary, it would seem that the procedural variation observed
in the abovementioned studies makes specific comparisons of results
difficult; however, a general conclusion is that there is little
correspondence between self-report and behavioral measures of
assertion; and between roleplay measures and in vivo, or naturalistic
assessments of the same. As such, interpretations of results, and
generalizations from studies using such measures ought to be done
with a great deal of caution. A comment made by Rakos and colleagues
addresses this issue: "Despite the usual between study procedural
variation (Bellack, 1979), it appears that the situational
specificity of behavior imposes constraints on the external validity of role-playing assessments" (Rakos et al., 1982, p.435). Such an analysis might also be extended in looking at the utility of self-report measures of assertion. Clearly, the influence of situational factors in the study of assertion is indicated by many of the results discussed thus far in this review.

Situational Determinants of Assertion

While early work in the area of assertiveness stimulated a number of models for understanding this construct (e.g., anxiety; social skills deficits; trait theories); more recent literature has widely discussed the premise that assertion is a situationally specific behavior. Stated more simply, the extent to which an individual responds assertively is considered to be a function of the characteristics of the situation (target person, response type, etc.) rather than characteristics of the individual engaging in the behavior. Such a model implies that assertiveness is not a global trait, but rather a situationally specific response; as such, increasing assertion in individuals may largely depend upon identifying those situations in which assertion is inhibited, rather than adopting a generalized model of assertion training. Numerous studies have investigated this "situational specificity hypothesis" and produced results which are supportive of this model.

In addition to providing a widely cited behavioral measure of assertion, the work of Eisler et al. (1975) also addressed the situational determinants of assertive behavior. Sixty hospitalized
psychiatric patients were asked to roleplay 32 assertiveness situations that varied in context by having subjects interact with either a male or female confederate who was either familiar or unfamiliar to the subject. Responses were videotaped and later rated on several measures of verbal content and nonverbal behavior. Subjects were divided into groups of high and low assertives using a behavioral rating of overall assertiveness and the Wolpe-Lazarus (1966) assertion inventory. Results of this investigation basically supported the hypothesis that an individual's behavior in social situations is related to the context of the interaction. A comparison of responses to positive and negative assertion situations displayed significant differences on six out of seven nonverbal measures of assertion. Male confederates received significantly different responses from female confederates on measures of verbal content. In situations involving negative assertion, male subjects showed greater assertion toward women than toward men. Similarly, male subjects were more likely to express positive assertion to the female target than to a male protagonist. The data also indicated that subjects were more likely to display assertiveness toward unfamiliar targets than toward familiar ones, particularly when the assertion called for was positive. In summary, these data clearly provide support for the situational specificity of assertiveness in this sample from an adult psychiatric population.

Kirschner and Galassi (1983) presented the results of an investigation in which they examined person, situational, and
interactional influences on assertive behavior. In their study, 72 high scorers and 72 low scorers on the College Self-Expression Scale were randomly assigned to one of eight roleplaying groups. Each subject was asked to roleplay four scenes with a confederate, and responses to each of these vignettes were videotaped and later rated for assertiveness. The eight roleplay groups in this study represented eight situation types, such that any given subject was only exposed to one situational context. Contexts were developed by combining assertion types (positive or negative), target person (familiar or unfamiliar), and confederate gender (male or female). Videotaped recordings of subjects' interactions with confederates were rated using three behavioral measures: verbal content, appropriateness of affect, and duration of reply. Results indicated that both person and situational factors influenced assertion behavior, but did not support an interaction of person and situation in understanding assertiveness. For situations involving a male confederate, degree of familiarity of the confederate and type of assertion required significantly affected assertive behavior. When a female confederate was involved, the only influence on assertion came from the familiarity variable. The authors concluded that if the assertive behavior with a familiar confederate was examined, then gender of the confederate and type of assertion were important variables. In situations which required negative assertion, the familiarity of the confederate appeared to be the most important influence on assertive behavior. In positive assertion contexts,
both gender and familiarity of the confederate became more important influences in understanding assertive behavior. In light of these findings, it is suggested that researchers and practitioners alike give greater attention to understanding situational influences on assertion.

Kolotkin (1980) has examined the issue of situation specificity from a somewhat different approach. In particular, Kolotkin was interested in investigating variations in response difficulty in the stimulus situations found on standard assertion measures. In order to explore this question, subjects were asked to complete both the Adult Self-Expression Scale (ASES) and the Gambrill-Richey Assertion Inventory (GRAI). Only those subjects whose scores identified them as low assertives were included in this investigation because of the investigator's interest in generalizing results to the population of unassertive people. Items were developed which represented differing contexts (impersonal relationships, business relationships, intimate relationships) and response types (asking favors, refusing requests, expressing opinions, expressing anger, expressing positive feelings; standing up for one's rights, taking the initiative with others). Items which represented these variables were either taken from existing assertion measures or were developed by the investigator. Essentially, subjects were asked to rate the difficulty they would have in responding as described in each of the items. Results of the data analyses suggest that stimulus situations represented on assertion measures are not functionally equivalent in terms of
response difficulty. Those situations which subjects viewed as most
difficult did not fall consistently within a particular response type
category. Such findings not only lend support to the notion that
assertion is a situationally specific behavior, but that even within
response types or assertion contexts, there is a great deal of
variability in individuals' responses to stimulus situations.

An investigation by Fiedler and Beach (1978) not only examined
the situational influences upon assertion, but also focused on
testing a theory about those factors which influence individuals'
decisions about assertion. They hypothesized that "the decision to
act assertively is not a general trait. Instead, it varies in any
situation according to the consequences expected by the person
involved. Differences between persons who tend in general to be
assertive and those who tend in general to be less so lie in
differences in their expectations about these consequences" (p.537).
Subjects were 64 women enrolled in an undergraduate psychology
course, and 47 women who were in a dental hygiene program.
Participants were not told that the study was investigating
assertiveness, but rather that it focused upon decisions in
"difficult interpersonal situations." All subjects completed the
Rathus Assertiveness Schedule and the Trait Scale of the State-Trait
Anxiety Inventory (Spielberger, Gorsuch, & Lushene, 1970), and then
were given a standard list of 15 consequences that might result from
interpersonal conflicts. These consequences were to be used by
subjects in rating nine videotaped or written scenes. Initially,
participants were to decide whether the consequence was positive or negative, and then to show exactly how positive or negative it was. Additionally, for each scene subjects were asked how probable each consequence would be if she complied; and similarly, how probable each consequence would be if she did not comply. Last, subjects were to simply mark whether or not they thought they would actually comply with, or refuse the request described in each stimulus situation.

The authors' findings suggested that participants' intent to comply with an unreasonable request essentially depended upon the attributes of the situation. While significant differences in subjects' valuations of consequences did not exist, subjects did differ in their expectations concerning whether or not a consequence would occur if they were to comply with or refuse a request. One conclusion is that individuals do consider the consequences of being assertive when making a decision regarding such a behavior. To quote Fiedler and Beach, "the difference between participants who chose an assertive response and those who did not lies in the formers' assessments of the probabilities that bad consequences will occur and good consequences will not rather than in their evaluations of how bad or how good those consequences would be" (p.537). While the results of this investigation are limited by the sampling of female undergraduates only, and by its focus on only one response type (unreasonable requests), it does provide some support for the utility of a cognitively based model for understanding assertive behavior. Specifically, the importance of expectations regarding consequences,
or the outcomes of assertion is addressed.

Epstein (1980) examined the social consequences of assertion, aggression, passive aggression, and submission in the context of situational and dispositional variables. Written descriptions of 16 situations were provided to male and female undergraduates who were asked to report their degree of compliance, sympathy for the protagonist, and anger toward the protagonist in each situation. Four core vignettes representing different interpersonal requests were developed, and for each situation, four modes of making the request were provided (assertion, aggression, etc.), therefore producing 16 vignettes. Half of the subjects responded to vignettes involving a female protagonist, while the other half reacted to scenes involving a male.

Results indicated that the consequences (compliance, anger, sympathy) of assertive and unassertive requests depended upon the situation, the type of request, and characteristics of the recipient of the request (subject). Assertion produced higher ratings of compliance, lower ratings of anger, and more sympathy by subjects than did passive or direct aggression. While there were no differences in the amount of compliance or sympathy produced by passive and direct aggression, data suggested that passive aggression did produce significantly less anger in subjects than did direct aggression. Finally, ratings were significantly more positive in response to submissive requests than to assertive requests, suggesting that perhaps submission may often produce more positive
results than assertion. A major contribution of this research is the evidence that response type may constitute an important variable when examining situational influences on assertiveness.

Finally, one research team reports the results of two investigations which focused on providing a multidimensional analysis of assertion situations (Rudy, Merluzzi, & Hanahan, 1982). The development of hypotheses in this investigation drew upon the theoretical work of both Kelly (1955) and Bandura (1977), and emphasized the importance of understanding how individuals construe situations and process information. Like many of the authors already discussed, Rudy and colleagues viewed the decision to act assertively "as a decision that varies according to personal experiences, expectations, and anticipated consequences; all of which are largely controlled by specific situational determinants" (p.125). The first two experiments reported by these authors asked 20 undergraduate males to rate numerous situations on bipolar scales representing frequency, familiarity, ego-involvement, difficulty, and uncomfortableness. Additionally, subjects were asked to sort situations into categories based upon similarity. All subjects were also given an assertion inventory in order to establish assertion levels. In the second experiment, 64 undergraduate males and eight assertiveness training clients were given 36 negative and 48 positive vignettes which represented a variety of target persons, environments, and assertion situations. Participants were asked to read each situation, imagine themselves in the situation, and then
categorize the vignettes according to how similar in difficulty it would be to respond to the situation. Subjects used the same five rating scales as used in the first experiment to rate each vignette, and also completed the assertion inventory.

Results are most easily interpreted separately for positive and negative assertion types. The components analysis for the positive dimension yielded three components: 1) emotional arousal; 2) interpersonal dimension reflecting social propriety and personal involvement; and 3) an evaluative dimension regarding the familiarity and predictability of the situation. The emotional arousal dimension was significantly less important for high assertives and important for low assertives. The interpersonal dimension was significantly more important for high assertives and less important for low assertives. The evaluative dimension was significantly less important for low assertives. To summarize, low assertives appeared to primarily use emotional arousal as the dimension for evaluating positive assertion situations, while high assertives tended to rely more upon social intelligence or social propriety.

Components analysis for the negative dimension yielded four components: 1) status/power dimension; 2) irritation which is brought about when norms are not followed; 3) plausibility of situation; and 4) intensity of situation (relaxed/cooperative vs. risky/hostile). The status/power dimension was significantly important for high assertives, low assertives, and client groups; while the irritation dimension was important only to low assertive
and client groups. Plausibility was significantly important to the high and middle assertives and unimportant for the low assertives. The intensity dimension was important only to the middle assertive group. Essentially these results indicate that not only is it possible to further examine response types in light of the numerous dimensions they represent, but also that high, middle, and low assertives differentially respond to situationally specific assertion stimuli. The work of Rudy et al. (1982) clearly indicates the complexity of factors which influence individuals' decisions regarding assertion.

In summary, the abovementioned research studies provide a wealth of support for the continued importance of investigating decisions about assertion in the context of situationally specific stimuli. While these studies vary greatly in methodology, an in operational definitions of the assertion construct, they consistently conclude that situational influences are critical to our understanding of the assertion response. Furthermore, the work of Fiedler and Beach (1978) and Rudy et al. (1982) is particularly useful in beginning to investigate the utility of cognitively based models in researching assertion.

**Gender Differences in Assertion.**

In the past, numerous studies have suggested that men generally express more assertiveness than do women (Galassi, et al., 1974; Morgan, 1974; Gay, et al., 1975). Gambrill and Richey (1975) found significant situational differences between the assertive behaviors
of men and women when using their Assertion Inventory. Men were less likely to ask whether or not they had offended someone, were less likely to turn down a request for a date, and were generally less resistant to sexual overtures. On the other hand, women were less likely to question a criticism of their work and less likely to ask for a date. Others have found similar support for gender differences as a function of assertion context.

Hollandsworth and Wall (1977) found that women self-report greater assertiveness in expressing anger toward parents, while men report being more assertive when dealing with supervisors in the work environment, are more outspoken regarding opinions, and tend to take more of the initiative in social interactions with the opposite sex. Research by Currant, Dickson, Anderson, and Faulkender (1979) indicated that gender differences may be a function of sex-role stereotyping and response types; that is, highly sex-role stereotyped men were more likely to engage in oppositional assertions, while highly sex-role stereotyped women were generally more inclined toward expressive assertions. It is important, however, to recognize that most of this research supporting gender differences in assertion is based upon self-report data; in light of the previously reviewed research concerning the lack of correspondence between self-report and behavioral measures of assertion, such differences must be interpreted cautiously.

Mathison and Tucker (1982) performed a discriminant functions analysis of items on the Rathus Assertiveness Schedule. Male and
female undergraduate students in an introductory communications course were asked to complete the RAS. Data analyses suggest that in this particular sample, men self-reported more assertion than women, and tended to differ significantly in terms of behavior in response specific assertion contexts. The general pattern represented in these data was that men tend to be more assertive than women in public settings, while women tend to be more assertive in smaller, interpersonal situations; though overall, men report more assertion than women. This finding is consistent with the data reported by Hollandsworth and Wall (1975) who found that women reported more assertion in expressing intimate feelings such as love and affection, while men self-reported greater assertion in public settings and less intimate social settings.

Sex-Role Stereotyping and Assertion

An initial study by Nix, Lohr, and Stauffacher (1980) sought to examine the relationship between sex-role orientation and self-reported assertion. Participants in this research were 102 male and female introductory psychology students who received course credit for their participation. Subjects completed both the College Self-Expression Scale and the Bem Sex-Role Inventory. A stepwise multiple regression analysis was utilized in predicting the CSES score from the variables of masculinity, femininity, and subject gender. Results of the analyses demonstrated that the masculinity score on the BSRI was the only statistically significant predictor of the CSES score; and accounted for a moderate percentage (53) of the
total variance. Assertion was positively correlated with only the masculine sex-role characteristic and was not related to gender.

The work of Nix et al. (1980) was followed up by Lohr and Nix (1982) in an attempt at replicating the earlier results. Once again, male and female undergraduates were asked to complete the CSES, and in this instance, the short form of the BSRI. The finding that masculinity was the only significant predictor of assertiveness was consistent with results of the previous research. The authors concluded that "perhaps the relationship between assertiveness and sex-role characteristics is not a measurement artifact of the Bem inventory; and self-related assertiveness is greater in persons with masculine sex-role characteristics, regardless of sex" (p. 114). Here again, cautions regarding the generalizability of these results due to methodological issues are in order.

A third study examining the relationship between sex-roles and assertiveness was conducted by Gayton, Havu, Baird, and Ozman (1983). This investigation, which sampled only from female undergraduates, asked subjects to complete the BSRI and the Gambrill-Richey Assertion Inventory. On the basis of the BSRI, subjects were described in terms of one of four sex-role groups: androgynous, indeterminate, sex-typed, or sex reversed. In completing the GRAI, subjects provided information about both the probability of engaging in specific assertion behaviors, and their degree of comfort in assertion situations. The data indicated that androgynous females were able to function more assertively and report less discomfort in
such situations than were sex-typed females. In addition, androgynous women in this sample were less likely to suppress those behaviors which have historically been viewed as inappropriate for women. The authors concluded that their research supports Bem's (1975) hypothesis that androgynous individuals are less concerned with the sex-appropriateness of a given behavior, and more concerned with what will be most effective in a particular situation.

Perceptions of Assertive Behavior

A number of investigators have suggested in the past that the gender of the person displaying assertive behavior is a determining factor in how that assertive behavior will be evaluated (Broverman et al., 1970; Vogel, 1970; Ness et al., 1980; Kelly & Worrell, 1977; Spence & Helmreich, 1972). Generally it has been suggested that males demonstrating assertion will be viewed more favorably than females exhibiting exactly the same behavior.

In a study investigating the responses of men and women to a female confederate in assertion roleplays, Hull and Schroeder (1979) found that unassertive behavior was viewed positively; aggressive behavior was reacted to negatively; and though assertion was evaluated as fair and nonrevengeful, the assertive female was also seen as unsympathetic, dominant, and aggressive. No gender differences among subjects responding to the female confederate were reported, however it is important to note that the gender of the confederate was not varied in this research.
Kelly, Kern, Kirkley, Patterson, and Keane (1980) have focused on the reactions of men and women to assertive and nonassertive behavior. Male and female undergraduates were asked to observe either a male or female model on videotape handling four different assertion situations. The model interacted with another confederate either in an assertive or unassertive manner. At the end of the videotape, subjects were asked to describe the model using 26 bipolar rating scales. The authors reported two general patterns in the results: 1) Assertive persons were rated higher than unassertives on scales such as competence, achievement, and ability; but were also rated lower than unassertives on scales such as warmth, flexibility, likeability, etc.; and 2) an assertive female model was viewed less favorably than a similar male model on ratings of attractiveness, likeability, competence, and ability. They concluded:

while assertive individuals were viewed by others as handling situations appropriately (and described as socially skilled, intelligent, etc.), the lower ratings they obtained on variables such as likeability and warmth suggest that assertion may not lead to outcomes in which the assertive person is liked. Further, when the female stimulus models were observed to handle situations in an assertive manner, they were even more negatively evaluated on likeability indices than assertive males. If females' assertive behavior results in such a differential and negative response during everyday interaction, it appears
likely that females would particularly learn to inhibit appropriate assertion (Kelly et al., 1980, p.682).

It is also important to note that assertion was defined in this research using situations which involved the refusal of requests, and as such, represented a limited sample of assertion contexts. Additionally, the fact that subjects rated models from a distance, and did not actually interact with those models created an analogue of the actual evaluation process.

While the Kelly et al. (1980) investigated differential perceptions of assertive and unassertive models, the work of Hess, Bridgwater, Bornstein, and Sweeney (1980) was designed to examine perceptions regarding different types of assertion. Subjects were asked to listen to audiotaped recordings of eight standard stimulus situations; four of which involved positive assertion, while four of which required the expression of negative assertion. Three separate recordings of these eight vignettes were made, varying the voice of the person heard on tape. One voice was obviously male, one obviously female, and one voice judged to be ambiguous in terms of gender. Participants were also asked to complete the BSRI and the Rathus Assertiveness Schedule. The RAS assertiveness score, individual ratings of BSRI assertive and aggressive items, and composite masculinity and femininity scores on the BSRI served as the dependent variables in this investigation. It is important to note, however, that the RAS and BSRI ratings were in reference to the actor heard on the audiotape, and not for the subject. Subjects were asked
to place themselves in the role of the speaker on tape, and then to rate the speaker on each of the RAS and BSRI items.

Results indicated that female subjects were more likely than men to rate actors as more assertive on the RAS, more aggressive on the BSRI, and more masculine regardless of tape condition and situation type. Both male and female subjects perceived models in the negative assertion situations as being more assertive on BSRI, more aggressive on BSRI, and more masculine than models in the positive situations. In fact, more feminine characteristics were attributed to actors displaying positive assertion than to those demonstrating negative assertion. In summary, the results of this research would suggest that perceptions about assertion are clearly influenced by gender-related factors. Women are more likely than men to view actors as more assertive, aggressive, and masculine in response. At the same time, sex-role stereotypes also appear to be related to assertion type in that actors displaying positive assertion are more likely to be described in terms of feminine characteristics, while those actors modeling negative assertion are viewed as more masculine in disposition.

Summary

This chapter has focused upon reviewing the literature which is specific to definitions and measurement of assertion, as well as to the influences of situational factors, gender, and sex-role stereotyping on both the expression and perception of assertive behavior. Early in this review a number of models for defining
assertion were discussed; clearly the bulk of the literature discussed in this chapter advocates a move away from a trait theory of assertion, to a model which acknowledges the situational specificity of assertion. A number of authors have made reference to the utility of cognitively based models in examining decisions regarding assertion (Alden & Cappe, 1981; Cochran, 1981; Rudy et al., 1982) with particular reference to social learning theory. In addition, the work of Fiedler and Beach (1978) and Rudy et al. (1982) indicates the potential importance of examining individuals' expectations about the consequences of assertion in predicting assertive behavior. Finally, while numerous methodological limitations somewhat cloud the interpretability of results, there is some evidence to support various hypotheses about gender differences in assertion, and in perceptions of assertive behavior. The purpose of the present research is to investigate the efficacy of social learning theory (Bandura, 1977) as a model for understanding possible gender differences in decisions regarding assertion, as well as to further investigate the situational specificity of such decisions.
CHAPTER THREE

METHODOLOGY

Design

This research design was intended to investigate the relationships between self-efficacy expectations, outcome expectations, and performance relative to situations involving assertive responses. Furthermore, the relative influence of each of these variables on an individual's decision to engage in assertive behaviors was also of interest. Lastly, sex differences in regard to the above research questions were be examined.

Five research variables were of interest:

1) Self-efficacy expectations are defined as those "judgments of one's ability to execute a certain behavior pattern," or more simply, the belief that one can successful carry out the behavior necessary to produce the outcomes (Bandura, 1977).

2) Outcome expectations are those estimates that given behaviors will lead to specific outcomes (Bandura, 1977). Outcome expectations may be further described in terms of the valence of the outcome (e.g., positive or negative); and the strength of the expectancy.

3) Performance refers to an individual's demonstrated skill or performance level on measures of assertion. "Assertion" is
defined as "standing up for one's basic interpersonal rights in such a way that the rights of another person are not violated in the process. It is a direct, honest, and appropriate expression of one's thoughts, feelings and beliefs" (Alberti & Emmons, 1970). In this study, assertion skills were established using both self-report and behavioral measures.

4) Likelihood of responding assertively in a given situation. Research participants were asked to report the likelihood of their responding similarly to actors in hypothetical situations.

5) Gender differences in research participants' responses.

Research Participants

Participants were 70 female and 71 male undergraduates recruited from introductory psychology courses who received course credit for their involvement with this experiment. While there is a need for future investigations to research the present issues with a wide variety of populations, the influences of self-efficacy and outcome expectations on assertion behavior are also relevant to our understanding of the college student population.

Instrumentation

Three major instruments were utilized in the present study. The College Self-Expression Scale (Galassi, DeLeo, Galassi, & Bastien, 1974) and an adaptation of the Behavioral Assertiveness Test (Eisler, Hersen, & Miller, 1973) were used to assess subject's current level of assertiveness. The Situations Survey was developed by this investigator to measure subject's self-efficacy expectations and
outcome expectations regarding specific hypothetical situations. The latter instrument also assessed the likelihood that the subject would find himself or herself in the given situation, as well as the likelihood that he/she would respond in the same manner as the actor in the situation presented. A demographic data sheet was also completed by each subject in order to collect information about characteristics of the population sampled.

The College Self-Expression Scale. (See Appendix A.) This 50 item scale was designed to measure the frequency or degree of difficulty of engaging in a wide variety of assertive behaviors with a number of different persons (Galassi et al., 1974). Three types of assertive behavior are evaluated by this instrument:

1) **Positive assertion** which includes expression of love, affection, and admiration; and complimenting others.

2) **Negative assertion** which involves expression of annoyance, dissatisfaction, and justified anger.

3) **Self-affirmation/Self-denial** which includes initiating and/or refusing conversations or requests; expressing personal opinions; expressing legitimate rights; exaggerated concern for others, excessive anxiety and overapologizing.

The CSES has displayed adequate reliability (Galassi, Galassi, & Litz, 1974), and numerous validity studies have been conducted. Significant corelations were found between the CSES and selected scales of the Gough Adjective Check List (Galassi, et. al., 1974).

Galassi, Hollandsworth, Radecki, Gay, Howe and Evans (1976) found
that low scorers on the CSES can be differentiated from high scorers and from a combination of moderate and high scorers on a behavioral test of assertiveness. Correlations of dormitory residents' CSES scores with resident advisers' ratings of residents' assertiveness provide support for concurrent validity. In addition, concurrent validity was demonstrated in an investigation which required high and low CSES scorers to role play scenes requiring assertive behavior. These scenes were later rated for content, appropriateness of affect, and duration of reply. Lastly, a major strength of this instrument is the lack of a significant correlation between CSES scores and a paper-and-pencil measure of aggression. This potential confound with aggression is a frequent one with self-report measures of assertion, and one preferred to be avoided by this investigator.

**Behavioral Assertion Test.** (See Appendix B.) Subjects were asked to verbally respond to eight scenes from an audiotaped recording. Subjects listened to a description of the situation, and were asked to assume the role of one of the persons in the scene. They then listened to a recording of a statement made by the other actor in the scene, and were asked to verbally respond to that statement. Each subject's response to each of the scenes was audiotaped, and later rated for its verbal and nonverbal aspects of assertion. The first two situations were regarded as 'practice' and as such, were not included in the data analyses. The scenes utilized in the Behavioral Assertion Test (BAT) represented different combinations of the "Types of Situations" dimension (e.g., positive
assertion, negative assertion, or self-affirmation/self-denial) and
the "Persons" dimension (e.g., frequent and close prior contact vs.
no or limited and distant prior contact). Such combinations result
in six situations: positive-familiar; positive-unfamiliar;
negative-familiar; negative-unfamiliar; self-affirmation-familiar;
and self-affirmation-unfamiliar.

Audiotapes from the Behavioral Assertion Test were scored by two
trained raters using an adapted version of the Eisler, Hersen, and
Miller (1973) scoring procedure. Raters were two predoctoral
interns, one male and one female, at a large midwestern university
counseling center. Taped responses were rated in terms of duration
of reply, latency of response, loudness of speech, fluency of speech,
verbal content, appropriateness of affect, and overall assertiveness.
(See Appendix C for scoring rules.) Training of raters consisted of
reviewing scoring rules, listening to the stimulus tapes, and coming
to consensus regarding behavioral criteria for scoring responses to
each of the six test situations. Lastly, raters practiced scoring
mock BAT tapes until ratings on each scale were within one point of
each other.

The Situations Survey (See Appendix D.) This instrument
consists of 18 situations representing three types of assertion
responses and interactions with three types of target persons. The
three types of assertion responses were those mentioned previously:
positive, negative, and self-affirmation/self-denial. The three
types of target persons included: 1) partner/significant other; 2)
personal friends/acquaintances; and 3) parents/family. Given that the population under study was the college student, co-workers as target persons were not included. Many college students do not work, and the use of classmates as "co-workers" might potentially be confounded with the "personal friend/acquaintance" category. (However, it is useful to acknowledge the importance of relationships with co-workers in populations where such relationship are more likely to exist.) Two situations were used to represent each cell of the situations matrix presented below in Figure 2:

<table>
<thead>
<tr>
<th>Type of Assertion</th>
<th>Positive</th>
<th>Self-Affirmation</th>
<th>Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partner</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Friends</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 2.
Situations Matrix

Following the written presentation of each of these situations, subjects were asked to complete a short questionnaire describing their reactions to the situation (see Appendix E). This questionnaire was designed to measure the following: 1) the likelihood of finding themselves in this situation; 2) self-efficacy expectations regarding their behavior in this situation; 3) valences
of the outcomes anticipated regarding this situation; 4) the strength of the expectancy regarding the outcome; and 5) the likelihood that they would choose to behave as the actor in the situation did.

Self-efficacy expectations were sampled with respect to two dimensions: 1) whether or not the subject believes s/he can actually perform the specified behavior (magnitude); and 2) the subject's confidence regarding such a rating. Outcome expectations were measured along both quantitative and qualitative dimensions. Initially, subjects were asked to write a short description, detailing what they believed the outcome of such an encounter would be. Secondly, they were asked to rate such an outcome on several variables represented by Likert ratings (e.g., positive-negative, threatening-nonthreatening, etc.) Lastly, subjects were asked to rate the strength of their expectancy regarding such outcomes.

Demographic Data Sheet (See Appendix F). Each subject was asked to provide information regarding his/her age, sex, year in school, major, and exposure to the following kinds of experiences: stress management training, study skills training, paraprofessional training, assertion training, prior counseling, etc. The major item of interest, other than age and sex, was whether or not any of the subjects in the study have been previously exposed to assertion training. The other items were included in the data sheet primarily as distractors.
Procedure

This investigation was conducted individually with each participant. Initially, the participant was asked to complete the Situations Survey and the College Self-Expression Scale in that order. Following completion of these instruments, subjects were then individually taken to a small office where the Behavioral Assertion Test was administered. Two tape recorders were used; one which played the stimulus tape; the other which recorded the playing of the stimulus tape and the subject's responses to it. This arrangement enabled the investigator to simply turn on the stimulus tape and the second recorder, and then leave the room so that the subject could respond without distraction and increased self-consciousness. The stimulus tape was constructed in such a way that the subject need not do anything other than stop the tape recorders at the conclusion of the eighth vignette. Following completion of the BAT, subjects were asked to complete the Demographic Data Sheet. Once this was completed, participants were asked to refrain from discussing the investigation with classmates and friends until the end of the current quarter. Those subjects who requested it were formally debriefed, and offered the option of having results mailed to them upon completion of the analyses. Debriefing included a discussion of the purposes and hypotheses of the investigation as well as a description of the instruments and procedures involved.
Hypotheses

On the basis of theoretical considerations and the literature which was reviewed in the previous chapter, the following hypotheses were developed for investigation in the present research:

1. Overall, no significant gender differences will exist on the two measures of assertiveness (Behavioral Assertion Test; CSES).

2. Gender differences will exist on measures of self-efficacy expectations, outcome valences, and choice (likelihood).

3. Significant positive correlations will exist between self-efficacy and assertiveness; between self-efficacy and likelihood of response; and between positively valenced outcome expectations and likelihood of response.

4. Self-efficacy and outcome expectations will vary significantly depending upon the type of assertion required, target person, and sex of subjects. (For example, outcome expectations for men may be lower in situations requiring positive, soft assertions; while outcome expectations may be lower for women in situations which require negative assertions such as anger.)

5. For women, self-efficacy expectations and outcome expectations will play more important roles than assertion skill in understanding likelihood scores.

6. For men, self-efficacy expectations and assertion skill will be more important than outcome expectations in understanding likelihood scores.
**Data Analyses**

1. A single assertiveness score was computed for each subject on the College Self-Expression Scale.

2. Ratings on each of the seven variables on the Behavioral Assertion Test were averaged across raters and across situations for each subject. Mean ratings were also produced for each subject across raters, and within each assertion type x target person cell.

3. The Pearson-r correlation coefficient was computed as a test of interrater reliability between the two judges on each of the five scales of the Behavioral Assertion Test.

4. Means and standard deviations for likelihood responses were computed for each subject across all situations on the Situation Survey.

5. Means and standard deviations on the likelihood of responding dimension were found for men and women as groups, and within each type by target person cell.

6. Means and standard deviations for self-efficacy confidence ratings were computed for each subject across all situations.

7. Means and standard deviations for self-efficacy confidence ratings were computed for men and women as groups, and within each type by target person cell.

8. Means and standard deviations for likelihood of outcome ratings were computed for each subject across all situations.

9. Means and standard deviations for likelihood of outcome ratings were computed for men and women as groups, and within each
type by target person cell.

10. Means and standard deviations of outcome valence scores were obtained for each subject across all situations.

11. Means and standard deviations of outcome valence scores were obtained for men and women as groups, and within each type by target person cell.

12. Correlations between subjects' scores on the CSES and the seven scales of the Behavioral Assertion Test will be produced.

**Statistical Tests**

The following statistical tests were performed as tests of the hypotheses generated for this investigation:

1. **Multiple Linear Regression**, in order to test the major hypotheses concerning the relative influences of self-efficacy expectations, outcome expectations, performance, and sex on subjects' likelihood of responding in an assertive manner.

2. **Multivariate Analyses of Variance**. One MANOVA was conducted using assertion type, target person, and sex as "independent" variables; while self-efficacy expectations; outcome expectations; and response likelihood served as "dependent variables". A second MANOVA was conducted using sex as the independent variable, and performance scores (CSES, BAT) as the dependent variables. A significant MANOVA (using the Wilkes-Lambda criterion) was followed up with univariate analyses where appropriate. Any significant univariate ANOVAs were investigated using post-hoc tests.
CHAPTER FOUR
RESULTS

This chapter presents the results of the data analyses performed. Participants' responses to three measures (CSES, Behavioral Assertion Test, Situations Survey) were collected and provided the data used in the analyses discussed in this section. Variables of interest were:

1) Self-efficacy expectations regarding assertion;
2) Outcome expectations regarding assertion;
3) Self-reported assertion;
4) Behavioral demonstration of assertion;
5) Likelihood of choosing to act in an assertive manner.

The Situations Survey (see Appendix F) is an instrument which presents eighteen social situations representing three types of assertion (positive, negative, self-affirmation) and three types of assertion targets (family, friends, partner). Two situations are presented for each of the nine cells in this target person by assertion type matrix. For each situation, subjects reported their self-efficacy magnitude (yes or no); self-efficacy strength (confidence in yes/no rating); likelihood of responding with the assertion described; a projective description of an outcome for the situation presented; the strength of the outcome expectation; and 20 Likert ratings describing the projected outcome. Subjects' responses
to the 18 situations were summed for each of the five quantitative variables and these sums were used in the statistical analyses.

Self-reported assertion was measured by the College Self-Expression Scale (CSES). The CSES yielded a single score between zero and 200 for each subject. Behavioral demonstrations of assertion were measured by an adapted version of the Behavioral Assertion Test (BAT) in which subjects were asked to verbally respond to eight situations presented via audiotape. These responses were then audiotaped and later rated by trained judges on five variables: loudness, fluency, verbal content, affect, and overall assertiveness. In addition, these recordings were timed by the principal investigator in order to arrive at the latency and duration scores. The first two of eight situations of the BAT were considered practice and thus, only scores for six situations were used in the data analyses.

The following statistical analyses were performed:

1. A three-factor MANOVA was utilized to examine the overall effects of gender, target person, and type of assertion on self-efficacy expectations, outcome expectations, and likelihood of responding with assertion. A statistically significant MANOVA (p<.01) using the Wilks-Lambda criteria was followed by univariate analyses of variance (ANOVAs), and where indicated, posthoc comparisons (Tukey's HSD test) were performed.

2. A MANOVA was performed to investigate the overall effect of gender on the two measures of assertion skills (CSES and BAT). Univariate analyses of variance were also performed, and where
significant results were obtained, the Tukey HSD post-hoc test was utilized.

3. Pearson-r correlation coefficients were generated to investigate relationships among the five variables on the BAT and subjects' CSES scores. These correlations were produced for men and women separately as groups; as well as a combined group. Correlations between the variables of self-efficacy expectations, outcome expectations, likelihood ratings, and assertion skill were also established using the Pearson-r coefficient.

4. The Pearson-r correlation coefficient was utilized in measuring the degree of interrater reliability on the five scales of the BAT.

5. Multiple linear regression was used to examine the relationships among the variables of self-efficacy expectations, outcome expectations, and assertion skill in predicting, or explaining, participant's likelihood of choosing to act with assertion. The choice of a multiple linear regression (MLR) strategy is, of course, somewhat dependent upon the research questions at hand. In light of the purposes of the present study, the following decisions regarding MLR strategies were made:

a. A stepwise MLR would be utilized for simply predicting the likelihood of subjects' responding assertively, with gender, self-efficacy magnitude, self-efficacy strength, outcome strength, outcome valence, overall assertion (from the BAT), and self-reported assertion serving as predictor variables. For this analyses, men and women would be combined as a single group.
b. For comparison purposes, a hierarchical MLR strategy would be utilized in analyzing the responses of the combined (men and women) group. The purpose of hierarchical MLR is explanatory rather than predictive, and as such, requires that the researcher establish, a priori, an ordering of the "independent" variables to be used in the procedure (Cohen & Cohen, 1975). A combination of two approaches to ordering was utilized for this analysis: 1) research relevance, and 2) causal priority. The two variables of most interest to this researcher for explaining subjects' likelihood of assertive behavior were self-efficacy and outcome expectations. The variable of least interest was skill. Thus, a decision was made to enter overall assertion (from the BAT) and the CSES score as the last two variables in the model. A decision was made to enter the two self-efficacy measures first, since theoretically, they are causally prior to the outcome measures. Thus, for the hierarchical MLR using a combined group, the independent variables were ordered in the following manner: self-efficacy magnitude, self-efficacy confidence, outcome strength, outcome valence, overall assertion, and the CSES score.

c. The hierarchical MLR strategy would be used for exploring the hypotheses regarding sex differences in the relative contributions of each of the independent variables in explaining the likelihood score. Such a strategy was warranted in light of the fact that the researcher had proposed a specific theory regarding the different ordering of variables for men and women as groups. The ordering of variables for the hierarchical MLR is listed below:

1. Males: Likelihood = self-efficacy magnitude
2. Females: Likelihood = self-efficacy magnitude

self-efficacy confidence
outcome strength
outcome valence
overall assertion (BAT)
CSES score

Essentially, it was hypothesized that for males, self-efficacy expectations and skill played greater roles than outcome expectations in explaining decisions regarding assertion, whereas for women, skill was a less important contributor than self-efficacy and outcome expectations.

Results summarizing all of the abovementioned statistical analyses begin below.

Three-factor MANOVA for the Situations Survey

The MANOVA produced significant overall effects for gender \( F(5,2462)=18.52, p<.0001 \); target person \( F(10,4924)=14.62, p<.0001 \); assertion type \( F(10,4924)=154.60, p<.0001 \); and the target person by assertion type interaction \( F(20,8166)=6.42, p<.0001 \). The significant MANOVAs were followed up by univariate ANOVAs which are presented in Tables 1-5. Tables of means and standard deviations are
### Table 1.

Summary Table for Univariate ANOVA for Self-Efficacy Magnitude

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Error 2466 349.56

*p<.05
**p<.0001
Table 2.

Summary Table for Univariate ANOVA for Self-Efficacy Confidence

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*p<.001

**p<.0001
### Table 3.

**Summary Table for Univariate ANOVA for Likelihood**

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*p < .0001
## Table 4.

Summary Table for Univariate ANOVA for Outcome Strength

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*p<.0005

**p<.0001
### Table 5.

Summary Table for Univariate ANOVA for Outcome Valences

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*p<.005

**p<.0001
presented in Appendix G.

**Self-efficacy magnitude.** The ANOVA for self-efficacy magnitude (yes/no) was significant \( (F=7.09, p<.0001) \), with significant main effects for target person \( (F=3.49, p<.05) \) and assertion type \( (F=15.87, p<.0001) \), and a statistically significant target person by assertion type interaction \( (F=17.11, p<.0001) \). Post-hoc comparisons indicated significant differences in self-efficacy magnitude between "friends" as target persons \( (M=0.84783) \) and the target person categories of "family" \( (M=0.81039) \) and "partner" \( (M=0.80193) \). No significant differences between "family" and "partner" were observed. As such, self-efficacy magnitude was greatest in situations involving friends, and less for those involving family members or a partner.

Assertion type difference occurred between positive assertion \( (M=0.87767) \) and negative assertion \( (M=0.80024) \), and between positive assertion and assertion requiring self-affirmations \( (M=0.78588) \). No significant differences between negative assertion and self-affirmation were noted. Consequently, self-efficacy magnitude was greatest in situations requiring positive assertion, less in those requiring negative assertion, and least in those situations requiring self-affirmations. Results of the post-hoc comparisons of means for the target person by assertion type interaction are presented in Table 6.

**Self-efficacy confidence.** The univariate ANOVA for strength of self-efficacy expectations was significant \( (F=6.75, p<.0001) \), producing significant main effects for gender \( (F=45.84, p<.0001) \), and assertion type \( (F=6.85, p<.001) \), as well as a significant interaction
Table 6.
Post-hoc Comparisons of Means for SE Magnitude

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*p<.05

1 = family/positive  
2 = family/negative  
3 = family/self-affirmation  
4 = friend/positive  
5 = friend/negative  
6 = friend/self-affirmation  
7 = partner/positive  
8 = partner/negative  
9 = partner/self-affirmation
effect for target person and assertion type (F=10.96, p<.0001). The Tukey HSD test demonstrated significant (p<.05) differences for women (M=85.738) and men (M=81.033) in strength of self-efficacy expectations. Some assertion type differences were also significant; notably, differences between positive assertion (M=85.3563) and negative assertion (M=82.7305); and between positive assertions and self-affirmations (M=82.47059). No difference was found between negative assertion and self-affirmation response types on this variable. Confidence in estimates of self-efficacy was greater in situations involving positive assertion than in those requiring either negative assertion or self-affirmations. Post-hoc comparison data for the target person by assertion type interaction is presented in Table 7.

Likelihood. The univariate ANOVA was also significant (F=10.48, p<.0001), reporting significant main effects for gender (F=46.30, p<.0001), and assertion type (F=19.55, p<.0001); as well as a significant target person by assertion type interaction (F=19.10, p<.0001). Post-hoc comparison data indicated that women (M=79.876) were significantly more likely to respond assertively than were men (M=73.267). Significant differences for assertion type were present between positive (M=81.0630) and negative (M=74.2908) types, and between positive assertion and self-affirmation (M=74.9765). No significant differences existed between negative assertion and self-affirmation. These data indicate that subjects were more likely to respond assertively in those situations involving positive assertion than in contexts requiring negative assertion or
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*p<.05

1 = family/positive
2 = family/negative
3 = family/self-affirmation
4 = friend/positive
5 = friend/negative
6 = friend/self-affirmation
7 = partner/positive
8 = partner/negative
9 = partner/self-affirmation
self-affirmations. Table 8 presents the post-hoc data for the target person by assertion type interaction.

Outcome Strength. This univariate ANOVA was also significant (F=11.69, p<.0001), reporting significant main effects for gender (F=53.53, p<.0001), target person (F=16.01, p<.0001), and assertion type (F=42.43, p<.0001). Additionally, a significant interaction between target person and assertion type (F=4.98, p<.0005) was indicated. The Tukey HSD test indicated that women (M=84.353) had significantly stronger outcome expectations than did men (M=80.113). Significant differences for the target person variable occurred between "family" (M=84.432) and "friends" (M=81.486), and between "family" and "partner" (M=80.598). Differences in outcome strength between "friends" and "partner" categories were not significant. Subjects reported stronger outcome expectations for those situations involving family members than in those involving either friends or a partner. Significant differences for the assertion type variable were found between positive (M=85.3919) and negative (M=78.9184) assertions; positive assertions and self-affirmations (M=82.8824); and between self-affirmations and negative assertions. Outcome expectations were strongest for those situations involving positive assertion, less strong in those requiring self-affirmations, and weakest in those social interactions which involved negative assertion. Post-hoc comparison data for the target person by assertion type interaction is presented in Table 9.

Outcome Expectation Valences. The univariate ANOVA for this variable was statistically significant (F=106.72, p<.0001), and
Table 8.

Post-hoc Comparisons of Means for Likelihood

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</table>

*p<.05

1 = family/positive
2 = family/negative
3 = family/self-affirmation
4 = friend/positive
5 = friend/negative
6 = friend/self-affirmation
7 = partner/positive
8 = partner/negative
9 = partner/self-affirmation
### Table 9.
Post-hoc Comparisons of Means for Outcome Strength

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<td>4.17*</td>
<td>-1.15</td>
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*p<.05

1 = family/positive  
2 = family/negative  
3 = family/self-affirmation  
4 = friend/positive  
5 = friend/negative  
6 = friend/self-affirmation  
7 = partner/positive  
8 = partner/negative  
9 = partner/self-affirmation
indicated significant main effects for gender \( (F=8.22, p<.005) \), target person \( (F=39.52, p<.0001) \), and assertion type \( (F=836.54, p<.0001) \); as well as a significant target person by assertion type interaction \( (F=9.85, p<.0001) \). Post-hoc comparison data indicated that women \( (M=86.464) \) had significantly more positive outcome expectations than did men \( (M=84.007) \). Also, comparisons revealed significant target person differences; namely, differences between "family" \( (M=89.779) \) and "friends" \( (M=85.361) \); between "family" and "partner" \( (M=80.459) \); and between "friends" and "partner". Outcome expectations were most positive for those situations involving family members, less positive for those involving friends, and least positive for assertion situations involving a partner. Assertion type differences were significant between positive \( (M=108.851) \) and negative \( (M=66.841) \) assertions; positive assertions and self-affirmations \( (M=80.047) \); and between self-affirmations and negative assertions. Outcome expectations were most positive with regard to positive assertions, less positive in those contexts requiring self-affirmations, and most negative in those situations involving negative assertions. Table 10 presents the post-hoc comparison data for the target person by assertion type interaction.

**MANOVA for the CSES and BAT**

The MANOVA produced a significant overall effect for gender across the two assertion skill measures \( \{F(2, 137)=3.80, p<.03\} \). The univariate ANOVAs (see Table 11) demonstrated a significant gender effect for the CSES \( (F=5.95, p<.05) \), but a nonsignificant gender effect for the BAT \( (F=2.40, p>.05) \). Means and standard deviations
Table 10.
Post-hoc Comparisons of Means for Outcome Valences

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*p<.05

1 = family/positive  
2 = family/negative  
3 = family/self-affirmation  
4 = friend/positive  
5 = friend/negative  
6 = friend/self-affirmation  
7 = partner/positive  
8 = partner/negative  
9 = partner/self-affirmation
Table 11.
Summary Table for Univariate ANOVA for CSES and BAT

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<th>BAT</th>
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<td></td>
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<td>F</td>
<td>df</td>
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*p<.05
are presented in Table 12 below:

Table 12.
Means and standard deviations for the CSES and BAT

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<th>OVERALL (BAT)</th>
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<td>s=17.19</td>
<td>s=3.77</td>
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<td></td>
<td>n=71</td>
<td>n=71</td>
</tr>
<tr>
<td>Females</td>
<td>M=130.64</td>
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<tr>
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<td>s=19.53</td>
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<tr>
<td></td>
<td>n=70</td>
<td>n=69</td>
</tr>
</tbody>
</table>

The Tukey HSD post-hoc comparison found this difference between means on the CSES to be a significant one (p<.05). That is, women self-reported a significantly higher level of assertion on the CSES than did men.

Interrater reliability on the Behavioral Assertion Test

The Pearson-r correlation coefficients as measures of interrater reliability for the two judges are presented in Table 13. Correlations ranged from .55 for the "fluency" scale to .75 for the "overall assertion" scale. All correlation coefficients were statistically significant (p<.0001).

Correlations Among Scores on the BAT and CSES

Correlation coefficients (Pearson-r's) among scales on the BAT and the CSES were obtained by using the average of the two judges' ratings for each subject on each scale. Correlation coefficients are presented in Table 14. It might be noted that while almost all of the correlations among variables on the BAT are statistically significant (p<.0001), none of the correlations between the CSES
Table 13.
Interrater Reliability Coefficients for the BAT

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<th>Affect</th>
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Table 14.
Correlations Among Scores on the BAT and CSES

\[
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& & & & & & & 0.0000 \\
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& & & & & & & 0.0001 & 0.0000 \\
3 & 0.3154 & 0.2991 & 1.0000 & * & * & * & * \\
& & & & & & & 0.0001 & 0.0003 & 0.0000 \\
4 & 0.6070 & 0.4577 & 0.6526 & 1.0000 & * & * & * & * \\
& & & & & & & 0.0001 & 0.0001 & 0.0001 & 0.0000 \\
5 & 0.4887 & 0.3765 & 0.8913 & 0.8340 & 1.0000 & * & * & * \\
& & & & & & & 0.0001 & 0.0001 & 0.0001 & 0.0001 & 0.0000 \\
6 & -0.3754 & -0.4728 & -0.4058 & -0.4484 & -0.4641 & 1.0000 & * & * \\
& & & & & & & 0.0001 & 0.0001 & 0.0001 & 0.0001 & 0.0001 & 0.0000 \\
7 & 0.3161 & -0.1110 & 0.3919 & 0.3247 & 0.4159 & -0.3677 & 1.0000 & * \\
& & & & & & & 0.0001 & 0.1915 & 0.0001 & 0.0001 & 0.0001 & 0.0001 & 0.0000 \\
8 & 0.0508 & 0.0194 & 0.1409 & 0.0797 & 0.1283 & -0.0122 & 0.1592 & 1.0000 \\
& & & & & & & 0.5511 & 0.8200 & 0.0967 & 0.3490 & 0.1310 & 0.8859 & 0.0603 & 0.0000 \\
\end{array}
\]

1 = Loudness  
2 = Fluency  
3 = Content  
4 = Affect  
5 = Overall Assertion  
6 = Latency  
7 = Duration  
8 = CSES Score
Correlations Among Scores on the Situations Survey

Relationships among the variables of self-efficacy magnitude, self-efficacy confidence, likelihood, outcome strength, and outcome valences were explored using the Pearson-r correlation coefficient. In addition, relationships among the abovementioned variables and the two assertion skill measures (CSES and BAT-Overall) were examined using the Pearson-r coefficient. Table 15 presents the results of this analysis for men and women as a single combined group of subjects. For correlation coefficients presented separated by gender, see Appendix H.

Multiple Linear Regression - Men and Women as a Combined Group

A Stepwise MLR procedure was employed for use in developing an equation for predicting the likelihood of subjects' choosing assertion as a response in social situations. A significance level of .05 was required in order for the inclusion of variables in the model. The stepwise solution produced is presented in Table 16. Again, it is important to recall that the stepwise procedure orders variables in the solution based upon the greatest amount of variance accounted for in the dependent variable by any given independent variable. In the present study, results suggest that self-efficacy confidence singly accounts for the greatest amount of variance (40.95%) observed in the likelihood scores. The second variable entered in the model is self-efficacy magnitude, which accounts for an additional 18 percent of the variance. Together, these two self-efficacy measures account for 58 percent of the variance.
Table 15.

Correlations Among Scores on the Situations Survey

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1 = Self-efficacy magnitude
2 = Self-efficacy confidence
3 = Likelihood
4 = Outcome Strength
5 = Outcome Valences
6 = CSES Score
7 = Overall Assertion
## Table 16.

### Stepwise MLR Solution for Men and Women

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observed in the likelihood scores. The next largest increase in variance (4%) is accounted for by the outcome strength measure. Adding a fourth variable to the model, overall assertion (from the BAT), increases the proportion of variance accounted for by the independent variables to 65 percent. The only other variable which meets the .05 criteria for inclusion in the model is gender; its addition increases the amount of observed variance in likelihood scores accounted for by these five variables to 68 percent.

Secondly, a hierarchical MLR procedure was developed to explore a theory about the ordering of variables in explaining subjects' likelihood decisions. This procedure was described earlier at the beginning of this chapter. The hierarchical MLR solution for combined groups (men and women) is presented in Table 17.

The first variable entered in the model was gender, and alone, accounts for 12 percent of the variance observed in the likelihood scores. The second variable entered in the model was self-efficacy magnitude. Looking at Table 17, it appears that self-efficacy magnitude produced an increase of 35 percent in accounting for the variance observed in the likelihood scores ($R^2 = .47$, $p < .0001$). The addition of the self-efficacy confidence variable makes a statistically significant increase (15%) in the variance accounted for by the model ($R^2 = .62$, $p < .0001$), thus gender, self-efficacy magnitude, and self-efficacy confidence together account for 62 percent of the variance observed in the likelihood data. Step four of the hierarchical MLR involved adding the variable, outcome strength, to the model. This addition, also significant ($p < .001$),
### Table 17.
Hierarchical MLR Solution for Men and Women

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produced an increase of three percent ($R^2 = .65$) in accounting for the variance in likelihood. The outcome valence score was the fifth variable entered in the model, and also produced a significant ($p < .02$) increase of almost one percent in $R^2$ ($R^2 = .66$). These five variables combined now explain about 66 percent of the variance observed in the likelihood data. The sixth variable added to the model was the overall assertion score (from the BAT) and also produced a statistically significant increase of two percent ($R^2 = .6832$). The last variable entered in the model was the CSES score, which did not produce a statistically significant ($p < .5104$) increase in the proportion of variance accounted for by the model. Of the seven variables, outcome valences and the CSES score produced the smallest increments in $R^2$, though the only nonsignificant contribution was that made by the CSES score.

**Hierarchical MLR for Women's Likelihood Scores**

A hierarchical multiple linear regression procedure was developed to explore a theory about the ordering of variables to explain women's decisions regarding assertion. The independent variables used in explaining "likelihood" were ordered as follows: self-efficacy magnitude, self-efficacy confidence, outcome strength, outcome valences, overall assertion, and CSES score. The hierarchical MLR solution for women is presented in Table 18.

The first variable entered in the model was self-efficacy magnitude, and initially accounted for 46 percent of the variance observed in the likelihood data. This initial contribution was statistically significant ($p < .0001$). Step two involved adding
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<td></td>
<td>37.41</td>
<td>.0001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE Confidence</td>
<td></td>
<td>0.39</td>
<td>.0018</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td></td>
<td>0.12</td>
<td>.3132</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outcome Valences</td>
<td></td>
<td>0.09</td>
<td>.2028</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Overall Assertion</td>
<td></td>
<td>0.11</td>
<td>.5688</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CSES Score</td>
<td></td>
<td>0.01</td>
<td>.8693</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
self-efficacy confidence to the model, and this new variable produced a significant increase ($p<.0001$) in the variance accounted for by the model ($R^2 = .64$). The third step added outcome strength to the equation, and the inclusion of this variable accounted for another one percent of the variance observed in the likelihood data. The contribution of this variable was not statistically significant ($p<.1223$). The fourth step in this procedure added outcome valences to the model and did not produce a significant increment in $R$ ($p<.1776$). Overall assertion was the variable added in the fifth step of the model, and also failed to make a significant contribution ($p<.5423$). The addition of the last variable, the CSES score, did not make a significant contribution ($p<.8693$) in further explaining the variance observed in the likelihood data. In summary, the first two variables of self-efficacy magnitude and self-efficacy confidence accounted for the greatest percentage of variance in likelihood scores, and were the only two significant contributions in the model. **Hierarchical MLR for Men's Likelihood Scores**

The hierarchical multiple linear regression procedure described below was developed to explore a theory about the ordering of variables on the Situation Survey and measures of assertion in explaining men's decisions regarding assertion. The independent variables used in explaining "likelihood" which follow, are in an order which reflects their hypothesized importance: self-efficacy magnitude, self-efficacy confidence, overall assertion, CSES score, outcome strength, outcome valences. The hierarchical MLR solution for men is presented in Table 19.
### Table 19.

Hierarchical MLR Solution for Men

<table>
<thead>
<tr>
<th>Step</th>
<th>Variable</th>
<th>Parameter</th>
<th>Estimate</th>
<th>pr&gt;t</th>
<th>F</th>
<th>pr&gt;F</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Intercept</td>
<td></td>
<td>626.09</td>
<td>.0001</td>
<td>40.64</td>
<td>.0001</td>
<td>0.37</td>
</tr>
<tr>
<td></td>
<td>SE Magnitude</td>
<td></td>
<td>47.20</td>
<td>.0001</td>
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</tr>
<tr>
<td>2</td>
<td>Intercept</td>
<td></td>
<td>65.20</td>
<td>.6677</td>
<td>38.32</td>
<td>.0001</td>
<td>0.53</td>
</tr>
<tr>
<td></td>
<td>SE Magnitude</td>
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<td>36.10</td>
<td>.0001</td>
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<td></td>
<td>SE Confidence</td>
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<td>0.50</td>
<td>.0001</td>
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</tr>
<tr>
<td>3</td>
<td>Intercept</td>
<td></td>
<td>-99.18</td>
<td>.5064</td>
<td>33.52</td>
<td>.0001</td>
<td>0.60</td>
</tr>
<tr>
<td></td>
<td>SE Magnitude</td>
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<td>29.71</td>
<td>.0002</td>
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</tr>
<tr>
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<td>SE Confidence</td>
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<td>0.48</td>
<td>.0001</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Overall Assertion</td>
<td></td>
<td>0.80</td>
<td>.0010</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>4</td>
<td>Intercept</td>
<td></td>
<td>-202.36</td>
<td>.2084</td>
<td>26.48</td>
<td>.0001</td>
<td>0.62</td>
</tr>
<tr>
<td></td>
<td>SE Magnitude</td>
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<td>26.71</td>
<td>.0002</td>
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</tr>
<tr>
<td></td>
<td>SE Confidence</td>
<td></td>
<td>0.43</td>
<td>.0001</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Overall Assertion</td>
<td></td>
<td>0.85</td>
<td>.0005</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>CSES Score</td>
<td></td>
<td>0.09</td>
<td>.1027</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Intercept</td>
<td></td>
<td>-463.85</td>
<td>.0097</td>
<td>25.52</td>
<td>.0001</td>
<td>0.66</td>
</tr>
<tr>
<td></td>
<td>SE Magnitude</td>
<td></td>
<td>24.99</td>
<td>.0002</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE Confidence</td>
<td></td>
<td>0.22</td>
<td>.0664</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall Assertion</td>
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<td>.0008</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>CSES Score</td>
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<td>0.08</td>
<td>.1359</td>
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<td></td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td></td>
<td>0.45</td>
<td>.0039</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>Intercept</td>
<td></td>
<td>-627.64</td>
<td>.0029</td>
<td>22.10</td>
<td>.0001</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>SE Magnitude</td>
<td></td>
<td>24.09</td>
<td>.0004</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SE Confidence</td>
<td></td>
<td>0.21</td>
<td>.0702</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Overall Assertion</td>
<td></td>
<td>0.67</td>
<td>.0052</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>CSES Score</td>
<td></td>
<td>0.07</td>
<td>.1641</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td></td>
<td>0.43</td>
<td>.0056</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Outcome Valences</td>
<td></td>
<td>0.18</td>
<td>.1297</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The first variable entered in the model was self-efficacy magnitude, and accounted for 37 percent of the variance observed in the likelihood measure. This contribution made by self-efficacy magnitude is a statistically significant one (p<.0001). Self-efficacy confidence was the variable added at step two in this procedure, and created a significant (p<.0001) increase in $R^2$ of 16 percent. At step three, $R^2$ was increased to 60 percent by the addition of overall assertion to the model (p<.001). Together, these three variables now explain approximately 60 percent of the variance observed in the likelihood data for men. At step four, the CSES score was added, and did not produce a significant increase in $R^2$ (p<.1027). This suggests that step four is not a good place to include the CSES score as a variable in explaining likelihood. Outcome strength was added to the model at step five, and made a statistically significant contribution (p<.005) in understanding the variance observed in the likelihood data. The inclusion of outcome strength in the model brings the percentage of variance observed in the likelihood data up to sixty-six. The last variable entered in the model is that of outcome valences, and did not create a significant increase in $R^2$ (p<.1297). The hierarchical MLR solution would suggest that of the six variables as ordered, the CSES score and the outcome valences scores do not make significant contributions to an understanding of men's decisions about assertion in this particular sample.
Summary

Several significant results are indicated by the statistical analyses performed. Initially, gender differences in self-reported assertion (CSES) were indicated, though differences on the behavioral measure of assertion (BAT) were nonsignificant. Thus, women's self-reported assertion was higher than that of men. The MANOVA which used self-efficacy expectations, outcome expectations, and likelihood scores as dependent variables produced significant overall main effects for gender, target person, and assertion type; as well as a significant overall target person by assertion type interaction. Univariate ANOVAs were statistically significant for all five of the abovementioned dependent variables. Results of the post-hoc comparisons are summarized in Table 20.

Clearly, gender differences are present on four of the five dependent variables, suggesting that women have more confidence in their ratings of self-efficacy expectations and outcome expectations, more positive outcome expectations, and a greater self-reported likelihood of responding assertively than do men.

The data suggest that subjects (both men and women) are more likely to believe they are capable of assertion (self-efficacy magnitude) in situations involving friends than in those either involving family or partners. On the other hand, confidence in outcome expectations is generally higher with family than with either friends or partners. Lastly, outcome expectations tend to be most positive regarding those situations involving family; less positive when concerning friends; and least positive in assertion situations.
Summary Table of Significant Findings on the Situations Survey

**Analysis**  |  **Results**
---|---
**MANOVA**  | 1. Significant overall main effect for gender.
| 2. Significant overall main effect for target person.
| 3. Significant overall main effect for assertion type.
| 4. Significant target person by assertion type interaction.
**ANOVA**  | 1. Significant differences on self-efficacy magnitude.
| 2. Significant differences on self-efficacy confidence.
| 3. Significant differences on likelihood.
| 4. Significant differences on outcome strength.
| 5. Significant differences on outcome valences.

**POST-HOC COMPARISONS:**

<table>
<thead>
<tr>
<th>IV</th>
<th>DV</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>SE Strength</td>
<td>women&gt;men</td>
</tr>
<tr>
<td></td>
<td>Likelihood</td>
<td>women&gt;men</td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td>women&gt;men</td>
</tr>
<tr>
<td></td>
<td>Outcome Valences</td>
<td>women&gt;men</td>
</tr>
<tr>
<td>2. Target Person</td>
<td>SE Magnitude</td>
<td>friends&gt;family=partner</td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td>family&gt;friends=partner</td>
</tr>
<tr>
<td></td>
<td>Outcome Valences</td>
<td>family&gt;friends=partner</td>
</tr>
<tr>
<td>3. Assertion Type</td>
<td>SE Magnitude</td>
<td>positive&gt;negative=SA</td>
</tr>
<tr>
<td></td>
<td>SE Confidence</td>
<td>positive&gt;negative=SA</td>
</tr>
<tr>
<td></td>
<td>Likelihood</td>
<td>positive&gt;negative=SA</td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td>positive&gt;SA&gt;negative</td>
</tr>
<tr>
<td></td>
<td>Outcome Valences</td>
<td>positive&gt;SA&gt;negative</td>
</tr>
<tr>
<td>4. Target x Type Interactions</td>
<td>Too numerous to report in this table.</td>
<td></td>
</tr>
</tbody>
</table>
In looking at the results regarding assertion type, it is clear that self-efficacy magnitude and confidence are greatest when position assertion is called for than when either negative assertion or self-affirmation (e.g., refusing requests) is suggested as a response. Similarly, subjects report a greater likelihood of responding when the assertion is a positive one, than when it is either a negative assertion or self-affirmation. Lastly, confidence in outcome expectations is strongest and outcome expectations most positive, when positive assertion is anticipated; less confident and less positive regarding self-affirmation; and least confident and least positive in situations calling for negative assertion.

A stepwise MLR was utilized in predicting likelihood of assertion from gender and the self-efficacy, outcome, and assertion skill measures. Only five of the seven variables made significant (p<.05) contributions to the prediction of likelihood. They were, in order: self-efficacy confidence, self-efficacy magnitude, outcome strength, overall assertion, and gender. Together they accounted for 68 percent of the variance observed in the likelihood scores.

The hierarchical MLR strategy is useful in testing a theory about how variables might be ordered in a model developed to explain subjects' likelihood decisions. For the combined group (men and women), the following order was established a priori: gender, self-efficacy magnitude, self-efficacy confidence, outcome strength, outcome valence, overall assertion, and CSES score. The hierarchical solution produced by the data indicated that the first six variables
significantly contributed to an understanding of the variance observed in the likelihood scores; however the entry of the CSES score as the seventh variable does not significantly add to the model. The CSES score and outcome valence were the two least significant variables in the hierarchical model; a finding which is also supported by the stepwise solution discussed above.

The hierarchical MLR procedure was also used to test this investigator's theory about sex differences in the importance of self-efficacy expectations, outcome expectations, and skill as predictors of likelihood decisions regarding assertion. The hierarchical MLR solution for women indicated that only two variables, self-efficacy magnitude and self-efficacy confidence, made significant contributions to the model. However, the hierarchical solution for men more closely resembles the solution for the combined group: self-efficacy magnitude, self-efficacy confidence, overall assertion, and outcome strength all make significant contributions in accounting for the variance observed in the likelihood scores. The CSES score as the fourth variable in the model, and outcome valence, as the sixth variable, do not significantly add to the model.

Implications of these results and suggestions for future research will be discussed in chapter five.
CHAPTER FIVE
DISCUSSION

The present study was designed in order to examine a number of research questions. Principally, gender differences in self-efficacy and outcome expectations regarding assertion were of interest. Gender differences in self-reported, and behaviorally tested assertion were also a focus of this investigation. Finally, the utility of self-efficacy expectations, outcome expectations, and assertion skill as constructs explaining decisions regarding assertion was to be explored.

The intent of this chapter is to focus upon conclusions drawn from the results of this investigation as well as to discuss the limitations of the study. In particular, attention is given to the numerous methodological considerations which must be addressed when embarking upon a new program of research. Lastly, alternative methods of researching these and related questions are proposed.

Discussion of Results

As noted in chapter four, there are several sets of analyses which were performed on the data. This section addresses each set of analyses separately, and then attempts to offer some integrative remarks. Initially, results of the analyses on the self-report and behavioral measures of assertion are discussed; followed by an examination of the multivariate data regarding self-efficacy
expectations, outcome expectations, and likelihood decisions about assertion. Finally, implications of the multiple regression solutions used in predicting likelihood decisions are explored.

**Assertion skill: CSES and BAT** It was hypothesized that no significant gender differences would exist on the two measures of assertiveness used in the present study. Thus, it was interesting to note than not only did gender differences exist on the self-report measure (CSES) but that women, not men, were the participants reporting higher assertion scores. This difference, though in the same direction, was not statistically significant for the Behavioral Assertion Test. This implies that in the present sample women are behaviorally at least as assertive as men, and self-report a higher level of assertion. This finding is not consistent with that of Orenstein, Orenstein, and Carr (1975) who found men to be significantly more assertive than women on the Rathus Assertiveness Schedule (RAS, Rathus, 1973). It might be hypothesized that women's increased assertion reflects social changes which may have occurred as a result of the women's movement in the last two decades. Such an explanation may be particularly relevant to this sample which comes from a predominantly 18 to 22 year old population. An alternative explanation for the current findings lies in concern about the reliability of self-report and the validity of the behavioral measures. These methodological concerns will be addressed in greater detail at the end of this section.

Methodological concerns in part arise in looking at the relationships between the CSES score and the seven Behavioral
Assertion Test variables. All Pearson-r's are quite low, and none are statistically significant. Essentially this implies that knowing an individual's self-reported assertion would tell one little about scores on the BAT given that the relationships between the two tests are generally very weak. This finding is not consistent with the findings of other studies examining relationships between self-report and behavioral measures of assertion (Galassi, Hollandsworth, Radecki, Gay, Howe, & Evans, 1976; Kern & MacDonald, 1980; Kirschner & Galassi, 1983; MacDonald, 1978). Numerous methodological issues make comparison of these results with those of other research quite difficult, and are typically problems inherent in behavioral and self-report approaches to testing.

Galassi and Galassi (1975) demonstrate that factors such as mode of presentation (live vs. tape recorded) and number of responses required from subjects (one vs. many) can significantly affect behavioral measures of performance; most notably, on variables of response duration and anxiety. Much of the assertion research which utilizes behavioral assessment varies on one or both of these factors, and as such, makes comparison a difficult if not highly unreliable task.

Secondly, the content of the behavioral test used varies considerably. For example, the much cited work of Eisler, Miller, Hersen, and Blanchard (1975) utilizes a behavioral test with adult male inpatient psychiatric patients. The situations constructed for roleplaying with a live confederate differ greatly from the content used in the present study. The behavioral assessment measure used in
this investigation is probably most similar in content and mode of presentation to the College Women's Assertion Sample (CWAS) developed by MacDonald (1975); however, it differs in terms of scoring criteria, and the number of stimulus situations presented. The current study utilized six "test" situations while the CWAS asks subjects to respond to 52 vignettes. Scoring procedures in the present investigation were modeled after the variables suggested by Eisler et al. (1975) while the CWAS uses a scoring system developed for that particular instrument.

A third factor must be considered in evaluating the self-report and behavioral test results; that is, those demand characteristics which may have been operating during the data collection. While the effects of demand characteristics in this particular investigation are unknown, past research suggests that they are often influential in behavior therapy research and assessment (Bernstein & Paul, 1971; Borkovec, Stone, O'Brien, & Kaloupek, 1974; Kazdin, 1973; Lick & Bootzin, 1970; Miller & Bernstein, 1972). An attempt was made in the present study to minimize demand characteristics on the behavioral measure by automating the BAT to the point where the investigator could leave the room and allow the participant to freely respond to the test alone. Nonetheless, social desirability and other factors could have continued to influence subjects' responses to both the self-report and behavioral measures of assertion.

**Self-Efficacy Expectations, Outcome Expectations, and Likelihood.** Much of the recent literature in the area of assertion has supported the premise that assertion is a situationally specific
behavior (Cianni-Surridge & Horan, 1983; Eisler et al., 1975; Galassi, Galassi, & Fulkerson, 1983; Galassi, Galassi, & Vedder, 1981; McFall & Lillesand, 1971; McFall & Marston, 1970; McFall & Twentyman, 1973). One intention of the current study was to examine the utility of social learning theory in understanding individuals' decisions about assertion. One might hypothesize that the same notions about situational specificity also extend to self-efficacy expectations, and likelihood estimations regarding assertion.

One of the multivariate analyses used in this research sought, in part, to address the question of situational context. This three-factor MANOVA investigated overall effects of subject gender, target person, and assertion type on self-efficacy expectations, outcome expectations, and likelihood scores. It was initially hypothesized that gender differences would exist on measures of self-efficacy, outcome, and likelihood; and that self-efficacy and outcome expectations would vary significantly depending upon the type of assertion required, target person, and gender of subject.

Results of the statistical analyses regarding gender differences supported the initial hypothesis; that is, gender differences existed on four of the five dependent variables. Women self-reported higher scores than men on self-efficacy strength, likelihood, strength of outcome expectations, and outcome valences. No differences were noted on the variable of self-efficacy magnitude. This means that women in the current sample report more confidence in their estimates of self-efficacy, a greater likelihood of responding assertively, more confidence in their expectations regarding outcomes of
assertion, and expect more positive outcomes as a result of assertive behavior. While no other research has examined self-efficacy and outcome expectations regarding assertion and consequently these results stand alone, certainly in light of the literature on sex-role stereotyping, these findings come as a surprise. Given the literature on sex role socialization and perceptions of women's mental health summarized in chapters one and two, one might have expected the higher ratings on self-efficacy and outcome variables to have come from men in this study. Once again, while the reliability and validity of the self-report measure might be called into question; this data which consistently describes women as more confident and positive in their expectations than men, has important implications. Such findings may suggest that women have made progress in overcoming past barriers to assertion and self-affirmation which existed as a result of negative stereotyping (Blechman, 1980; Broverman et al., 1970). Future research addressing the reliability and validity of a new measure such as the Situations Survey would of course aid in interpreting these results.

The second part of this MANOVA examined overall effects of target person and assertion type, and in fact, supported the hypothesis that differences existed on these variables. The MANOVA reported statistically significant overall main effects for target person and assertion type, as well as a significant target person by assertion type interaction. Univariate ANOVAs were significant for all five dependent variables. To aid in a discussion of them, results of the post-hoc comparisons for main effects are presented
First, looking at the target person variable it appears that subjects are more likely to believe they are capable of assertion (self-efficacy magnitude) in situations involving friends than in either those involving family or partners. One hypothesis for explaining this might be that friends are perceived as less risky target persons than either family or friends, in that generally the friendship situations presented in the Situations Survey might be perceived as less intimate than either family or partners. Perhaps intimacy of the relationship is associated with greater risk, and consequently, less confidence regarding one's ability to act assertively.

On the other hand, the strength of subjects' outcome expectations and outcome valences were much higher in regard to situations involving family than those involving either friends or partners. One explanation might be that outcome expectations are more externally referenced, and as such, subjects (particularly of traditional college age) have more experience with family members than with either college friends or partners. Thus, prior experience may be a moderating factor with regard to outcome expectations.

An examination of the assertion type data also reveals some interesting results. Significant differences between assertion types exist on all five of the dependent variables, with positive assertion consistently receiving the highest ratings. Subjects reported greater confidence in their abilities to be assertive in situations requiring positive assertion than in either negative assertion or
Table 21.

Post-hoc Comparisons for Main Effects

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Dependent Variable</th>
<th>Comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Gender</td>
<td>SE Strength</td>
<td>women&gt;men</td>
</tr>
<tr>
<td></td>
<td>Likelihood</td>
<td>women&gt;men</td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td>women&gt;men</td>
</tr>
<tr>
<td></td>
<td>Outcome Valences</td>
<td>women&gt;men</td>
</tr>
<tr>
<td>2. Target Person</td>
<td>SE Magnitude</td>
<td>friends=family=partner</td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td>family=friends=partner</td>
</tr>
<tr>
<td></td>
<td>Outcome Valences</td>
<td>family=friends=partner</td>
</tr>
<tr>
<td>3. Assertion Type</td>
<td>SE Magnitude</td>
<td>positive=negative=SA</td>
</tr>
<tr>
<td></td>
<td>SE Confidence</td>
<td>positive=negative=SA</td>
</tr>
<tr>
<td></td>
<td>Likelihood</td>
<td>positive=negative=SA</td>
</tr>
<tr>
<td></td>
<td>Outcome Strength</td>
<td>positive=SA&gt;negative</td>
</tr>
<tr>
<td></td>
<td>Outcome Valences</td>
<td>positive=SA&gt;negative</td>
</tr>
</tbody>
</table>
self-affirmation contexts. Similarly, subjects reported greater confidence in the abovementioned estimates when faced with positive assertion situations than when asked about situations involving negative assertion or self-affirmation. Men and women were more likely to choose to be assertive in positive assertion situations and less likely if the assertion required was of a negative or self-affirmation type. These results essentially suggested that subjects are most likely to view themselves as having the skills to be assertive and the willingness to act assertively in positive contexts, and less so in negative contexts. With regard to self-efficacy and likelihood measures, the distinction between negative assertion and self-affirmation appears not to be important.

On the other hand, such a distinction emerges as significant when looking at outcome expectations. On the two outcome variables, situations involving positive assertion continue to receive the highest ratings; however, outcome expectations regarding self-affirmations were rated significantly higher than those involving negative assertions. Once again, it would seem that a concern for how others might perceive one's actions may account for this difference in outcome expectations. More specifically, in evaluating the efficacy of one's own behavior, differences between self-affirmations and negative assertions may seem minor; however, in thinking about others' reactions to these behaviors, such differences may become more salient. For example, stating "I'm very angry with you" may not seem much more difficult, if at all, than saying, "No, you cannot borrow my typewriter" yet others' reactions to these two
statements are more likely to differ. The expected reaction to "I'm very angry with you" may be much more negative than to "No, you cannot borrow my typewriter."

In light of the numerous assertion type by target person interactions reported in chapter four, an attempt to review all of them may be less productive than a discussion of general themes found in these post-hoc comparisons.

1) Self-efficacy magnitude. Two general patterns are of interest with respect to subjects' beliefs about their assertion efficacy. First, estimates of self-efficacy regarding negative assertions with family members were significantly lower than any other target by type interaction except for self-affirmations with partners. Second, estimates of self-efficacy regarding self-affirmations with partners were significantly lower than all other interactions with the exception of the negative assertion/family pairing. These data suggest that the target person by type interactions which are likely to produce the lowest efficacy regarding assertion are those which involve negative assertion (e.g., anger) with family members, or those which involve self-affirmations (e.g., refusing requests) directed toward romantic partners. Common elements here might be those of intimacy of target person (with family and partners being more intimately involved with the subject than are college friends); and the negative tone of the assertion, be it called negative assertion or self-affirmation.

2) Self-efficacy confidence. The main pattern to be noted here is that self-affirmations with partners are associated with
significantly lower confidence ratings than five of the other target person by assertion type pairings. The two exceptions to this pattern are negative assertions with family members, and positive assertions with friends. The lack of a significant difference in confidence ratings between self-affirmation/partner and negative assertion/family might follow the rationale found in the section on self-efficacy magnitude. One tentative hypothesis regarding the low confidence ratings related to positive assertion with friends has to do with concerns about the expression of affection to persons other than family members or romantic partners being perceived as socially inappropriate. If such concerns have been internalized by subjects it is possible that lower confidence regarding one's ability to successfully carry out positive assertions with friends may result.

3) Likelihood. The two patterns noted regarding likelihood ratings are identical to those mentioned with regard to the self-efficacy magnitude variable. Specifically, negative assertions with family members were accompanied by significantly lower ratings of likelihood than any other target person/assertion type pairing with the one exception of self-affirmation with partners. Similarly, the self-affirmation with partner context was characterized by ratings of likelihood significantly lower than any other interaction, except the negative assertion with family category. Once again, the same general hypothesis might be offered here that was stated in the self-efficacy magnitude section.

4) Outcome strength. The most notable pattern with regard to interactions here was that positive assertions with family members
are associated with stronger confidence ratings about outcomes. Ratings of outcome strength regarding the positive assertion/family interaction were significantly higher than any other of the target person by assertion type interactions. Perhaps this reflects the notion that college students have more "history" with family members than with any other target persons in their lives; and as such, are most confident about outcomes with this target person group. Additionally, positive assertions with family members may be perceived as the least risky type of assertion (see discussion of outcome valences below); perhaps the combination of a very familiar target person and "safe" assertion type with this particular target group enables subjects to experience a greater sense of confidence in expected outcomes.

5) Outcome valences. Two patterns are of interest with respect to subjects' ratings on the outcome valence variable. First, as suggested above, subjects' ratings of outcome valences were significantly more positive in regard to the positive assertion with family members interaction than with any other target person by assertion type pairing. Perhaps this lends some support to the hypothesis that positive assertion with family members is less risky because of its socially sanctioned appropriateness, and the greater degree of familiarity with the target person. Second, negative assertions with family members were accompanied by significantly more negative outcome valences than five of the other target person/assertion type interactions. The two exceptions to this pattern were negative assertions with friends, and negative
assertions with partners.

Summary. In summary, the analyses of the effects of target and type variables on the dependent variables used in this study tend to provide further support for the situational specificity of decisions regarding assertion. The additional contribution of the current investigation is that it explores the "situational specificity" hypothesis in the context of self-efficacy and outcome expectations as well as likelihood decisions regarding assertion, whereas past research has focused solely on assertive behavior. This contribution will be further discussed in the later section on "implications for future research."

Multiple Linear Regression with Combined Groups

The stepwise and hierarchical multiple linear regression procedures for the combined group of men and women produced very similar results. The stepwise MLR identifies five of seven variables which make significant contributions in accounting for variance observed in the likelihood data, and orders them in the following way: self-efficacy confidence, self-efficacy magnitude, outcome strength, overall assertion (from the BAT), and gender of subject. The other two variables, outcome valence and CSES, failed to make significant contributions to this model. Results of the hierarchical MLR in which variables were ordered a priori, report similar findings regarding the contributions of each of the seven variables in the model. Gender, self-efficacy magnitude, self-efficacy confidence, outcome strength and overall assertion produce the largest increases in the multiple correlation coefficient. While the outcome valence
variable does make a statistically significant increase in accounting for variance observed in the likelihood data, its contribution is the smallest of the six significant variables. And, as was the case in the stepwise solution, the self-report measure of assertion failed to make a significant contribution to the model.

One striking implication of these results is that in both cases, the self-report assertion score was not a good measure for predicting or explaining men's and women's decisions regarding assertion. This may serve to raise further questions about the reliability of self-report, particularly those measures which reflect decisions about social situations in which all kinds of social desirability and demand characteristics may be operating. In light of the low correlations between the behavioral measures and the CSES, and the above regression data, it may be that the overall assertion score on the BAT is the more useful indicator of subjects' assertion in the present sample.

A second implication of these data is that knowledge about self-efficacy expectations (both magnitude and confidence) may be more useful in explaining and predicting subjects' decisions regarding assertion than either outcome expectations and skill. However, if outcome expectations are to be considered, the strength of one's outcome expectations is a better predictor than outcome valences. In part, such an interpretation might be supported by the work of Fiedler and Beach (1978) who concluded:

...results suggest that participants, irrespective of their scores on standard measures of assertiveness and of
anxiety, consider the consequences of being assertive when making a decision about how to behave. Moreover, it was found that the differences between participants who chose an assertive response and those who did not lies in the former's assessments of the probability that bad consequences will occur and good consequences will not rather than in their evaluations of how bad or good those consequences would be (p.537).

The method employed in the present study asked subjects to generate a qualitative, or projective measure of outcomes and then to quantitatively rate their degrees of confidence in the outcome generated. It was this quantitative rating that constituted outcome strength. Fiedler and Beach's (1978) conclusions may be useful in interpreting the regression results in the present study in that outcome strength clearly makes a greater contribution to the model than does outcome valence. As such, estimates that the projected outcome (good or bad) described by subjects will actually occur emerged as more important than the valences associated with such an outcome. While the methodology employed in the Fiedler and Beach work was quite different from that of the present study, this interpretation of results appears strikingly similar.

Separate hierarchical MLR solutions were produced to test a theory about sex differences in the ordering of variables in the likelihood model. The two hierarchical solutions for men and women separately are discussed below.
Hierarchical MLR for Women's Likelihood Scores

It was hypothesized that for women, self-efficacy expectations and outcome expectations played more important roles in explaining decisions about assertion than did skill. This hypothesis was not entirely supported by the data. In fact, self-efficacy magnitude and self-efficacy confidence were the only two significant contributors to the model explaining women's likelihood decisions, and together, accounted for 64 percent of the variance observed in the likelihood scores. None of the outcome expectation measures or skill measures added significantly to the variance accounted for by this model, suggesting that for women, estimates of personal self-efficacy and confidence in such estimates play the major roles in explaining decisions about assertion. Such a finding might tempt one to return the focus of assertion training to addressing ways in which individual efficacy regarding assertion might be enhanced. An alternative way of interpreting this finding involves taking a closer look at the constructs of self-efficacy and outcome expectations. It has been suggested in one particular discussion of Bandura's social learning theory (Teasdale, 1978) that self-efficacy and outcome expectations may not be as easily distinguished from one another as Bandura's model would indicate. It is conceivable then, that for women, estimates of self-efficacy and confidence in those estimates may not be independent of expectations regarding outcomes. Such a question may serve as one alternative interpretation which, rather than concluding the relative unimportance of outcome expectations, asks whether or not they represent one factor inherent in an
individual's estimates of self-efficacy.

**Hierarchical MLR for Men's Likelihood Scores**

The hierarchical MLR solution for men is actually quite similar to that produced for the combined group. As was the case with women, self-efficacy magnitude and confidence together account for a large proportion of the variance observed in the likelihood scores. Overall assertion scores contributed significantly to the model, as did the strength of outcome expectation variable. As was the case with the combined group, the two variables contributing least to the model were outcome valences and the CSES. These data would indicate that not only is information about self-efficacy expectations useful in explaining men's decisions about assertion, but information about outcome strength and observed behavior may also be helpful. In short, the hierarchical solution for men's likelihood scores came more closely to fitting the hypothesis generated for this study, with the one variable not fitting well in the established order being the CSES score. The hierarchical strategy proposed for women did not support the initial hypothesis as well in that outcome expectations were not as important in the model as was originally predicted by the investigator. Nonetheless, the emergence of the self-efficacy variables as dominant in explaining women's decisions regarding assertion may continue to serve as a stimulus for discussion.

**Limitations of the Investigation**

It is, of course, important to discuss the limitations of any research. Given that the nature of the present study was exploratory, there were numerous methodological decisions made, each
of which carried with it implications for the outcome of the research. Several issues are discussed in this section: 1) methodological and design considerations; 2) concerns regarding instrumentation; and 3) statistical considerations.

The methodology. By design, the present study represents an analogue of assertion situations and decisions, potentially bringing with it the problems and restrictions of such. The Situations Survey presents 18 social situations on paper and asks participants to self-report self-efficacy expectations, outcome expectations, and the likelihood of choosing to act in the same manner as the actor in the situation. Initially, whether or not participants' interpretations of the social situation described on paper is the same, or similar to interpretations made in vivo is an empirical question. In a sense, a situation presented on paper is more "distant" or removed, and may not engender the same evaluations regarding self-efficacy and outcomes as those which occur when confronting situations in real life. Similarly, a situation presented on paper may appear "safer" and as such, reports regarding the likelihood of responding assertively may be somewhat more inflated than when presented live.

A second methodological issue focuses on the order to presentation of materials in this study. All subjects were asked to complete the Situations Survey, the CSES, and the BAT in this order. Sample size, and the unknown effects of performance on self-efficacy expectations provided the rationale for not varying order of presentation with the stimulus materials. Hackett (Personal Communication, 1983) raises the question of whether or not asking
subjects to complete performance or skill tasks significantly affects later estimates of self-efficacy. In light of Bandura's theory, it was hypothesized that the potential effects of performance on self-efficacy expectations were probably greater than the effects of reporting self-efficacy prior to completing later performance measures; however, this remains a question for research. It is likely that if initial self-efficacy reporting were to have any significant effect, it would be in the direction of inflating self-reporting on the CSES more than performance on the Behavioral Assertion Test given the nature of these two tasks.

As with any research, the generalizability of results is limited to the population from which one has sampled. Results of the current study reflect the responses of a predominantly 18 to 22 year old undergraduate university population. A decision was made to sample from this population, not only for standard reasons of convenience, but more importantly, because the undergraduate university student is often the target of interventions such as assertion training. Thus, it was expected that the present research might provide some implications for practitioners working with this population. As discussed previously, many of the gender differences originally hypothesized were not supported by the data in this study. Here again, it is particularly important to limit generalizations regarding the research findings to the university population, and more specifically, to undergraduate psychology students who have received course credit for their participation. While their anecdotal responses describing their reactions to the study would
suggest a surprising degree of interest and participation, the fact that participation was based on course requirements must not be overlooked.

More important perhaps is the question of whether or not the observed gender differences might represent a trend toward greater assertiveness on the part of women in our society, which is beginning to be noticed in young women who have been raised in the decades most commonly associated with the women's movement. It remains an interesting issue for future research to explore; that is, whether similar gender differences in assertion, self-efficacy, and outcome expectations might exist in different populations within our society. Specific populations to use in investigating this question might include: older adults; non-university adults in the work force (in or out of the home); university students who are not participating for course credit; clients seen at mental health agencies; and those individuals who voluntarily request assertion training.

**Stimulus materials.** The CSES is a self-report measure of assertion which has been widely used and reported in the assertion literature. Additionally, it has been the focus of several validity studies, and is generally thought of as possessing good reliability and validity (Kirschner & Galassi, 1983). The decision to use the CSES was based upon its applicability to the population under study, as well as its perceived adequacy as a measurement tool.

The Behavioral Assertion Test was used for the purpose of providing an alternative to the self-report measure of assertion, rather than solely relying on individuals' reporting of assertion.
skills. Yet the reliability and validity of this particular BAT remains uncertain. It must be stated that the BAT used in the present study is an adaptation of the method reported by Eisler et al. (1975) and differs in three important ways: 1) participants' responses to stimulus situations were audiotaped rather than videotaped; 2) the content of the assertion situations focused on issues relevant to university undergraduate, whereas the Eisler et al. research was conducted with adult male inpatient psychiatric patients; and 3) the original Eisler et al. method utilized live roleplay situations, while the current study presents stimulus situations via a narrator on audiotape.

Glenn (1980) utilized an adaptation of the Eisler et al. method with undergraduate university students, but differed in that subjects chose their own two situations to roleplay with a confederate, and these live roleplays were videotaped rather than audiotaped. This method was not utilized in the present study because it was the opinion of the investigator that a more standardized assertion stimulus was necessary, a notion which is seconded by MacDonald (1982).

MacDonald (1975) developed a behavioral measure which specifically addressed the assertion skills of college women. The CWAS is a 52 item behavioral test which presents standardized stimulus situations via audiotape, and asks participants to verbally respond to each of the situations. These responses are then audiotaped and later rated for assertiveness by trained raters using criteria specifically developed for each of the 52 situations. While
it was the opinion of this investigator that the CWAS is one of the more well-tested behavioral measures available for use with college students, it was not utilized in the present study for two reasons: 1) it was specifically developed for use with college women, and not for use with the men who would also be subjects in this sample; and 2) a 52 item behavioral test in addition to the CSES and lengthy Situations Survey would probably tax the patience and attention of the participants in this research.

It goes without saying that the individual investigator is confronted with numerous decisions regarding methodology; in the case of the present study, two important decisions regarding the BAT had to be made: 1) whether to allow subjects' to present their own assertion situations for roleplaying, or to standardize the assertion situations; and 2) whether or not to use audiotape or videotape recordings. The first decision, to use a standardized BAT was made in order to assist in the interpretation of results; though the creation on an analogue and subsequent questions regarding generalizability of results are also recognized. The second decision, to audiotape rather than to videotape was a more pragmatic one. The original purpose of the investigation focused more on looking at self-efficacy and outcome expectations, and less on assertion skills; thus, for this initial investigation, the added problems associated with videotaping were not considered warranted. It is conceivable however, that interrater agreement as well as rater accuracy, might be increased when raters have access to paralinguistic and other nonverbal cues. Such cues might be of
particular benefit in rating categories such as fluency; the category with the lowest level of interrater agreement in the current study.

It must be noted that the levels of interrater reliability in this study, while statistically significant, were minimally adequate. Numerous investigations using behavioral measures of assertion routinely report interrater reliability coefficients in the .80's and .90's; certainly the lower levels of interrater agreement raise some question about the dependability of the Behavioral Assertion Test used in this study. Parenthetically, the one other study utilizing the same rating criteria with undergraduate students (Glenn, 1980) reported interrater reliability coefficients in a similar, or somewhat lower range than those reported in the present study. While more extensive rater training would probably improve these measures of interjudge agreement, one might also question whether rating criteria developed for use with adult inpatient psychiatric patients present a more difficult rating task when used with university undergraduates.

The Situations Survey (SS), as noted in chapter three, is an instrument developed by the present investigator to research the questions regarding self-efficacy and outcome expectations. Lack of an available measure warranted the development of such an instrument, yet its construction, reliability and validity are not without question. Until further research provides data on the psychometric properties of this instrument, conclusions or interpretations about the research hypotheses must be regarded as tentative.
In constructing the SS, a number of considerations were made: 1) that situations would represent a range of target persons and types of assertion; 2) that situations used in the survey would closely parallel the kinds of situations represented in assertion inventories and previous assertion research; 3) that stimulus persons in each situation be gender-neutral; and where relevant, not explicitly or implicitly heterosexual or homosexual in orientation; and 4) that stimulus situations be standardized for all subjects, but that there be a mix of quantitative and qualitative measures of subjects' responses to each situation. Quantitative measures of self-efficacy magnitude and self-efficacy strength were used as has been done in previous research on these variables. Outcome expectations were of particular interest in this research in light of the hypotheses generated in chapter three, therefore both a qualitative measure of expected outcome, and quantitative measures of outcome strength and outcome valences were used.

There are, of course, advantages and disadvantages to these methods. One advantage is that subjects were allowed to "personalize" their responses to a standardized stimulus situation by providing a "projective" indicator of outcomes of assertion. Similar procedures have been used in other research; most notably, in investigating fear of success. The specific problem with this particular method is that the quantitative measures of outcome strength and outcome valences are in reference to the projective description of an outcome, rather than to a standardized outcome. Related to this is the question of whether or not all of the subjects
used the rating scales to describe the outcome of assertion, or whether some may have used the scales to rate the original assertion situation. Despite very careful instructions to subjects asking them to use the 20 Likert scales to rate the outcome they had written about, it still remains a possibility that some subjects inadvertently used the rating scales to describe the original assertion situation. Future research in this area might benefit from exploration of ways to address this concern.

In spite of the potential problems in interpreting results from this method, the use of a qualitative measure of outcome is particularly beneficial in a preliminary and exploratory study such as the present one. Outcomes described by subjects in their writings may be quite useful in planning future research in this area.

Two concerns are specific to the 18 situations used in the Situations Survey. First, the situations presented in the SS represent only three types of target persons and three assertion types designed specifically for the undergraduate university student. Obviously, future research which may examine the self-efficacy and outcome expectation variables with other populations will need to find more relevant vignettes. An attempt was made to utilize target person and assertion type categories which have been most frequently represented in assertion research and in assertion measures; though it is certainly recognized that these variables have been represented differently in many studies.

Secondly, one must question whether the fact that the narrative situations were written by a female investigator may have in any way
contributed to the finding that women had consistently higher self-efficacy and outcome expectations, as well as self-reported likelihood of assertive responses. Whether or not subleties of language and expression differentially influenced men and women participating in this research remains to be known. In the future, this issue might be addressed in a number of ways, in order to insure a more gender-neutral set of stimulus situations, if the same situations are to be used for men and women. One such method would be to have narrative situations developed by men and women, and in a separate study have these situations rated by males and females for gender bias using only those situations which are perceived to be gender neutral in the self-efficacy and outcome research. A second method might entail providing men and women with definitions of assertion, aggression and submission to be used in rating a large number of vignettes; and subsequently using only those vignettes which were rated as assertive by both men and women. Other approaches to address this concern might be generated.

Statistical considerations

The question of statistical power often arises in evaluating the results of data analyses. Pragmatic considerations often limit the number of subjects used in a given investigation, and the present study is no exception. It should be noted that approximately 20 subjects per independent variable were represented in the multiple regression procedure for combined groups, whereas only 10 subjects per variable were present for MLR analyses done separately by gender of subject. Numerous authors would agree that 10-20 subjects per
variable should be treated as the minimum in using regression techniques; consequently the current procedures would have been more powerful had more subjects been used in this study. Both hierarchical and stepwise regression procedures are viewed as sensitive to sampling error; and as such it is important to recognize that the regression equation generated by a particular sample may not be the same as for the next sample tested. Logically, the issue of sampling error becomes less of a concern as the power of the test is increased. Future research in this area may benefit from a larger sample under study.

Implications for Future Research

Throughout this discussion, references have been made to implications for future research. The purpose of this section is to briefly summarize these and other ideas which have been developed in response to the current investigation. One initial direction for future research would focus upon gathering reliability and validity data for both the Behavioral Assertion Test and the Situations Survey. Given the number of behavioral assertion measures already referenced in the literature, comparison of research results will continue to be difficult until researchers begin to use well-developed and standardized measures in this area. The CWAS is a good example of progress in this area, though it is limited by its design for college women. On the other hand, the Situations Survey represents an initial attempt at developing a measure which explores self-efficacy and outcome expectations regarding assertion, rather than assertion skill. As such it may be particularly worthwhile to
focus future research on developing and refining the psychometric properties of this instrument, particularly if its use as a research instrument is to be continued. Research examining the test-retest reliability and/or cross-validational research using the Situations Survey, BAT, and CSES may be a good place to begin.

Another proposal is to conduct a factor analytic study of outcome valences generated by the Situations Survey. In particular, differences in factor solutions for men and women might be explored. To conduct such a study, approximately 300 additional subjects might be asked to complete the Situations Survey only, and this data could be added to the current sample to conduct a preliminary factor analysis.

It might be interesting to develop a system for content analyzing the qualitative measures of outcome generated by participants in this research. Such an endeavor might be particularly useful in beginning to develop a line of research which explores outcome expectations regarding assertion, and how such expectations correspond with others' perceptions of assertive men and women. In a sense, the question here is whether or not such outcome expectations correspond with reality; that is, are subjects perceived by others in the ways that they expect to be perceived?

Future research might attempt to look at the relationship between outcome expectations as measured by the Situations Survey and subjects' responses to a self-report measure such as the Fear of Negative Evaluations inventory (Watson & Friend, 1969).
As mentioned previously in this chapter, there is a great deal of support in the assertion literature for the "situational specificity" hypothesis. Kirschner and Galassi (1973) suggest that "the degree to which an individual behaves assertively is presumed to be influenced more by stimulus characteristics of the interpersonal situation (situationism) than by manifestations of more stable personality characteristics or behavioral consistencies (personism) (p.355)." One implication for future research is that target person and assertion type might be used as predictor variables in a regression equation for likelihood scores. The presence of significant target person and assertion type main effects as well as an interaction of the two in the present research might indicate their utility in predicting the likelihood of an assertive response, in addition to the self-efficacy, outcome, and skill variables.

Gender differences in the present study indicated that women report more assertion skill; greater self-efficacy expectations; stronger, and more positive outcome expectations; and greater likelihood of responding assertively than do men. Research which explores the possibility of gender differences with respect to these variables might also be interesting if conducted with populations other than the undergraduate psychology student. For example, research using this methodology might be conducted with older adults; adults in the work force; ethnic and cultural minorities; counseling center/community mental health clients; or individuals who specifically seek out assertion training. Such research would be useful in exploring the hypothesis that the gender differences
present in this study may reflect some positive gains in young women's experiences and thoughts regarding assertion as a result of the women's movement.

In general, the literature in this area could benefit from work toward developing common definitions of the assertion construct, as well as more consistent approaches to measuring it. Certainly such a move would aid in comparison of research results and the development of a systematic approach to understanding men's and women's decisions regarding assertion. For example, MacDonald (1982) has reported definitions of assertion, aggression, and submission which research data indicates are behaviorally distinct constructs. These or other such definitions might prove useful to researchers who seek to provide the assertion literature with some system of organization, in part, for the purpose of aiding in the interpretability of results. The literature in this area is continually beset by the problem of ambiguous definitions of constructs and would clearly benefit from some system of organization. Johnson (1976) has provided such an organization by describing four ways in which assertiveness might be viewed: 1) a general theoretical definition; 2) an operational definition including specific verbal and nonverbal components; 3) a definition dealing with content and form of verbal responses; and 4) a definition in terms of environmental influences. Future research might benefit from consideration of the implications of a unifying model for understanding decisions regarding assertion.
Summary

The intent of this chapter was to present a discussion of the findings of this investigation, methodological issues in doing such research, and finally, suggestions for future research. Several important research results were discussed: 1) gender differences in which women reported more assertion skill; greater self-efficacy expectations; stronger, and more positive outcome expectations; and a greater likelihood of responding assertively than men; 2) significant effects of target person and assertion type on measures of self-efficacy, outcome, and likelihood; 3) the emergence of self-efficacy magnitude and confidence as major variables in predicting the likelihood of assertion; with outcome expectations and the behavioral measure of assertion playing somewhat less important roles; and 4) gender differences in the importance of self-efficacy, outcome, and skill measures in explaining likelihood decisions regarding assertion. Numerous methodological concerns related to this research have been discussed; yet in spite of them, the present investigation appears to make two important contributions to the assertion literature: 1) the data may tentatively suggest that young women's experiences of and thoughts about assertion may be more positive than has been the case in the past; and 2) the present study represents an initial attempt to utilize social learning theory as a model for understanding men's and women's decisions regarding assertion.
REFERENCES


Currant, G.F., Dickson, A.L., Anderson, H.N., & Faulkender, P.J.


Glancy, D.J. Women in law: The dependable ones. *Harvard Law School*


Johnson, P.A. (1976). The relationships of trait anxiety, personality characteristics, and values to assertiveness in the adult woman. Unpublished doctoral dissertation, The Ohio State University, Columbus, Ohio.


psychiatry. Baltimore: Johns Hopkins University Press.


Salter, A. (1949). *Conditioned reflex therapy*. New York:


APPENDIX A
THE COLLEGE SELF-EXPRESSION SCALE

The following inventory is designed to provide information about the way in which you express yourself. Please answer the questions by circling the appropriate number: 0 = almost always or always; 1 = usually; 2 = sometimes; 3 = seldom; 4 = never or rarely. Your answer should reflect how you generally express yourself in that situation.

0 1 2 3 4 1. Do you ignore it when someone pushes in front of you in line?
0 1 2 3 4 2. When you decide that you no longer wish to date someone, do you have much difficulty telling the person of your decision?
0 1 2 3 4 3. Would you exchange a purchase you discovered to be faulty?
0 1 2 3 4 4. If you decided to change your major to a field which your parents will not approve of, would you have difficulty telling them?
0 1 2 3 4 5. Are you inclined to be over-apologetic?
0 1 2 3 4 6. If you were studying and your roommate were making too much noise, would you ask him/her to stop?
0 1 2 3 4 7. Is it difficult for you to compliment and praise others?
0 1 2 3 4 8. If you are angry at your parents, can you tell them?
0 1 2 3 4 9. Do you insist that your roommate does his/her fair share of the cleaning?
0 1 2 3 4 10. If you find yourself becoming fond of someone you are dating, would you have difficulty expressing these feelings to that person?
0 1 2 3 4 11. If a friend who has borrowed $5.00 from you seems to have forgotten about it, would you remind this person?
0 1 2 3 4 12. Are you overly careful to avoid hurting other people's feelings?
0 1 2 3 4 13. If you have a close friend whom your parents dislike and constantly criticize, would you inform your parents that you disagree with them and inform them of your friend's assets?
0 1 2 3 4 14. Do you find it difficult to ask a friend to do a favor for you?
0 1 2 3 4 15. If food which is not to your satisfaction is served in a restaurant, would you complain about it to the waiter?
0 1 2 3 4 16. If your roommate without your permission eats food that s/he knows you have been saving, can you express your displeasure to her/him?
0 1 2 3 4 17. If a salesperson has gone to considerable trouble to show you some merchandise which is not quite suitable, do you have difficulty saying "no"?
0 1 2 3 4 18. Do you keep your opinions to yourself?
0 1 2 3 4 19. If friends visit when you want to study, do you ask them to return at a more convenient time?
20. Are you able to express love and affection to people for whom you care?

21. If you were in a small seminar and the professor made a statement that you considered untrue, would you question it?

22. If a person of the opposite sex whom you have been wanting to meet smiles or directs attention to you at a party, would you take the initiative in beginning a conversation?

23. If someone you respect expresses opinions with which you strongly disagree, would you venture to state your own point of view?

24. Do you go out of your way to avoid trouble with other people?

25. If a friend is wearing a new outfit which you like, do you tell that person so?

26. If after leaving a store you realize that you have been shortchanged, do you go back and request the correct amount?

27. If a friend makes what you consider to be an unreasonable request, are you able to refuse?

28. If a close and respected relative were annoying you, would you hide your feelings rather than express your annoyance?

29. If your parents want you to come home for a weekend but you have made important plans, would you tell them of your preference?

30. Do you express anger or annoyance toward the opposite sex when it is justified?

31. If a friend does an errand for you, do you tell that person how much you appreciate it?

32. When a person is blatantly unfair, do you fail to say something to her/him?

33. Do you avoid social contacts for fear of doing or saying the wrong thing?

34. If a friend betrays your confidence, would you hesitate to express annoyance to that person?

35. When a clerk in a store waits on someone who has come in after you, do you call her/his attention to this matter?

36. If you are particularly happy about someone's good fortune, can you express this to that person?

37. Would you be hesitant about asking a good friend to lend you a few dollars?
38. If a person teases you to the point that it is no longer fun, do you have difficulty expressing your displeasure?

39. If you arrive late for a meeting, would you rather stand than go to a front seat which could only be secured with a fair degree of conspicuousness?

40. If your date calls on Saturday night 15 minutes before you are supposed to meet and says that s/he has to study for an important exam and cannot make it, would you express you annoyance?

41. If someone keeps kicking the back of your chair in a movie, would you ask her/him to stop?

42. If someone interrupts you in the middle of an important conversation, do you request that the person wait until you have finished?

43. Do you freely volunteer information or opinions in class discussions?

44. Are you reluctant to speak to an attractive acquaintance of the opposite sex?

45. If you lived in an apartment and the landlord failed to make certain necessary repairs after promising to do so, would you insist on it?

46. If your parents want you home by a certain time which you feel is much too early and unreasonable, do you attempt to negotiate this with them?

47. Do you find it difficult to stand up for your rights?

48. If a friend justifiably criticizes you, do you express your resentment then and there?

49. Do you express your feelings to others?

50. Do you avoid asking questions in class for fear of feeling self-conscious?
APPENDIX B
BEHAVIORAL ASSERTION TEST (BAT) SCRIPT

SITUATION NUMBER ONE: "You and one of your closest friends agreed to meet for lunch at twelve o'clock. You were on time and you've been sitting at the table waiting for nearly twenty-five minutes. Finally, your friend comes rushing in and says, 'Sorry I'm so late.' You say..."

SITUATION NUMBER TWO: "Last week you bought a pocket calculator and resolved not to ever loan it because it cost so much. A very good friend calls you and says, 'I have a take home statistics quiz and I just can't finish by hand. It's due tomorrow. Can I borrow your new calculator? I'll really be careful with it.' You say..."

SITUATION NUMBER THREE: "You are driving alone at night on an unfamiliar road and your car runs out of gas. You can't see lights in either direction and don't remember passing a service station in the last several miles. You've been waiting about thirty minutes and two cars have passed, but not stopped. Finally a car stops and the driver asks if you need assistance. The driver takes you to a service station in the nearest town. You realize that you don't have the deposit for the gas can. The driver pays the deposit and takes you back to your car. As your car starts, you say..."

SITUATION NUMBER FOUR: "Earlier today a friend borrowed your typewriter. When s/he did, you told her/him you would need it back soon and s/he promised to return it within an hour. That was five hours ago. Because s/he hadn't returned is as s/he said s/he would, you haven't been able to get the work done that you were planning to do. At last, s/he brings it back saying, 'Sorry I'm so late, I forgot.' You say..."

SITUATION NUMBER FIVE: "You have gone to a movie alone to relax. As the movie begins, you notice that the theatre is packed. During the movie the three people in front of you begin talking louder and louder so you can't even hear the movie's dialogue. Several other people around you have already asked them to stop talking, but they just start laughing and talking louder. You say..."

SITUATION NUMBER SIX: "You are studying for a test you have tomorrow and it looks like you'll have to cram during every minute between now and the test. A good friend phones, and after a long pause says, 'I know you're busy, but I'm really upset about some things. Could I come over and talk to you for awhile tonight?' You say..."
SITUATION NUMBER SEVEN: "You and one of your closest friends have gone out to dinner together. You spend part of the evening reminiscing about many of things that you've done together during the course of your friendship. In particular, you remember many instances when you have helped one another in times of crisis. At the end of the evening, your friend says to you, 'You know, tonight has reminded me of how important you are to me. I really appreciate our friendship.' You say..."

SITUATION NUMBER EIGHT: "As the class ends, your history professor announces a quiz for tomorrow over last week's material. Another student you don't know, and who hardly ever comes to class, comes up to you and says, 'You were taking pretty complete notes. I'm desperate! Could I borrow your notes and Xerox them?' You say..."
RATING ROLE PLAY TAPES

Speech Characteristics

1. Duration of Reply:

   Record the length of time subject speaks per response in each role play. If the subject pauses for more than three seconds, terminate timing until subject speaks again. Then, average across the six role plays.

2. Latency of Response:

   Record the length of time between the actor's statements ending and subjects' responses beginning. Average across the six role plays.

3. Loudness of Speech:

   Rate loudness of subjects' speech for each role play on a five point scale from 1 (very low) to 5 (very loud). Average across the six role plays.

4. Fluency of Speech:

   Rate fluency of subject's speech for each role play on a five point scale from 1 (very non-fluent) to 5 (very fluent). Long pauses, hesitations, repetitions, use of ah, oh, um, you know, and other expletive are to be considered non-fluent speech. Average across the six role plays.

Content and Affect

1. Verbal Content:

   Rate content of subjects' responses for each role play on a five point scale with 1 signifying no response, or an inappropriate response, and 5 indicating unqualified, or direct, assertiveness. Average across the six role plays.

2. Affect:

   Rate the emotional tone of subjects' responses in each role play on a five point scale from 1 (flat, unemotional) to 5 (full, appropriate affect). Average across the six roleplays.
Overall Assertiveness

After rating all previous categories, rate each subject's overall assertiveness in each role play on a 5 point scale from 1 (very unassertive) to 5 (very assertive). Average across the six role plays.
BEHAVIORAL ASSERTION TEST RATING FORM

TAPE # _______
VOICE # _______
SUBJECT # _______
RATER # _______

1. Duration of reply: ______ minutes ______ seconds

2. Latency of response: ______ seconds

3. Loudness of speech:

   1  2  3  4  5
   very  low  very  loud

4. Fluency of speech:

   1  2  3  4  5
   very  non-fluent  very  fluent

5. Verbal content:

   1  2  3  4  5
   inappropriate  unqualified  assertiveness

6. Affect:

   1  2  3  4  5
   flat,  full,  unemotional  appropriate

7. Overall Assertion:

   1  2  3  4  5
   very  non-assertive  very  assertive
THE SITUATIONS SURVEY

Instructions

Although you are reading the following situations in this booklet, please try to imagine that you are actually a participant in each situation. Take a moment to think about how you would feel and act in such a situation and respond on that basis. For each scale, please be sure to put a check ( ) or "X" above the space, or number, which best corresponds to how you would feel. For each question that does not involve a scale, please write one or two short sentences which best describe your response.

In a moment you will turn to the next page where you will find a "SAMPLE SITUATION." Please read through this carefully and and answer each of the questions which follow. If you have any questions or are confused about what you are being asked to do, please stop and ask the investigator in charge of this study to explain it further. If you have no questions, proceed to "SITUATION ONE" and continue until you have completed this booklet. Now, please turn to the SAMPLE SITUATION on the next page, and begin working.
SAMPLE SITUATION

You are expecting a long-distance phone call from a friend who is only able to call you between 11 p.m. and midnight. Your roommate has been on the phone since 10:45 and it's now 11:45. You think that your friend has probably been trying to call you and hasn't been able to get through since your roommate has kept the line busy. As 12 o'clock approaches you begin to get more anxious since you were really looking forward to talking with your friend. You decide to interrupt your roommate, reminding him/her that you are expecting a phone call, and would like him/her to hang up.
THE 18 SITUATIONS USED IN THE SITUATIONS SURVEY

The following situations are grouped into pairs representing the same cell of the target person by assertion type matrix. In the actual Situations Survey, situations were randomly ordered for presentation to subjects. In order to minimize the amount of space required by this appendix, each of the 18 situations will not be followed by the self-efficacy, likelihood, and outcome measures; but rather, these questions will be presented at the end of this section, following presentation of the 18 social situations.

FAMILY/POSITIVE:

Since you began college, your parents frequently offered their emotional, and sometimes financial, support. It's been nice for you to know that your family is "there" for you when you need them. Even though you and your parents have had some rough moments, you realize that they care for you and want to be supportive. The next time you talk with them on the telephone you decide to make a special effort to thank them for the support and encouragement that they've given you. You tell them that though you don't always express your appreciation, you do realize that they've been important to you, and you just called them to say "thanks."

It wasn't until you started college and saw less of your family that you really realized how important they are to you. Lately you have been aware of many things which you appreciate about them, as well as how much you miss them. You decide to make a quick trip home to see them. You are looking forward to going home, and being able to tell your family just how much you care for, and appreciate them.

FAMILY/NEGATIVE

You have been talking with your family members on the telephone, and as usual, they begin making negative comments about the person you have been dating. Once again, they remind you that they don't approve of your choice of partners, and hope that you don't intend to become "seriously involved" with this person. Each time you talk with them you feel hurt that your family is not supportive of your relationship. You also dislike the fact that they attempt to tell you whom you should and should not date. This time you decide to tell them that their negative comments and lack of support leave you feeling angry and upset with them.

You've been studying all day and have decided that you need to work all weekend on a paper. Just as you've collected your books to go to the library, there is a knock on your door. Your parents have arrived, and announced their plans to spend the weekend visiting with you. Ordinarily you would welcome their visit, but you are
particularly irritated with them because earlier in the week you had
told them of your busy schedule and weekend study plans. You decide
to be honest with them, telling them that you are annoyed because they didn't check with you first before coming to town.

FAMILY/SELF-AFFIRMATION

You have gone home for the weekend. Friday night when you got home
you mentioned to your parents that you were quite tired and also
needed to spend most of the weekend studying. On Saturday morning
your parents inform you that they have made plans for an evening out
with old family friends, and that you are expected to attend. The
insist that if you don't go out with them, "everyone" will be
disappointed. You decide to once again remind them that you are
tired and need to study, therefore you will not be going out with
them that evening.

You have recently decided to change your major from business to
social work. When you first enrolled in college, your parents had
encouraged you to major in computer science or engineering because
both majors would lead to well-paying jobs. After taking a social
work class, you finally feel as though you have found the "right"
field for you, however you know that your parents will be
disappointed in your decision. You decide to talk with them, letting
them know that you understand and appreciate their concern. At the
same time you let them know that you do intend to major in social
work.

FRIEND/POSITIVE

Recently you have been spending more time with an individual in one
of your classes. Prior to this term, the two of you were not
acquainted. The more time you spend with this individual, the more
you have discovered how much you enjoy his(her) company. You are
beginning to think that this person might become one of your closer
friends. You decide to tell your new friend how much you enjoy
spending time together, and how you hope to become better friends.

You and a friend have been taking an English course together. Last
week both of you were required to turn in a term paper for the class.
Today in class, the instructor has returned your paper. You have
been given a "B" on your paper. Your friend who is sitting next to
you tells you that he(she) received an "A". Even though you are
disappointed in your own grade, you decide to congratulate your
friend on his(her) excellent grade.
FRIEND/NEGATIVE

One of your friends has been particularly negative lately and has directed a number of very sarcastic comments toward you. You think that if your friend is actually upset about something you have said or done, he/she should tell you directly rather than making these sarcastic and indirect comments. You are becoming fed-up with his/her attacks on you and feel that they are quite unfair. You decide to tell your friend that these sarcastic comments make you quite angry, and that you would appreciate if he/she would refrain from making them.

For months, you and one of your close friends have had plans to go out of town for spring vacation. It is now the week before you had planned to leave. Your phone rings and it is your friend who says, "The person I've just started dating has asked me to go on vacation with him/her. I hope you don't mind, but... oh you know how it is." You feel angry and hurt, not to mention frustrated, because it will be difficult to make new vacation plans at the last minute. You decide to tell your friend that although you understand the situation, you also feel quite angry and hurt about this sudden change in plans.

FRIENDS/SELF-AFFIRMATION:

You and a group of your friends have gathered for lunch. During the meal, one of your friends begins speaking critically about a mutual acquaintance who is not present at lunch. Other people at the table join in with comments such as "what a jerk!" and "if he/she could hear us laughing now!" You happen to like the person about whom your friends are laughing, and are offended by their comments. You decide to tell them that you disagree with their comments and think that it is unfair for them to be talking behind another person's back.

You have been out to dinner with friends at a moderately expensive restaurant. Because you are all students, you had previously decided that each would pay his/her own way. After a very nice dinner, a single check arrives, and each person is asked to contribute the amount of money he/she owes. Although your own bill was ten dollars, the only money you have with you is a twenty dollar bill. You give the person paying the bill your money, and ask that the change be returned to you after the bill has been paid. The other individual pays the check and returns to your table saying nothing about the change you are owed. You approach your friend and ask for the ten dollars you expected in change.
PARTNER/POSITIVE:

You have recently been experiencing a number of personal problems related to family and school pressures. You generally have been feeling very alone and depressed. The person you have been dating has made a special effort to be supportive of you by taking time out to talk with you about your concerns. One afternoon after another one of these conversations, you decide to let your partner know how helpful he(she) has been and to thank him/her for the concern and support.

You have been dating the same person now for several months. You are beginning to recognize that you feel deeply for this person, and are becoming quite serious about the relationship. While it is apparent that the two of you enjoy one another's company, neither one of you have specifically brought up the subject of your relationship. You decide it's "now or never" and somebody's got to do it. The next time you are together, you decide to share your feelings of love and affection with your partner.

PARTNER/NEGATIVE:

You and the person you have been dating have made several plans for a weekend together. You are out one evening with a group of friends and one of them asks your partner to go see a movie with him/her on Saturday. Without consulting you, your partner agrees to see the movie with another friend. You feel angry and disappointed that your partner has failed to consider that he(she) had already made plans to spend Saturday night with you. You decide to tell your partner that you are angry and feel as though you have been left out of his/her plans.

The person you are romantically involved with has been quite irritable lately, and when you are together, frequently seems to "take it out on you." Although you know that your partner has been under a lot of stress, you are also getting quite tired of being dumped on all of the time. You feel as though you have tried to be patient and supportive, but recognize that you have your limits too. You decide to tell your partner that although you can appreciate his/her difficulties, you feel that these outbursts are unjustified and request that they stop.

PARTNER/SELF-AFFIRMATION:

You have made plans to spend the evening with the person you have recently begun dating. The two of you have decided to go out to dinner and then to a party at the home of a mutual friend. You had a good time at dinner, but now that you have arrived at the party, you realize how tired you are. What you'd really like to do is to leave
the party and go home; however, it is obvious that your date is thoroughly enjoying the party. The later it gets, the more tired you feel, and finally you decide that you need to go home. You find your date, and mention that you are tired and would like to go home.

The person you have been dating calls you and asks if you would let his(her) friend from home stay with you for the weekend. You are quite busy and have an important midterm on Monday morning. You had previously planned to spend the weekend in the library and now your partner is asking for your help in entertaining his(her) friend who is visiting from out of town. You decide to tell your partner that you already have plans to study for your midterms and will not be able to house his(her) friend for the weekend.
SITUATION

You have made plans to spend the evening with the person you have recently begun dating. The two of you have decided to go out to dinner and then to a party at the home of a mutual friend. You had a good time at dinner, but now that you have arrived at the party, you realize how tired you are. What you'd really like to do is to leave the party and go home; however, it is obvious that your date is thoroughly enjoying the party. The later it gets, the more tired you feel, and finally you decide that you need to go home. You find your date, and mention that you are tired and would like to go home.

1. If I found myself in this situation, I could act in this way:

   ___ Yes   ___ No

2. The degree of confidence I have in the above statement:

   10  20  30  40  50  60  70  80  90  100
   quite uncertain moderately uncertain quite uncertain

3. The likelihood that if I found myself in this situation, I would choose to act in this way:

   10  20  30  40  50  60  70  80  90  100
   very unlikely somewhat likely
   uncertain uncertain uncertain uncertain

4. If you were to put yourself in the above situation and had acted in this way, what outcomes or consequences would you expect to occur? (e.g., how would this situation end? how would people respond to you?)

5. How confident are you that the outcomes you have described above would actually happen?

   10  20  30  40  50  60  70  80  90  100
   quite uncertain moderately uncertain quite uncertain
5. Please use the following rating scales to describe how you would feel about the OUTCOME of this situation. (Again, OUTCOME refers to considerations such as how the situation might end, or possible consequences of your actions.) Remember to place a check or an "X" above the space which best describes your response.

<table>
<thead>
<tr>
<th>hardly threatening at all</th>
<th>very threatening</th>
</tr>
</thead>
<tbody>
<tr>
<td>friendliness</td>
<td>unfriendliness</td>
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<td>big stakes</td>
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<tr>
<td>pleasant</td>
<td>unpleasant</td>
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<td>important consequences</td>
<td>unimportant consequences</td>
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<td>effective</td>
<td>ineffective</td>
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<tr>
<td>satisfying</td>
<td>dissatisfying</td>
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<tr>
<td>a reduction in self-esteem</td>
<td>an increase in self-esteem</td>
</tr>
<tr>
<td>calming</td>
<td>agitated</td>
</tr>
<tr>
<td>treated unfairly</td>
<td>treated fairly</td>
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<tr>
<td>positive</td>
<td>negative</td>
</tr>
<tr>
<td>out of control of situation</td>
<td>in control of the situation</td>
</tr>
<tr>
<td>costly</td>
<td>beneficial</td>
</tr>
<tr>
<td>not harmful</td>
<td>harmful</td>
</tr>
<tr>
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<td>rewarding</td>
</tr>
<tr>
<td>supportive</td>
<td>unsupportive</td>
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<tr>
<td>relieved</td>
<td>worried</td>
</tr>
<tr>
<td>encouraged</td>
<td>discouraged</td>
</tr>
<tr>
<td>insecure</td>
<td>secure</td>
</tr>
</tbody>
</table>
DATA SHEET

Sex: _____ Male _____ Female

Age: ______

Major: ____________________________

Year in school (FR, SO, JR, SR, etc.): ____________________________

We are interested in collecting information about the kinds of previous educational experiences you may have participated in. Please check "Yes" or "No" regarding your participation in each of the activities listed below. Please limit your responses to experiences you have had in either high school or college.

Student Organizations/Clubs _____ Yes _____ No
Intramural Sports _____ Yes _____ No
Fraternities/Sororities _____ Yes _____ No
Stress management training _____ Yes _____ No
Assertiveness training _____ Yes _____ No
Study skills training _____ Yes _____ No
Test-anxiety workshop _____ Yes _____ No
Time management workshop _____ Yes _____ No
Support groups _____ Yes _____ No
Health and wellness workshops _____ Yes _____ No
Paraprofessional training (e.g., RA, Student Assistant) _____ Yes _____ No

**Thank you once again for your willingness to participate in this study.**
INSTRUCTIONS FOR SITUATIONS SURVEY AND CSES

In this study, you will be asked to give us your responses to a variety of social situations. As a participant in this research there are several things you should know:

1) Your responses to all of the instruments in this study are anonymous and confidential. The code number which will appear at the top of each measure is there simply so that we know that all of the questionnaires belong to the same person, and not so that we can identify the particular person who completed them.

2) You have the right as a participant to ask questions about this study; in particular, feel free to ask questions of the investigator when you have completed your participation.

3) Finally, your participation in this research is voluntary. This means that you have the right to discontinue your participation at any time. We hope, of course, that you will choose to complete the study.

One of the things that I'll ask you to do first is to read the following consent form. Basically, it summarizes the things that I've just told you. If you agree, please go ahead and sign and date the form.

Thanks.

The first part of this study involves completing two questionnaires (hand them to participant). The first one that you will be filling out is the top one, the Situations Survey. On the first page of this packet you will find a set of instructions. Please read them. Let me give you a little more specific information about how to fill out this questionnaire. First, turn to the next page where you will find a SAMPLE SITUATION. What you see is a brief description of a social situation, followed by five questions. Answer each of these five questions in response to the social situation described at the top of the page. In particular, question number four asks you to describe what you think might be the outcome of this situation. All that you need to do here is to write a couple of short sentences describing your ideas about the what might happen as a result of acting in the way that was described in the situation. If you turn to the next page, you will find a set of 20 rating scales. Remember that these scales are to be used in rating the outcome that you are written about in question four, and not to describe the original situation.
At this point do you have any questions?
Please begin now by completing the sample situation. If you have no questions about the sample, go ahead and begin working on situation one. When you have completed all the situations in this booklet, you can then begin working on the second questionnaire. Any questions?
INSTRUCTIONS PRIOR TO THE BEHAVIORAL ASSERTION TEST

(Ask subject to take the seat in front of the two tape recorders and microphone.)

Instructions to subject:

The last part of this investigation involves listening to eight social situations described on a tape recording, and then giving us your reactions to the situations. What you will be doing is listening to a short description of a situation by a narrator, who will also tell you what one of the actors in the situation might be saying to you if you were actually present. What this means is that we are asking you to try to imagine that you are actually involved in the situation being described by the narrator, and that another person in the situation has said something to you. Then, we want you to verbally respond by saying exactly what you would say if the other person in the situation was sitting right here in this room. The key is to imagine that the situation being described by the narrator is actually happening, and then to say whatever you would say in that situation. Your response will then be tape recorded. To summarize: a narrator on tape will describe a social situation. Your task is to try to imagine that it is actually occurring. Then the narrator will tell you what another person in the situation would be saying to you if he/she were actually here. Following that there will be a 20 second silence in which you will say aloud whatever you would say to that person if the situation were really happening. We're asking you not to tell us about what you might say (Example: In this situation, I would probably say "No") but rather, to just say it (Example: No). I am going to leave the room so that you can listen to the recording and make your responses without feeling like I'm sitting here listening in. Okay? Any questions? What I'm going to do is to turn on the tape recording which will record your answers. All that you need to do when I leave the room is to push this button to begin the narration. You do not need to stop the narration; it is set up so that after each description of a situation there is a 20 second silence for you to make a response; at the end of the 20 seconds, the narrator will automatically begin describing the next situation. At the end of the tape recording, you can shut off both machines and come and get me outside. All set? (Leave the room.)
The only other thing that I need for you to do is to fill out this short questionnaire; it will only take a minute. Following its completion: That concludes the study. Do you have any questions or comments for me?
Table 22.

Means and Standard Deviations by Gender

<table>
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<th>Gender</th>
<th>Variable</th>
<th>N</th>
<th>Mean</th>
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</tr>
</thead>
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Means and Standard Deviations by Assertion Type

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Table 26.
Means and Standard Deviations for Gender by Target Person by Assertion Type
Table 26 (Continued).

Means and Standard Deviations for Gender by Target Person by Assertion Type

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Table 28.  
Correlations for Men's Scores on the Situations Survey

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