The Relationship Between
Sex-role Identity, Assertiveness, and Locus of Control

An Honors Thesis (ID 499)

By

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Review of the Literature

Androgyny

The traditional concepts of the masculine male and feminine female as standards of psychological health have recently been challenged. Instead, the concept of androgyny (from "andro", male, and "gyne", female) has emerged, a combination of both masculine and feminine traits which allows for greater flexibility in behavior patterns and self-concept. There is considerable evidence that traditional sex typing is unhealthy. For example, high femininity in females consistently correlates with high anxiety, low self-esteem, and low self-acceptance (e.g., Cosentino and Heilbrun, 1964; Gall, 1969; Gray, 1957; Sears, 1970; Webb, 1963). And although high masculinity in males has been related to better psychological adjustment during adolescence, it is often accompanied during adulthood by high anxiety, high neuroticism, and low self-acceptance (Harford, Willis, and Deabler, 1967; Mussen, 1962--from Bem, 1975a, p. 635).

The concept of masculinity has been associated by Parsons and Bales (1955) with an "instrumental orientation, a cognitive focus on getting the job done or the problem solved, whereas femininity has been associated with an expressive orientation, an affective concern for the welfare of others and the harmony of the group" (Bem, Martyna, and Watson, 1976, p. 1016). In
accordance with this, Bakan (1966) has suggested that masculinity is associated with an "agentic orientation, a concern for oneself as an individual, whereas femininity is associated with a communal orientation, a concern for the relationship between oneself and others" (Bem, Martyna, and Watson, 1976, p. 1016). The alternative, androgyny, is less restricted, allowing for more flexibility in behavior, depending on the situation rather than the stereotypically "appropriate" response. The reliance on situational appropriateness rather than sex-role appropriateness allows for a broader range of response alternatives, and so leads to more effective behavior.

One of the leading androgyny researchers is Sandra L. Bem. Bem (1975b) feels that "freeing people from rigid sex roles and allowing them to be androgynous...should make them more flexible in meeting new situations, and less restricted in what they can do and how they can express themselves" (p. 59). She feels that a nonandrogynous sex role seriously restricts the range of behaviors available to a person while an androgynous self-concept allows an individual to engage freely in both masculine and feminine behaviors (Bem, 1975a, p. 634). The theoretical basis of androgyny suggests that a person "would have no need to limit his or her behaviors to those traditionally defined as 'sex appropriate' but would have the psychological freedom to engage in whatever behavior seemed most effective at the moment, irrespective of its stereotype as masculine or feminine" (Bem and Lenney, 1976, p. 48). An androgynous
self-concept integrates both masculinity and femininity into a well-balanced union. "The concept of psychological androgyny implies that it is possible for an individual to be both masculine and feminine, both instrumental and expressive, both agentic and communal, depending upon the situational appropriateness of these various modalities; and it further implies that an individual may even blend these complementary modalities into a single act" (Bem, Martyna, and Watson, 1976, p. 1016).

Even though the concept of androgyny is growing in acceptance, the traditional stereotypes still prevail. Broverman (1972) has found that college students describe the ideal woman as less competent than the ideal man, and that even mental health professionals tend to describe "mature healthy women as more submissive, less independent, etc., than either mature healthy men, or adults, sex unspecified" (Broverman, p. 75). A belief in these stereotypes would logically lead to an internalization of the "appropriate" sex-role and its accompanying behaviors, this in turn forming a major part of one's self-concept.

According to Bem's studies, in which she administered the Bem Sex Role Inventory (BSRI) to approximately 1,500 undergraduates at Stanford University, about 50% consistently adhere to "appropriate" sex roles, about 15% are cross sex typed, and about 35% are androgynous (Bem, 1975b, p. 61). Bem (1974, 1975, 1976) has conducted several studies regarding independence and nurturance in association with sex role identity. She found androgynous subjects of both sexes displayed both "masculine" independence and "feminine" nurturance under conditions designed to elicit such responses. In contrast,
"all of the nonandrogynous subjects were found to display behavioral deficits of one sort or another, with the feminine females showing perhaps the greatest deficit of all" (Bem, 1975a, p. 634). The feminine females failed to display independence under pressure to conform and also failed to display playfulness (nurturance) with a kitten. Viewing these results, Bem believed the feminine females to have "flunked" both critical tasks, thus displaying the most serious behavioral deficit (Bem, 1975a, p. 642). However, in a later study (Bem, 1976) using human subjects, the feminine females did display nurturance. Bem (1976) found that only androgynous males and females were high in both instrumental (e.g., independence) and expressive (e.g., nurturance) domains. The feminine males were low in independence, while masculine males were low in nurturance. Feminine women were low in independence while masculine women were slightly lower in nurturance. The behavior of the masculine females produces some question, falling somewhere between the androgynous and feminine females. Heilbrun (1968) reports similar results, finding masculine girls to be both goal oriented (instrumental) and socially sensitive (expressive), while feminine girls tended to be socially sensitive but lacking in goal orientation. O'Leary and Depner (1976) in studying women's sex-role identity, propose that "the more constricted a woman's gender-role definition, the more restricted her behavioral alternatives" (p. 313).
In one of Bem's studies (1975b), 67% of the feminine women found it hard to be assertive as compared to 28% of the masculine men and androgynous subjects. The masculine men were the least responsive to the problems of others, with only 14% above average in showing concern, as compared to 60% of all other students (p. 61). The results of these experiments suggest that rigid sex roles can seriously restrict behavior. The masculine men displayed "masculine" independence and assertion when necessary, but they were not responsive to a kitten, a baby, or to a person in need. "In other words, they lacked the ability to express warmth, playfulness and concern--important human--if traditionally feminine--traits" (Bem, 1975b, p. 62). The feminine women were restricted in their ability to express masculine behavioral characteristics. They displayed traditional feminine behaviors (playing with a baby, responding with concern and support for a troubled person) but they were not "independent in judgment or assertive of their own preferences" (Bem, 1975b, p. 62).

In contrast to these behavioral deficits, "androgynous men and women did just about everything. They could be independent and assertive when they needed to be, and warm and responsive in appropriate situations. It didn't matter, in other words, whether a behavior was stereotypically masculine or feminine; they did equally well on both" (Bem, 1975b, p. 62).

According to both Kagan (1964) and Kohlberg (1966), "the highly sex-typed individual is motivated to keep his behavior consistent with an internalized sex-role standard, a goal that he presumably accomplishes by suppressing any
behavior that might be considered undesirable or inappropriate for his sex" (Bem, 1974, p. 155). This inhibition of expression not only produces behavioral deficits, but could conceivably lower self-esteem. Bem and Lenney (1976) found that when subjects were required to perform cross-sex activities, it was the sex-typed individuals who experienced the most discomfort and who felt the worst about themselves. Spence, Helmreich, and Stapp (1975) administered the Personal Attributes Questionnaire, which includes a male-valued scale (positive instrumental characteristics), a female-valued scale (positive expressive characteristics), and a sex-specific scale including both positive and negative and both instrumental and expressive items. They found highly significant, positive correlations between masculinity (as assessed by both the male-valued and sex-specific scales) and self-esteem for both sexes. Significant positive correlations between femininity (female-valued scale) and self-esteem were also found for both sexes. Spence, et. al. suggest that "the correlations between male-valued and female-valued items and their individually strong positive relationship with self-esteem suggest that the two factors may function in an additive way to determine an individual's self-concept and behaviors. These data suggest that androgyny, conceived of as the possession of a high degree of both masculinity and femininity, may lead to the most socially desirable consequences, the absolute strengths of both components influencing attitudinal and behavioral
outcomes for the individual" (p. 35). For both sexes, subjects classed as androgynous were highest in self-esteem, followed by those high in masculinity and low in femininity. Those low in both dimensions obtained the lowest self-esteem scores (Spence, et. al., 1975, p. 35).

Spence, et. al. (1975) propose a distinction between "androgynous" individuals, who are high in both masculinity and femininity and "undifferentiated" individuals who are low in both dimensions. Bem, Martyna, and Watson (1976) have found evidence to support this distinction. No significant difference was found between the high/high and low/low groups on Rotter's Internal-External scale, however; the low/low group was significantly lower in self-esteem and showed more behavioral inhibition (Bem, et. al., p. 1022-1023). Heilbrun (1976) also recognizes the low-masculine/low feminine group and their lower self-esteem as compared to androgynous, masculine, and feminine subjects.

There is growing empirical evidence that androgyny is associated with more effective behavior (Bem, 1975; Heilbrun, 1968; Spence, et. al., 1975). Bem and Heilbrun have focused on the "greater flexibility of the college-age person in accommodating to situations with varying role demands" (Heilbrun, p. 188), while Spence, et. al. have based their conclusions on higher self-esteem. Whether higher self-esteem is a result of a more flexible self-concept or a contributor to the development of androgyny remains in question.
Bem summarizes the concept of androgyny as a new view of psychological health by stating that:

"traditional concepts of masculinity and femininity do restrict a person's behavior in important ways. In a modern complex society like ours, an adult has to be assertive, independent, and self-reliant, but traditional femininity makes many women unable to behave in these ways. On the other hand, an adult must also be able to relate to other people, to be sensitive to their needs and concerned about their welfare, as well as to be able to depend on them for emotional support. But traditional masculinity keeps men from responding in such supposedly feminine ways. Androgyny, in contrast, allows an individual to be both independent and tender, assertive and yielding, masculine and feminine. Thus androgyny greatly expands the range of behavior open to everyone, permitting people to cope more effectively with diverse situations" (Bem, 1975b, p. 62).

Assertion

Another concept that leads to more effective behavior is that of assertion. Jakubowski (1977) defines assertion as "expressing feelings, beliefs, and preferences in a way which is direct, honest, appropriate, and shows a high regard for your rights as well as for the rights and feelings of others" (p. 9). However, many investigators have pointed out the distinction between positive and negative assertion. Eisler, Hersen, Miller, and Blanchard (1975) suggest that some individuals may have no difficulty responding with negative assertions, but may have difficulty responding when positive expression is required, or vice versa. Lazarus (1971) has pointed out that "most definitions of assertiveness do not
include the expression of positive emotions such as affection, empathy, admiration and appreciation. Wolpe (1969) has also differentiated between 'hostile' assertive responses...and 'commendatory' remarks" (Eisler, et. al., p. 330). Percell, Berwick, and Beigel (1974) incorporate this distinction into a concise definition of the goals of assertiveness training as "the spontaneous expression of personal rights and feelings, both positive and negative, in a socially acceptable manner" (p. 502). Shelton (1977) details assertion more completely with four basic statements: (1) the ability to express all manner of emotions, both pleasant and unpleasant in an open, direct and honest way; (2) the capacity to exercise one's rights without denying the rights of others; (3) the confidence to stand up for oneself without undue anxiety; (4) the freedom to be able to make a choice as to whether assertive behavior is appropriate" (p. 465).

Assertive training (Wolpe, 1958, 1969; Wolpe and Lazarus, 1966) originally was developed as a treatment for individuals with a passive or inhibited lifestyle. It has also been reported as successful in the treatment of various clinical problems, including sexual deviation (Edwards, 1972; Stevenson and Wolpe, 1960), depression (Piaget and Lazarus, 1969), and marital conflict (Eisler, Miller, Mersen, and Alford, 1974; Fensterheim, 1972). Assertiveness training has also been used to improve the interpersonal functioning of schizophrenics (Weinman, Gelbart, Wallace, and Post, 1972—from Eisler, et. al., 1975, p. 330). Wilk and Coplan (1977) believe assertive
training to have two parallel goals—"to increase individual awareness of verbal patterns, intentions, feelings, rights, risks and consequences both for the asserter and the other person in the encounter; and second, to increase the verbal and listening skills of the would-be asserter" (p. 460).

Various researchers have associated assertiveness with greater self-acceptance, less anxiety, and higher self-esteem (Alberti and Emmons, 1970; Jakubowski and Cristiani, 1977; Percell, et. al., 1974; Rathus, 1973; Schwartz and Gottman, 1976; Trudeau, 1975; Van Sickle, 1975; Wilk and Coplan, 1977; Wolpe and Lazarus, 1966). Percell et. al. (1974) tested the hypothesis that assertive individuals are more self-accepting and less anxious. Using 100 psychiatric outpatients, they administered an assertion inventory (Lawrence Interpersonal Behavior Test), a self-acceptance scale (Self-Acceptance Scale of the California Psychological Inventory), and a measure of anxiety (Taylor Manifest Anxiety Scale). They found a strong positive relationship for both men and women between the assertion inventory and self-acceptance measure (.49 for men, p < .001, and .51 for women, p < .001) and a strong negative correlation for women only between the assertion inventory and the anxiety measure (−.04 for men, p < .40, and −.88 for women, p < .001). They concluded that assertive individuals are more self-accepting than nonassertive persons and that assertive women are less anxious than non-assertive women. They then tested whether assertive training
would increase self-esteem and reduce the level of anxiety. Subjects in the assertiveness training group displayed significant increases in assertiveness and self-acceptance and significant decreases in anxiety relative to controls.

Various explanations are offered for the behavioral changes that accompany assertiveness. Wolpe and Lazarus (1966) view an assertive response as "incompatible with and an adequate inhibitor of anxiety" (Perceull, et. al., 1974, p. 503). Alberti and Emmons (1970) theorize that the relationship between assertion and self-acceptance is produced by the fact that the "assertive individual is more likely to have success in social situations since he is more expressive and able to make choices for himself; and, consequently, he feels good about himself" (Perceull, et. al., p. 503).

Other researchers cite relationships between assertion and self-esteem. Wilk and Coplan (1977), though offering no empirical evidence, suggest that assertive training results in "an increase in levels of awareness and confidence, self-respect and respect for others" (p. 40). Jakubowski and Cristiani (1977) state that one of the goals of assertiveness training is an increased sense of self-esteem. Rathus (1975), using the Rathus Assertiveness Schedule, found a correlation of .3294 (p < .01) between assertiveness and confidence.

Problems associated with nonassertion have also been studied. The extensiveness of nonassertion was surveyed by Gambrill and Richey (1975) in a sample of UCLA students.
46% reported high discomfort over assertion, and 53% reported a low likelihood of their responding assertively. Only 36% described themselves as being assertive. Jakubowski and Cristiani (1977) believe that "continued nonassertion typically results in individuals feeling a loss of self-confidence and self-respect and a growing anger, hurt, and powerlessness" (p. 2). Schwartz and Gottman (1976) report that individuals scoring low in assertiveness exhibit a greater number of negative and fewer positive self-statements as compared to moderate and high assertive individuals.

Bates and Zimmerman (1971) found that constriction (their term for nonassertion) was positively related to measures of neuroticism and fear, and negatively related to extraversion and affiliation scores. Self-reports of satisfaction from environmental stimuli were inversely related to constriction scores. They also hypothesized that constricted individuals would be more compliant to external demands than assertive individuals. The finding that highly constricted subjects had higher mean GPA's than those scoring low in constriction was used as support for this hypothesis. A relationship between constriction and the internal-external dimension was also found ($r = .38$, 48 df, $p < .01$), suggesting that unassertive individuals are more external than assertive individuals. This is in accordance with Jakubowski's statement (Jakubowski and Cristiani, 1977) that assertive behavior is related to feeling in control of oneself, indicating a more internal orientation.
Internal-External Locus of Control

The internal-external dimension has been the subject of many studies. Social learning theory (Rotter, 1954, 1955, 1960) provides the general theoretical basis for this concept regarding the nature and effects of reinforcement. In social learning theory, "a reinforcement acts to strengthen an expectancy that a particular behavior or event will be followed by that reinforcement in the future...It seems likely that, depending on the individual's history of reinforcement, individuals would differ in the degree to which they attributed reinforcement to their own actions" (Rotter, 1966, p. 2). The first attempt to measure the internal-external control dimension as a personality variable in social learning theory was reported in a doctoral dissertation by Phares (1955). Phares describes the internal vs. external control of reinforcement (I-E) as referring to "the extent to which an individual feels that he has control over the reinforcements that occur relative to his behavior. Internals tend to feel that they control their own destiny and are the effective agents in determining the occurrence of reinforcements. Externals, however, tend to see forces beyond their control as being the essential factors in determining the occurrence of reinforcements (such forces as fate, chance, powerful others, the complexity or unpredictability of the world, etc." (Phares, 1968, p. 649). Rotter (1966), who has developed the most widely accepted internal-external
scale (with a higher score indicating higher externality), explains the concept in a similar way. "When a reinforcement is perceived by the subject as following some action of his own but not being entirely contingent upon his action, then, in our culture, it is typically perceived as the result of luck, chance, fate, as under the control of powerful others, or as unpredictable because of the great complexity of the forces surrounding him. When the event is interpreted in this way by an individual, we have labeled this a belief in external control. If the person perceives that the event is contingent upon his own behavior or his own relatively permanent characteristics, we have termed this a belief in internal control" (Rotter, 1966, p. 1).

Rotter (1966) believes that "a generalized attitude, belief, or expectancy regarding the nature of the causal relationship between one's own behavior and its consequences might affect a variety of behavioral choices in a broad band of life situations" (Rotter, 1966, p. 2). Phares (1968) reports relationships between the I-E dimension and a variety of behaviors, including some learning situations (Dialer, 1961; James, 1957; Phares, 1955), conformity situations (Crowne and Liverant, 1963), and risk-taking (Liverant and Scodel, 1960). I-E has also been related to specific tests (Holden, 1958; Simmons, 1959), and to differences among known groups (Battle and Rotter, 1963; Cromwell, Rosenthal, Shakow, and Zahn, 1961). Preferences for skill or chance rewards (Rotter and Kulry, 1965), differences in level-of-aspiration behavior (Lefcourt, 1967),
the tendency to forget failures (Efram, 1963), attempts to control the environment (Gore and Rotter, 1963), and resistance to subtle suggestion (Gore, 1962) have also been associated with the internal-external concept.

Gore and Rotter (1963) have found that the individual who tends to perceive reinforcement as contingent upon his own behavior (internal) is more likely to take social action to better his life conditions. Internal scorers tend to describe themselves as more active, striving, achieving, powerful, independent, and effective than external scorers (Hersch and Scheibe, 1967). They also score highly on the Adjective Check List (ACL) measures of Defensiveness, Achievement, Dominance, Endurance, and Order, and low on Succorance and Abasement (Hersch and Scheibe, 1967). On the California Personality Inventory (CPI), internals scored higher on the Dominance, Tolerance, Good Impression, Sociability, Intellectual Efficiency, Achievement via Conformance, and Well-Being scales (Hersch and Scheibe, 1967). The converse was found to be true for external scorers. They also checked fewer favorable and more unfavorable self-descriptive adjectives in comparison to internals. 23 adjectives were checked significantly more often by internals \( (p < .05) \) as self-descriptive: clever, efficient, egotistical, enthusiastic, independent, self-confident, ambitious, assertive, boastful, conceited, conscientious, deliberate, persevering, clear-thinking, dependable, determined, hard-headed, industrious, ingenious, insightful, organized, reasonable, and stubborn (underscoring mine). Only one
adjective was checked significantly more often by externals—self-pitying (Hersch and Scheibe, 1967). These results support the conclusion of Hersch and Scheibe (1967) that "internality is consistently associated with indexes of social adjustment and personal achievement" (p. 613).

The internal dimension has been associated with higher levels of self-esteem and confidence. Rotter (1966) suggests that "perhaps related to this feeling that one can control the environment is also a feeling that one can control himself" (p. 21), suggesting more self-confidence in one's capabilities. Heaton and Duerfelt (1973) conducted a study with college students using three measures of self-esteem, the I-E scale, and a measure of self-reinforcement. Significant correlations were found for I-E and self-reinforcement (-.60), self-esteem and I-E (-.18), and self-esteem and self-reinforcement (.31). The three measures of self-esteem were also significantly correlated. Other investigators (Lefcourt, 1966; Crowne and Liverant, 1963) report that highly external individuals tend to be less confident than low-external individuals. Both Crowne and Liverant (1963) and Odell (1959) report a significant relationship between externality and conformity. Crowne and Liverant (1963) suggest a relationship between conformity and low self-confidence, describing the conformer as "one who has low expectancies of success in socially evaluative situations" (Lefcourt, 1966, p. 215). The conformer is therefore more external in his life outlook and also lacking in self-confidence due to his low expectation of success.
Internal individuals seem to be more success-oriented, striving to overcome hardships, while external individuals are less concerned with achievement than with their affective response to failure, describing more anxiety and suffering (Lefcourt, 1966). Several early investigators (Merton, 1946; Veblem, 1899) suggest a relationship between passivity and the belief in chance or luck (from Rotter, 1966). Rotter and Mulry (1965) suggest that "if it is true that groups who learn to expect chance or fate or powerful others to control their environment tend also to place value on reinforcements which they see as controlled by these outside influences than those which they perceive as a function of their own skill, it would imply that they would be less motivated towards an increase in skill or achievement" (p. 603). Rotter (1966) also reports that several studies support the finding that internal individuals will take steps to improve his/her environmental condition. "The individual who perceives that he does have control over what happens to him may conform or may go along with suggestions when he chooses to and when he is given a conscious alternative. However, if such a suggestion or attempts at manipulation are not to his benefit or if he perceives them as subtle attempts to influence him without his awareness, he reacts resistively" (Rotter, 1966, p. 24). This suggests that internal individuals have more flexibility in behavior, depending upon situational cues for their response.
The feeling of having control over what happens should logically lead to more effective behavior. Phares (1968) provides support for this assumption. "Previous research has indicated that internals, as opposed to externals, possess more information relevant to their situation and also seem to retain more of such information where it is relevant to personal goals (Seeman, 1963; Seeman and Evans, 1962). They also more actively seek information which is relevant to problem solving (Davis and Phares, 1967) and they likewise are more effective in attempting to change another's attitudes (Phares, 1965). The evidence clearly paints a picture of the internal's greater potential for effectiveness in his environment" (Phares, 1968, p. 661). Angyal (1941) and White (1959) both describe a motivation to attempt to master the environment, labeling it "autonomy" and "competence", respectively. Rotter believes this search for mastery is related to need for achievement, or n\(\text{Ach}\) (McClelland, Atkinson, Clark, and Lowell, 1953), with those high in n\(\text{Ach}\) possessing a belief in their own skill. A relationship has been found between n\(\text{Ach}\) and internal-external control, suggesting competence and felt mastery may contribute to an internal orientation, and more effective behavior.

The internal-external dimension has been found to relate consistently to measures of maladjustment, with internal scorers less maladjusted (Hersch and Scheibe, 1967). Rotter (1966) suggests that "theoretically, one would expect some relationship between internality and good adjustment in our
culture but such a relationship might not hold for extreme internal scorers... Extreme scores which were also true scores would suggest a passivity in the face of environmental difficulties, which, at least for many subjects, would result in maladjustment in our society" (p. 16-17).

Lichtenstein and Keutzer (1967) have found that the difference between males and females on their I-E score is not significant, however; a small, but significant negative relationship was found between external control and age \( (r = -0.14, p < 0.05) \), suggesting a tendency for older subjects to be more internally oriented. Graddall, et. al. (1965) found a relationship between internal scorers and higher grades for high school students. However, Eisenman and Platt (1968) and Hjelle (1970) did not find a significant relationship between college academic achievement and internal-external control. Hjelle (1970) suggests "some individuals who find themselves in a highly competitive academic environment, where the actions of others may have great relevance for their own success, might arrive at an external 'world view' as a defense against failure. Such individuals who were initially highly competitive would still maintain a comparatively strong achievement motivation and thus obtain high grades. They would, however, defensively account for failure by externally oriented attitudes" (Prociuk and Breen, 1973, p. 565). Rotter (1975) also reports that the mean I-E score is higher now than when the scale was first
developed, indicating a higher degree of externality, perhaps related to changing attitudes, or to concepts in the scale itself.

Mirels (1970) has identified two factors of the I-E scale: "a belief concerning felt mastery over the course of one's life, and a belief concerning the extent to which the individual citizen is deemed capable of exerting an impact on political institutions" (p. 226). Mirels suggests that predictions involving the I-E scale might be refined by separate consideration of these two factors. In addition to the distinction between two separate factors, Mirels points out that in items loading high on Factor I, both internal and external statements focus on the individual person as the target of control. In contrast, in items loading high in Factor II, both internal and external statements present the social system rather than the individual as the target of control. None of these items are stated in the first person. Mirels proposes that "equally important in distinguishing these items from those loading on Factor I is the fact that none of them require S to consider luck as a concern relevant to a person's political or social effectiveness. Finally, there exists the strong possibility that responses to these items are heavily contingent on the respondent's opinions about prevailing social institutions, opinions which may have little to do with the kind of personal fate control described by Factor I" (Mirels, 1970, p. 228).
Differences in scores may be due to the fact that though both factors deal with mastery over the environment, one concerns personal situations, the other, political.

Collins (1974) also distinguishes separate aspects within the internal-external control dimension. He believes "a respondent may score external on the Rotter Internal-External scale because he believes (a) the world is difficult, (b) the world is unjust, (c) the world is governed by luck, or (d) the world is politically unresponsive" (p. 381). Collins points out that from Rotter's perspective, these four types of externality are functionally equivalent. But, any one of these beliefs "would inhibit coping and lower self-esteem. Each of the four reasons would lead the respondent to conclude, 'There's no point in trying; it wouldn't make any difference if I did.' But these four sources of control are distinguishable and relatively uncorrelated" (Collins, 1974, p. 387). If Collins is correct in his distinction, this could account for the vast amount of variables correlated with the internal-external dimension and for Rotter's caution (1966) that the test is more suitable for the study of group differences rather than for individual prediction and that individual prediction among college students has been only partially successful. The reason may be that different concepts lie behind the external score. Though the reasons for internal-external control are debated, most investigators agree that internal control is associated with more effective behavior, more flexibility in behavioral responses, and higher self-esteem.
The Study

The present study is designed to investigate the relationships between sex-role identity, assertiveness, and locus of control, the major hypothesis being an expectation of a positive relationship between androgynty, assertiveness and internal locus of control. Those scoring high in masculinity are expected to be more assertive, while highly feminine scorers are expected to be unassertive. No significant relationship is expected between the internal-external dimension and masculinity/femininity. A measure of self-esteem is obtained from within the androgynty inventory. Androgynous and masculine individuals are expected to display higher self-esteem than feminine or indeterminate individuals. High self-esteem is also expected to correlate with assertiveness and internal locus of control.

These assumptions are based on the belief that an androgynous individual expresses more flexibility and control over his/her behavior. He/she is guided by situational factors rather than stereotypic expectations. Since the situation determines the response, more effective behavior should result. This flexibility in response ability, creating greater behavioral effectiveness, should logically lead to a greater feeling of control across a variety of situations (internal locus of control) and to more confidence in one's abilities, producing higher self-esteem. These factors combined, provide a strong foundation for assertive behavior. The feeling that
one has control over what happens and has a variety of response patterns available should enable that person to act assertively.

Sex-typed individuals should display sex-stereotypic behavior (e.g. masculine assertiveness, feminine non-assertiveness), with differences in self-esteem related to their self-concept (e.g. "competent" masculine high in self-esteem, "submissive" feminine low in self-esteem). Individuals labeled as indeterminate are lacking in both masculine and feminine behaviors. This should be reflected in low self-esteem and low assertiveness.

Previous research has found androgyny, internal locus of control, and assertiveness to separately lead to more effective behavior. This study attempts to determine whether these three factors are related, the assumption being that their combination should result in more effective behavior and psychological health.

Method

Subjects

The subjects were 111 Ball State students, 102 undergraduates and 7 graduate level, sampled from two English classes (103, 205), two History classes (203, 612), and one Psychology 100 class. 42 were male, 69 female. Ss ranged in age from 18 to 40, the mean age being 20.15. GPA ranged from 2.00 to 4.00. Ss were asked to provide background information indicating sex, age, class level, GPA, major,
and minor. Ss from the Psychology (GXPSY) 100 class participated on a voluntary basis, receiving one extra credit point for doing so.

**Instruments**

**Interpersonal Disposition Inventory.** Sex-role identity was assessed by the Interpersonal Disposition Inventory (IDI), a shortened version of the PRF Andro Scale (Berzins, Welling and Wetter, 1976). It consists of 85 true/false items: 27 feminine, 29 masculine, 20 self-esteem, 5 infrequency, and 4 filler. The masculine items encompass the themes of social ascendancy, intellectual ascendancy, autonomy, and orientation toward risk, while feminine items deal with nurturance, affiliative-expressive concerns, and self-subordination.

Subjects are divided into four groups on the basis of their masculine/feminine scores. Cutoff scores were determined by performing median splits on the normative sample. By this procedure, a high masculine score is defined as a score of 16 or greater, while a low masculine score is defined as a score of 15 or less. A high feminine score results from a value of 17 or greater and a low feminine score results from a value of 16 or less. The four categories formed are designated: *androgynous* (high masc/high fem), *masculine-typed* (high masc/low fem), *feminine-typed* (low masc/high fem), and *indeterminate* (low masc/low fem). An infrequency
score of two or more invalidates the score. The mean self-esteem score from the normative sample (males and females combined) is 13.73.

Normative data: The norms for the IDI are based on data collected from 386 men and 723 women during the 1975-1976 academic year at the University of Kentucky. Both under- and upperclass students were sampled; the mean age of the group was about 19.

Reliability: For these 1109 students, internal consistency (alpha) coefficients were .76 (masculine) and .67 (feminine). Eighty-three students took both the PRF and IDI scales at an interval of approximately three weeks. The authors feel that the obtained coefficients (r = .81 for both masculine and feminine scales) are probably conservative due to differences in administrative conditions (in class versus taken home) and different item contexts (PRF vs. IDI).

Validity: The convergent validity of the masculine and feminine subscales, relative to those of Bem's Sex Role Inventory (1974), was investigated using 1155 subjects (452 male, 703 female) during the 1974-75 academic year at the University of Kentucky. The correlation between the comparable masculine scales was .68 and between the feminine scales, .61. Correlation of Androgyny difference scores (Feminine minus Masculine) yielded a coefficient of .75. (All coefficients significant beyond .0001).

Discriminant validity studies utilized the PRF Desirability scale, the Marlow-Crowne Social Desirability scale,
and Bem's Desirability scale. The masculine scale yielded correlations of .14, .05, and .03, respectively, while the corresponding coefficients for the feminine scale were .17, .24, and .14. It was concluded that socially desirable responding does account for small proportions of variance in scores.

**Assertion Inventory.** Assertiveness was measured by the Gambrill and Richey Assertion Inventory (1975). In the present study, it was titled the "Situational Self-Rating Scale" to slightly disguise its purpose and lessen anxiety over "correct" responding. The Assertion Inventory is a 40 item self-report questionnaire which presents the respondent with various situations and asks him/her to indicate for each item (a) the degree of discomfort experienced or expected on a five point scale ranging from none to very much, and (b) the probability of displaying the behavior if actually presented with the situation on a five point scale ranging from always do it to never do it. Gambrill and Richey also ask the subject to circle the situations in which he/she would like to be more assertive, though for the purposes of the present study, these instructions were not used. The 40 items are divided into eight categories: (1) turning down requests; (2) expressing personal limitations; (3) initiating social contacts; (4) expressing positive feelings; (5) handling criticism; (6) differing with others; (7) assertion in service situations; and (8) giving negative feedback.
Discomfort (Disc) and response probability (RProb) scores are computed by adding responses on each dimension. Based on the normative sample, cutoff scores were determined. High discomfort is indicated by a score of 96 or greater; low discomfort is represented by a score of 95 or less. A high response probability is defined as a score of 104 or less, while a low response probability is defined as a score of 105 or more. Dividing discomfort and response probability into high and low values generates four behavioral profiles: Assertive (low Disc/high RProb), Unassertive (high Disc/low RProb), Anxious-performer (high Disc/high RProb), and Doesn't Care (low Disc/low RProb).

Normative data: The norms for the Assertion Inventory are based on data collected from three samples of undergraduates enrolled in social science classes, two from the University of California at Berkeley and one from the University of Washington in Seattle, and also a sample of 19 women participating in assertion training programs. One California sample was collected in 1973 and consisted of 116 men and 197 women (mean age = 22.1 yr) and the second was collected in 1974 and consisted of 137 men and 158 women (mean age = 21.6 yr). The age range for both California samples was 18-27 years. The Washington sample consisted of 16 men and 33 women (mean age = 23.1 yr, range 18-53). This sample completed the inventory at two different time periods five weeks apart. The 19 women taking part in six week assertion training programs ranged in age from 22 to 48 years (mean age = 32.1) and completed the inventory before and after training.
Reliability: Reliability was determined using Pearson correlations between pre- and posttests for the Washington sample. The resulting coefficients (.87 for discomfort and .81 for response probability) indicate high stability over the five-week time period.

Validity: A measure of validity is provided by a comparison of the clinical and undergraduate samples. The mean discomfort score for the 19 women before assertive training was significantly higher than the mean discomfort scores for the Washington and 1973 California samples. Many more individuals in the clinical group fell into the categories of "unassertive" and "anxious-performer" compared to respondents in the college population. The clinical group decreased significantly in both discomfort and response probability scores following training whereas no change occurred during a five-week interval in the reliability sample.

Internal-External Locus of Control. Internal-External control was measured using Rotter's Internal-External locus of control scale (1966). Again, for the purposes of this study, the title was changed to disguise the intention of the scale and lessen anxiety concerning the "test" situation. It was titled the "Social Attitude Questionnaire". The I-E scale is in forced-choice format (a,b), consisting of 23 items and 6 fillers. The score is the number of external choices. Subjects are divided into two groups: Internal (those obtaining a score of 8 or less) and External (those obtaining a score of 9 or more), according to the cutoff scores used by Rotter and Mulry (1965).
Normative data: Rotter's reliability and validity data for the Internal-External scale were obtained from a number of samples, though the majority comes from samples of students at Ohio State University. Other colleges, prison populations, and high school students are also represented. The range of data from several of Rotter's original studies will be presented, providing a representative sample from the vast amount of data.

Reliability: Rotter explains that the test is additive and items are not comparable, so split-half reliability tends to underestimate internal consistency. The Kuder-Richardson is also limited due to the forced-choice format. However, Rotter reports coefficients of internal consistency ranging from .65 to .79. Using a test-retest interval of one month, Rotter reports coefficients of .60 to .83. At an interval of two months, the values drop to .49 to .61.

Validity: Discriminant validity studies report correlations with the Marlow-Crowne Social Desirability Scale ranging from -.12 to -.41, and correlations with intellectual measures ranging from .01 to -.22. Rotter concludes that relationships with these variables are low, indicating good discriminant validity.

Procedure

The test instruments were assembled in all possible combinations of order (approximately the same number of each combination). Each questionnaire was preceded by
specific instructions relating to its use. The first page of each questionnaire booklet provided general instructions to the subject as well as space for background data on each subject (See Appendix A).

Before each testing session, brief oral instructions were given, explaining that the questionnaires were part of an honors thesis project, and stressing that there were no right or wrong answers. The tests were then distributed and subjects were free to leave after completion. Testing time ranged from 15 to 35 minutes, depending on the individual. Average completion time was approximately 20-25 minutes.

Data Analysis

Each test was hand-scored and assigned a number. Results were listed by subject number. Background information, scores from each subscale, and resulting categories were organized for each subject and punched on computer cards. The data was later analyzed at the Computer Center. Other statistical data were compiled by the investigator. Group means and category frequencies were computed, in addition to chi squares, t-tests, Pearson correlations, and analyses of variance.

Results

Distribution of subjects within each category are shown in Table 1. Though distribution of subjects is fairly even within the androgyny scale, many more individuals score
<table>
<thead>
<tr>
<th>Males</th>
<th>Andro</th>
<th>Masc</th>
<th>Fem</th>
<th>Indet</th>
<th>I-E Scale</th>
<th>Assert</th>
<th>Assertion Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>16</td>
<td>6</td>
<td>10</td>
<td>10</td>
<td>31</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>24</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Females</td>
<td>19</td>
<td>16</td>
<td>23</td>
<td>10</td>
<td>16</td>
<td>50</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>38</td>
</tr>
<tr>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>28</td>
<td>32</td>
<td>29</td>
<td>20</td>
<td>26</td>
<td>81</td>
<td>22</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>62</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12</td>
</tr>
<tr>
<td>Percentage</td>
<td>25.7</td>
<td>29.4</td>
<td>26.6</td>
<td>18.3</td>
<td>24.3</td>
<td>75.7</td>
<td>20.0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>56.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>10.9</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>12.7</td>
</tr>
</tbody>
</table>
external and unassertive as compared with the other categories of their respective scales. 71% of the androgynous subjects, 72% of the masculine, 82% of the feminine, and 78% of the indeterminate subjects scored external. 52% of the androgynous, 44% of the masculine, 69% of the feminine, and 70% of the indeterminate subjects were categorized as unassertive. 33% of the androgynous subjects were both external and unassertive, as compared to 41% of the masculine subjects, 59% of the feminine subjects, and 53% of the indeterminate subjects. In each sex-role category, the most frequent classification was external-unassertive (see Table 2). Of the internal androgynous subjects, 75% obtained a self-esteem score above 15 (out of a possible 20), while 53% of the external androgynous subjects scored above 15.

Table 2
Category Frequencies

<table>
<thead>
<tr>
<th></th>
<th>Assertive</th>
<th>Unassertive</th>
<th>Anx-Perf</th>
<th>Doesn't Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andro/Int</td>
<td>1</td>
<td>5</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Andro/Ext</td>
<td>5</td>
<td>9</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Masc/Int</td>
<td>4</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Masc/Ext</td>
<td>3</td>
<td>12</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Fem/Int</td>
<td>1</td>
<td>3</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Fem/Ext</td>
<td>4</td>
<td>17</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Indet/Int</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Indet/Ext</td>
<td>2</td>
<td>10</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total*</td>
<td>20</td>
<td>60</td>
<td>10</td>
<td>14</td>
</tr>
</tbody>
</table>

* Totals of tables 1 and 2 may vary due to incomplete data on certain subjects. In these cases, valid scores were available for only two of the three scales.
A Pearson Intercorrelation Matrix (see Table 3) showed significant relationships among several variables. Values reaching significance beyond the .01 level include correlations between the variables of age and femininity score \( r = -0.3932, p < .001 \), age and self-esteem \( r = 0.2509, p < .006 \), age and discomfort score \( r = -0.2862, p < .002 \), masculine score and self-esteem \( r = 0.3864, p < .001 \), and discomfort score and self-esteem \( r = -0.2712, p < .003 \). Other significant correlations include age and I-E score \( r = -0.2425, p < .008 \), and discomfort score and I-E score \( r = 0.2353, p < .009 \). As expected, there is a significant negative correlation \( r = -0.2787, p < .002 \) between the androgyny scale variables of feminine score and masculine score, and a significant positive correlation \( r = 0.3058, p < .001 \) between the assertion scale variables of discomfort and response probability. (Remember that while a high discomfort score indicates a high degree of anxiety, a high RProb score indicates low probability of responding).

Both age and self-esteem seem to have some effect on at least certain variables within each scale, suggesting that an interaction between a specific combination of variables may determine the various categories into which each individual falls.

Chi square tables were prepared comparing variables from each scale. This resulted in three tables, comparing (1) the four Androgyny scale categories and Internality/Externality, (2) the four Androgyny scale categories and the four Assertion scale categories, and (3) the four Assertion scale categories and Internality/Externality. No significant values were found (see Table 4).
<table>
<thead>
<tr>
<th></th>
<th>Age</th>
<th>GPA</th>
<th>Masc score</th>
<th>Fem score</th>
<th>SE score</th>
<th>I-E score</th>
<th>Disc score</th>
<th>RProb score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>.2030*</td>
<td>.1879*</td>
<td>-.3932**</td>
<td>.2509**</td>
<td>-.2425**</td>
<td>-.2862**</td>
<td>-.0116</td>
<td></td>
</tr>
<tr>
<td>GPA</td>
<td>-.0897</td>
<td>-.0191</td>
<td>.2225*</td>
<td>-.1415</td>
<td>-.1484</td>
<td>-.2373**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masc score</td>
<td></td>
<td></td>
<td>-.2787**</td>
<td>.3864**</td>
<td>-.0767</td>
<td>-.1900*</td>
<td>-.1321</td>
<td></td>
</tr>
<tr>
<td>Fem score</td>
<td></td>
<td></td>
<td></td>
<td>-.1626+</td>
<td>.1391</td>
<td>.1727</td>
<td>-.1351</td>
<td></td>
</tr>
<tr>
<td>SE score</td>
<td></td>
<td></td>
<td></td>
<td>-.2098*</td>
<td>-.2712**</td>
<td>-.2026*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I-E score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.2353**</td>
<td>.1444</td>
<td></td>
</tr>
<tr>
<td>Disc score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.3058**</td>
<td></td>
</tr>
<tr>
<td>RProb score</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* significant at .05 level
** significant at .01 level
+ significance .053
Table 4  
**Chi Square Values**

<table>
<thead>
<tr>
<th>Androgyny Scale</th>
<th>Assertion Scale</th>
<th>I-E Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Androgyny Scale</td>
<td>10.18 (9df, p .34)</td>
<td></td>
</tr>
<tr>
<td>Assertion Scale</td>
<td></td>
<td>1.84 (3df, p .61)</td>
</tr>
<tr>
<td>I-E Scale</td>
<td>1.25 (3df, p .74)</td>
<td></td>
</tr>
</tbody>
</table>

Though chi square tables displayed no significant differences in observed cell frequency as compared to expected frequency, several analyses of variance and t-tests indicated significant differences between specific groups.

**Comparison of males and females**

First, scores of males and females were compared on each variable. Table 5 lists group means on each subtest. Analysis of variance yielded significant F-values (see tables 6 and 7) for the masculinity score and the femininity score. No significant differences were found between males and females (as indicated by F-tests) on self-esteem, I-E, discomfort, or response probability scores. Table 5 shows scores for these subtests to be fairly equal between the sexes.
<table>
<thead>
<tr>
<th></th>
<th>Masc score</th>
<th>Fem score</th>
<th>SE score</th>
<th>I-E score</th>
<th>Disc score</th>
<th>RProb score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Males</td>
<td>17.10</td>
<td>14.57</td>
<td>13.86</td>
<td>10.95</td>
<td>101.24</td>
<td>110.93</td>
</tr>
<tr>
<td>Females</td>
<td>14.64</td>
<td>17.46</td>
<td>13.16</td>
<td>10.68</td>
<td>103.10</td>
<td>108.26</td>
</tr>
<tr>
<td>Overall</td>
<td>15.57</td>
<td>16.37</td>
<td>13.42</td>
<td>10.78</td>
<td>102.40</td>
<td>109.27</td>
</tr>
</tbody>
</table>
Table 6
ANOVA for Masculine Score of Males and Females

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>157.68</td>
<td>1</td>
<td>157.68</td>
<td>5.2153*</td>
</tr>
<tr>
<td>Within groups</td>
<td>3295.56</td>
<td>109</td>
<td>30.23</td>
<td></td>
</tr>
</tbody>
</table>

* p < .05

Table 7
ANOVA for Feminine Score of Males and Females

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>218.41</td>
<td>1</td>
<td>218.41</td>
<td>13.0846*</td>
</tr>
<tr>
<td>Within groups</td>
<td>1319.45</td>
<td>109</td>
<td>16.69</td>
<td></td>
</tr>
</tbody>
</table>

* p < .0005

Comparison of androgyny scale groups

The four groups of the androgyny scale (androgynous, masculine, feminine, indeterminate) were compared by analysis of variance. Table 8 reports group means on each subtest. Significant F-values were found for masculinity, femininity, self-esteem, and response probability. Separate t-tests indicated significant differences between specific groups.

ANOVA Masc score. Analysis of variance of the masculinity score yields a significant F-value (see Table 9). Significant differences were found between masculine and indeterminate individuals (t = -10.43, p < .0001), masculine and
### Table 8

<table>
<thead>
<tr>
<th>Subtest Group Means for Androgyny Scale Groups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Masc score</td>
</tr>
<tr>
<td>Masc</td>
</tr>
<tr>
<td>Fem</td>
</tr>
<tr>
<td>Indet</td>
</tr>
<tr>
<td>Overall</td>
</tr>
</tbody>
</table>
feminine individuals ($t= 13.05, p< .0001$), indeterminate and androgynous individuals ($t= 8.77, p< .0001$), and androgynous and feminine individuals ($t= 11.10, p< .0001$). These differences are to be expected due to the nature of the androgyny scale. Contrasts in group means yield significant differences between each group ($p< .0001$) as compared with the others on the masculinity score. This finding also is expected by definition of the androgyny scale groups.

Table 9
ANOVA for Masculine Score of Androgyny Scale Groups

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2078.32</td>
<td>3</td>
<td>692.77</td>
<td>82.5356*</td>
</tr>
<tr>
<td>Within groups</td>
<td>881.33</td>
<td>105</td>
<td>8.39</td>
<td></td>
</tr>
</tbody>
</table>

* $p< .0001$

ANOVA Fem score. A comparison of the femininity scores of the four androgyny scale groups yields a significant $F$-value (see Table 10) and also several significant $t$-values between specific groups. Significant differences were found between masculine and androgynous individuals ($t= 9.36, p< .0001$), masculine and feminine individuals ($t= 10.73, p< .0001$), indeterminate and androgynous individuals ($t= 7.83, p< .0001$), and indeterminate and feminine individuals ($t= 9.02, p< .0001$) on their femininity scores. Contrasts in group means yield significant differences ($p< .0001$) between all groups of the androgyny scale as compared to each other on the feminine
score. Again, because femininity is a dimension of the androgyny scale, these strong differences between groups is expected.

Table 10
ANOVA for Feminine Score of Androgyny Scale Groups

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>936.92</td>
<td>3</td>
<td>312.31</td>
<td>59.0640*</td>
</tr>
<tr>
<td>Within groups</td>
<td>555.20</td>
<td>105</td>
<td>5.29</td>
<td></td>
</tr>
</tbody>
</table>

* p < .0001

ANOVA SE score. Analysis of variance of the androgyny groups on their self-esteem scores yields a significant F-value (F = 5.0234, p < .0027—see Table 11 for complete data), and several significant t-values. As can be seen in table 8, the masculine group obtained the highest SE score, while the feminine group obtained the lowest SE score. The androgynous group fell above the overall mean, but below the masculine mean. Significant differences were found between masculine and indeterminate individuals (t = -2.22, p < .0287), masculine and feminine individuals (t = 3.48, p < .0007), and androgynous and feminine individuals (t = -2.83, p < .0056). However, the difference between self-esteem scores of androgynous and indeterminate subjects does not reach significance (t = 1.67, p < .0984) as was expected.

In contrasts of group means, two groups showed significantly different scores. The group mean of masculine subjects as compared to the group means of the other androgyny scale
groups yields a significant difference ($t = 2.64, p < .0097$). The group mean of feminine subjects as compared to the group means of masculine, indeterminate, and androgynous subjects also demonstrates a significant difference ($t = -2.91, p < .0044$). Comparisons of group means of indeterminate as compared with others ($t = -1.16, p < .2495$), and androgynous as compared with others ($t = 1.65, p < .1015$) does not demonstrate significance.

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>218.15</td>
<td>3</td>
<td>72.72</td>
<td>5.0234*</td>
</tr>
<tr>
<td>Within groups</td>
<td>1519.96</td>
<td>105</td>
<td>14.48</td>
<td></td>
</tr>
</tbody>
</table>

* $p < .005$

ANOVA I-E score. In a comparison of internal-external scores, the overall $F$-value was not significant ($F = 1.6129, p < .1908$), however; a significant $t$-value was found ($t = 1.99, p < .0495$) between indeterminate and feminine subjects. The indeterminate individuals displayed the lowest mean I-E score, while the feminine individuals scored highest of the four groups (see Table 8). In a contrast of group means (comparing one variable with the other three combined), a significant difference was found between feminine subjects and the other groups ($t = 2.09, p < .0389$), however; the indeterminate group as compared with the others did not reach significance ($t = -1.27, p < .2069$).
ANOVA Disc score. In an analysis of variance of discomfort scores the overall F-value was not significant (F= 1.7145, p< .1685) for the androgyny scale groups. The differences between discomfort scores of masculine as compared to feminine subjects approaches significance (t= 1.94, p< .0549). The masculine subjects displayed the lowest mean discomfort score, while the feminine subjects scored highest in discomfort (see Table 8 for data). In a contrast of the group mean of masculine subjects to the group means of indeterminate and feminine subjects, a significant difference was found (t= -2.03, p< .0048), indicating the masculine-typed individuals display (or at least report) significantly lower discomfort across situations than either indeterminate or feminine-typed individuals. Androgynous individuals reported slightly higher discomfort than masculine individuals, but their scores were below the overall mean (see Table 8).

ANOVA RFprob score. The analysis of variance of response probability scores for the masculine, feminine, androgynous, and indeterminate groups produced a significant F-value (F= 2.7767, p< .0449). Table 12 reports ANOVA data. Significant differences were found between indeterminate and androgynous subjects (t= -2.70, p< .0081) and between androgynous and feminine subjects (t= 2.15, p< .0338). In a contrast of group means, androgynous subjects differed significantly from the other groups (t= -2.69, p< .0082), while the difference between indeterminate subjects as compared to the others
approached significance ($t= 1.86, p< .0660$). As seen in Table 8, androgynous subjects displayed the lowest mean RProb score (indicating high probability of responding), while the indeterminate subjects displayed the highest mean RProb score (low probability of responding).

Table 12
ANOVA for RProb Score of Androgyny Scale Groups

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>2569.65</td>
<td>3</td>
<td>856.55</td>
<td>2.7767*</td>
</tr>
<tr>
<td>Within groups</td>
<td>32389.91</td>
<td>105</td>
<td>308.48</td>
<td></td>
</tr>
</tbody>
</table>

* $p< .05$

Comparison of Internals and Externals

In analyses of variance for internal vs. external subjects on the dimensions of masculinity, femininity, self-esteem, discomfort, and response probability, no significant $F$-values were found. Although the differences are not significant, internal subjects displayed higher overall means for the masculine, feminine, and self-esteem scores, and lower overall means in discomfort and response probability (see Table 13).

Comparison of Assertion Scale Groups

Analyses of variance among the four assertion scale groups yielded significant $F$-values for only the discomfort and response probability scores. Since differences in these two scores are what determine the assertion classification,
<table>
<thead>
<tr>
<th></th>
<th>Masc score</th>
<th>Fem score</th>
<th>SE score</th>
<th>I-E score</th>
<th>Disc score</th>
<th>RProb score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>16.35</td>
<td>16.62</td>
<td>14.42</td>
<td>6.35</td>
<td>100.15</td>
<td>107.50</td>
</tr>
<tr>
<td>External</td>
<td>15.12</td>
<td>16.40</td>
<td>12.98</td>
<td>12.74</td>
<td>103.25</td>
<td>109.51</td>
</tr>
<tr>
<td>Overall</td>
<td>15.42</td>
<td>16.45</td>
<td>13.33</td>
<td>11.19</td>
<td>102.50</td>
<td>109.02</td>
</tr>
<tr>
<td>Subtest Group Means for Assertion Scale Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Masc score</td>
<td>Fem score</td>
<td>SE score</td>
<td>I-E score</td>
<td>Disc score</td>
<td>RProb score</td>
<td></td>
</tr>
<tr>
<td>Assertive</td>
<td>16.64</td>
<td>15.64</td>
<td>14.18</td>
<td>9.45</td>
<td>80.86</td>
<td>91.32</td>
</tr>
<tr>
<td>Unassertive</td>
<td>14.89</td>
<td>16.37</td>
<td>12.65</td>
<td>11.53</td>
<td>116.18</td>
<td>118.60</td>
</tr>
<tr>
<td>Doesn't care</td>
<td>16.21</td>
<td>15.64</td>
<td>14.64</td>
<td>10.00</td>
<td>77.43</td>
<td>115.43</td>
</tr>
<tr>
<td>Anxious perf</td>
<td>16.33</td>
<td>18.50</td>
<td>14.75</td>
<td>10.42</td>
<td>108.33</td>
<td>95.92</td>
</tr>
<tr>
<td>Overall</td>
<td>15.56</td>
<td>16.36</td>
<td>13.44</td>
<td>10.80</td>
<td>103.33</td>
<td>110.26</td>
</tr>
</tbody>
</table>
this highly significant difference between groups is expected. Differences between specific groups were analyzed by individual t-tests and contrasts of group means (also using t-tests). Subtest group means for the assertion groups are listed in Table 14.

ANOVA Masc score. In comparing the masculinity score of the assertion scale groups, no significant differences were found as determined by F-tests, t-tests, and contrasts of group means. Unassertive subjects obtained a slightly lower overall mean than the other groups, though the difference was not significant ($t = -1.36, p < .1762$). Table 14 lists group means for the masculinity score.

ANOVA Fem score. The overall F-value and individual t-tests for the feminine score of the assertion groups did not show any significant differences. In contrasting group means, the difference in anxious performer's scores as compared with the other groups (assertive, unassertive, and doesn't care) approaches significance ($t = 1.94, p < .0549$). Anxious performers obtained the highest mean feminine score of the four assertion scale groups (see Table 14).

ANOVA SE score. Analyses of variance of self-esteem scores for the assertion scale groups resulted in no significant findings as indicated by the F-test and individual t-tests. However, in a contrast of group means, the unassertive subjects
differed significantly \( (t = 2.20, p < .0298) \) from the other groups, obtaining a significantly lower self-esteem group mean (see Table 14 for mean values).

**ANOVA I-E score.** In comparing the internal-external scores of the four assertion groups, the overall F-value was not significant. The difference between scores of assertive and unassertive individuals approaches significance \( (t = 1.96, p < .0522) \). Assertive individuals obtained the lowest (less external) mean I-E score. In a contrast of group means, the unassertive group as compared with others approached a significant difference in scores \( (t = 1.89, p < .0621) \). Table 14 reports group means.

**ANOVA Disc score.** A significant F-value \( (F = 61.95, p < .0001) \) was found for the assertion scale groups on their discomfort score, as well as significant differences between specific groups. These findings are expected by definition of the assertion scale groups. Significant differences were found between assertive and unassertive individuals \( (t = 11.01, p < .0001) \), assertive and anxious performer subjects \( (t = 5.22, p < .0001) \), unassertive and doesn't care subjects \( (t = -10.15, p < .0001) \), and doesn't care and anxious performer subjects \( (t = 6.08, p < .0001) \). The difference between unassertive individuals and anxious performers approached significance \( (t = -1.92, p < .0569) \). Contrasts of group means show each group to differ significantly \( (p < .0001) \) in relation to the other three groups. Table 14 reports group means. Unassertive individuals obtained the highest mean discomfort score.
### Table 15
ANOVA for Discomfort Score of Assertion Scale Groups

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>31030.48</td>
<td>3</td>
<td>10343.49</td>
<td>61.9520*</td>
</tr>
<tr>
<td>Within groups</td>
<td>17697.73</td>
<td>106</td>
<td>166.96</td>
<td></td>
</tr>
</tbody>
</table>

* p< .0001

**ANOVA RProb score.** Analyses of variance of the response probability score of the assertion scale groups produced a significant F-value (F = 65.6781, p< .0001—see Table 16) and several significant t-values. Again, the RProb score is a part of the assertion scale, so highly significant differences between groups are to be expected. Significant differences were found between assertive and unassertive individuals (t= 12.58, p< .0001), assertive and doesn't care subjects (t= 8.07, p< .0001), unassertive individuals and anxious performers (t= -8.23, p< .0001), and doesn't care and anxious performer subjects (t= -5.68, p< .0001).

### Table 16
ANOVA for RProb Score of Assertion Scale Groups

<table>
<thead>
<tr>
<th>Source of variation</th>
<th>Sums of squares</th>
<th>Degrees of freedom</th>
<th>Mean square</th>
<th>F-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>15045.32</td>
<td>3</td>
<td>5015.11</td>
<td>65.6781*</td>
</tr>
<tr>
<td>Within groups</td>
<td>8094.04</td>
<td>106</td>
<td>76.36</td>
<td></td>
</tr>
</tbody>
</table>

* p< .0001

In contrasts of group means, each group was found to differ significantly (p< .0001) when compared with the other three
groups. Table 14 reports group means. Unassertive subjects obtained the highest mean score, while assertive subjects obtained the lowest.

Discussion

The results of this study do not support the major hypothesis, that is, that a positive relationship exists between androgyny, assertiveness, and internal locus of control. However, several significant findings are in accordance with predictions. Relationships between variables appear to be more complex than originally expected, indicating the existence of differences between specific groups in relation to specific variables, rather than generalized expectancy patterns across all variables.

The Pearson Intercorrelation Matrix shows age to be a significant factor in all but the RProb score. Older individuals tend to score higher in masculinity and self-esteem and have higher GPA's. They score lower in femininity, externality, and discomfort. Thus, the age factor probably exerts an influence over the variables being examined, however; age was not included in the analysis of variance data. Results of this study may, therefore, have been influenced by the large number of freshmen in the sample. Perhaps if individuals were divided by age in the various categories, other relationships would be found.
Self-esteem also seems to be significantly related to each variable. Whether it is a causative factor or a result of each dimension cannot be determined from this study. However, several investigators (Jakubowski and Cristiani, 1977; Percell, et. al., 1974; Wilk and Coplan, 1977) have suggested that higher self-esteem is one outcome of assertive training. It seems logical that if one feels he/she has control over most situations and is able to respond effectively and flexibly to meet situational demands, that person would display higher self-esteem as a result of his/her ability to respond and produce effects. This is essentially what was found in the present study. High self-esteem shows a positive relationship with age, GPA, and masculinity, and a negative correlation with femininity, externality, discomfort, and response probability. Thus, a person with high self-esteem is more masculine and internal, with a higher probability of responding across situations, while experiencing less discomfort over doing so.

This study differed from the research of Spence, et. al. (1974) and Bem, Martyna, and Watson (1976), that found androgynous individuals to be highest in self-esteem and indeterminate individuals to be lowest. Instead, masculine individuals obtained the highest mean SE score (15.16), followed by the androgynous group (14.61), and the indeterminate group (12.75). The lowest mean self-esteem score was obtained by the feminine group (11.76). This is, however, in accordance with predictions.
that masculine and androgynous individuals would score higher in self-esteem than feminine or indeterminate individuals. The differences in scores between the masculine and androgynous groups and between the feminine and indeterminate groups are not significant, so this variation from previous findings may be due to the sample. Again the age factor may also have influenced results, since higher self-esteem is related to higher age.

The assertive, doesn't care, and anxious performer groups all obtained self-esteem scores above the overall mean, and above the overall mean reported by Wetter (1976). Though the assertive group did not obtain a significantly higher self-esteem score as expected, the unassertive group was significantly lower in self-esteem. Perhaps the combination of high discomfort and low probability of responding produces the greatest deficit in self-esteem, while the other non-assertive groups display inadequacy in only one of these dimensions.

Though internal individuals scored higher in self-esteem than external individuals, as was predicted, the difference was not significant.

Results indicate that one's sex-role identity definitely affects other areas of behavior. Significant differences were found between groups of the androgyny scale on several variables. Pearson product-moment correlations show a negative correlation between masculinity and discomfort, that is, those scoring higher in masculinity report lower discomfort in assertive situations. Whether they actually experience less discomfort
or merely report less due to their masculine self-image is not clear.

The four groups resulting from the androgyny scale are expected to differ in their masculine and feminine scores by definition of the scales classification system. Highly significant F- and t-values support this, however; the groups were also found to differ significantly on other variables separate from the sex-role typing. As already mentioned, these groups differed significantly in their self-esteem scores, with the masculine group obtaining the highest mean SE score. Since the masculine and androgynous groups (both high in masculinity) obtained higher SE scores than the feminine or indeterminate groups (both low in masculinity), perhaps the significant factor affecting SE is related to some characteristic within the masculinity scale (e.g. competence).

Differences between the groups on the internal-external scale were somewhat surprising. The indeterminate group obtained the lowest mean external score. Individuals who report a low number of both masculine and feminine characteristics as being descriptive of themselves, thus not possessing a definitive sex-role identity, would not be expected to feel greater control over what happens to them than the other groups. Perhaps the different dimensions within the I-E scale (as described by Mirels, 1970; and Collins, 1974), or the age factor (older individuals tend to become more internal) can account for this finding. No other explanations can be offered from the available data.
The feminine group, not so surprisingly, obtained the highest external score, differing significantly from the other three groups. Though the original hypothesis did not predict a significant difference between the masculine and feminine groups on their I-E score, other research (Bem, 1974, 1975, 1976) indicates that feminine-typed individuals display behavioral deficits regarding instrumental concerns, which could conceivably lead to a more external view.

Masculine and androgynous individuals report less discomfort on the Assertion Scale than feminine or indeterminate individuals. Masculine subjects, as previously mentioned, obtained the lowest discomfort score (significantly lower than feminine or indeterminate subjects). Feminine individuals reported the greatest discomfort. This, being one dimension of the assertion scale, is in accordance with predictions. Again, a dimension of masculinity could account for differences in discomfort, although the variables of age and self-esteem may also be operating.

Androgynous individuals seem to differ most distinctly from the other groups on their response probability score. The androgynous group obtained a significantly lower RProb score, indicating that they are more likely to respond assertively in various situations. This lends support to the hypothesis that a relationship exists between androgyny and assertiveness. Though the discomfort score of androgynous subjects was slightly above that of the masculine group's,
they scored below the overall mean. The relatively low discomfort, coupled with a high probability of response suggests that the androgynous group tends more toward assertiveness than the other groups, though other factors besides androgyny seem to be necessary for assertive behavior.

The indeterminate group showed the lowest probability of response, followed by the feminine group. Both of these groups also displayed higher discomfort than either the masculine or androgynous groups, implying a tendency toward unassertiveness, as predicted. The behavior of the masculine-typed subjects remains ambiguous. Though their discomfort across situations is significantly lower than that of the indeterminate and feminine subjects, their probability of actually responding does not seem to be high. They cannot, therefore, be classed as assertive, as was predicted.

The comparison of internal and external subjects did not yield any significant differences. This is somewhat surprising considering the vast amount of variables correlated with the I-E dimension. However, even though the values did not reach significance, internals tended to score higher on certain variables. Internals showed slightly higher scores in masculinity and self-esteem, and lower discomfort and response probability scores. But since none of these value differences reached significance, no inferences can be made.

Comparisons of the assertion scale groups revealed several differences among groups, although the only highly significant differences were on the discomfort and response probability
scores, which are used to categorize the four groups. No significant differences were found on the masculine and feminine dimensions. However, the unassertive group obtained a slightly lower masculinity score than the other groups. This corroborates the finding that the groups low in masculinity (feminine-typed and indeterminate) tend to be more unassertive. On the femininity dimension, the anxious performer group as compared with the other three groups approached a significant difference in scores. Anxious performers obtained the highest feminine score. This group, by definition, is high in discomfort, and as previously stated, the group scoring highest in discomfort was the feminine group. These findings seem to suggest that a relationship exists between femininity and anxiety.

The difference between the I-E scores of the assertive and unassertive groups was found to approach significance. Assertive individuals obtained the lowest external score, while unassertive subjects scored highest in externality. This supports the finding that internal subjects tend to have lower discomfort and response probability scores, indicating more assertive behavior. It must be noted, however, that none of these findings reach significance. One possible reason for the ambiguity regarding the I-E score, is the fact that so many individuals scored external (over 75%) and of those scoring internal, most scored close to the cutoff point. This rise in the I-E score was noted by Rotter (1975) and could account for the lack of significant findings for the I-E dimension.
After reviewing the results, the relationships among several variables remain in question. Some of the difficulty arises from the fact that the concept of androgyne is a combination of the masculine and feminine scores. Because two scores are involved, certain statistical tests are not possible. This is also the case for the assertion scale groups. Because the main focus of this study is on the androgynous and assertive groups, inferences must be made from the available data on separate variables. Another problem encountered in this study is that the groups most directly under investigation (androgyneous, internal, assertive) did not occur with as great of frequency as expected. As previously stated, the most frequent category was external-unassertive. Considering the statistical limitations, certain reasonable conclusions can be reached:

1. There is no direct relationship between androgyne, assertiveness, and internal locus of control as determined by chi square tables. However, a relationship does seem to exist between androgyne and assertiveness as indicated by t-tests between groups.

2. Though masculine subjects display less discomfort across situations, they do not appear to be more assertive than others.

3. Both the feminine and indeterminate groups appear to be less assertive, displaying greater discomfort and less probability of response. High femininity seems to be particularly linked to anxiety.

4. Indeterminate subjects tend to be more internal, while feminine subjects tend to be more external in comparison with others.

5. Self-esteem and age seem to be important factors in all variables (Masc, Fem, Disc, RProb, I-E).
The category into which each person falls appears to result from the interaction of several factors. The finding that age and self-esteem form relationships with each variable should be observed. If groups were further divided by age and SE score, perhaps more definitive conclusions would result. Since this study did not divide subjects in this way, no direct predictions can be made. Age and self-esteem, however, may not be the only extraneous factors operating.

Each variable under investigation concerns one's self-concept, beliefs, and behavior patterns. Though the relationships between androgyny, assertiveness, and internal locus of control seems logical, other behavioral variables are probably necessary for this particular pattern to result. Such factors as age and self-esteem may contribute to these behavioral distinctions, though many other factors outside the realm of this study may also affect one's self-concept and behaviors. Further investigation is necessary to determine if the predicted relationships exist when other critical variables are present. Perhaps the supposition that this particular personality pattern as indicative of greater psychological health is correct, with the problem being that most individuals do not reach this ideal pattern. Even if this is the case, further research is necessary to determine the particular set of variables necessary to form this pattern.
References


Percell, Lawrence P., PhD; Berwick, Peter T., PhD; and Beigel, Allan, MD. The effects of assertive training on self-concept and anxiety. *Archives of General Psychiatry*, 1974, *31*, 502-504.


APPENDIX A
(Questionnaire cover sheet)

The following questionnaires are to be used in research for my senior honors thesis. I need information regarding people's attitudes toward themselves and various social situations. Please answer all items as honestly as possible, however; do not linger over any items. Choose the response that most closely fits you. Some items will be more descriptive of you than others, and some you may feel do not apply to you at all, but please answer all the questions in the way that is closest to your feelings. There are no right or wrong answers. Your responses will be used for my research purposes only, and will be combined with those of many other students. It is important that you answer all items, as quickly as possible, and as honestly as possible. Before beginning the questionnaires, please complete the following background information:

Class standing   Fr   Soph   Jr   Sr   Other   ________
Age   ________
Sex   M   F
Major   __________   Minor   __________
Grade Point Average   _____
INTERPERSONAL DISPOSITION INVENTORY

The following is a series of statements which a person might use to describe himself or herself. Read each statement and decide whether or not it is descriptive of you. If you agree with a statement or decide that it does describe you, answer TRUE. If you disagree with a statement or feel that it is not descriptive of you, answer FALSE. Please indicate your response by circling either T or F before each statement.

T  F  1. Self-control is not a big problem to me. (SE)*
T  F  2. I like to be with people who assume a protective attitude toward me. (Fem)
T  F  3. I try to control others rather than permit them to control me. (Masc)
T  F  4. Surf-board riding would be too dangerous for me. (Masc)
T  F  5. Often I don't trust my emotions. (SE)
T  F  6. If I have a problem, I like to work it out alone. (Masc)
T  F  7. I seldom go out of my way to do something just to make others happy. (Fem)
T  F  8. Adventures where I am on my own are a little frightening to me. (Masc)
T  F  9. I usually know what to say to people. (SE)
T  F  10. I feel confident when directing the activities of others. (Masc)
T  F  11. I will keep working on a problem after others have given up. (Masc)
T  F  12. I would not like to be married to a protective person. (Fem)
T  F  13. There are many things I would change about myself if I could. (SE)
T  F  14. I usually try to share my problems with someone who can help me. (Fem)
T  F  15. I don't care if my clothes are unstylish, as long as I like them. (Masc)
T  F  16. When I see a new invention, I attempt to find out how it works. (Masc)
T  F  17. I can make up my mind and stick to it. (SE)
T  F  18. People like to tell me their troubles because they know I will do everything I can to help them. (Fem)
Sometimes I let people push me around so they can feel important. (Fem)

I am very rarely in a position where I feel a need to actively argue for a point of view I hold. (Masc)

I am usually disorganized. (SE)

I dislike people who are always asking me for advice. (Fem)

I seek out positions of authority. (Masc)

I believe in giving friends lots of help and advice. (Fem)

I am poised most of the time. (SE)

If someone finds fault with me I either listen quietly or just ignore the whole thing. (filler)

I get little satisfaction from serving others. (Fem)

I make certain that I speak softly when I am in a public place. (Fem)

I am afraid of what other people think about me. (SE)

I am usually the first to offer a helping hand when it is needed. (Fem)

When I see someone I know from a distance, I don't go out of my way to say "Hello." (Fem)

I would prefer to care for a sick child myself rather than hire a nurse. (Fem)

I am in control of what happens to me in my life. (SE)

I prefer not being dependent on anyone for assistance. (Fem)

When I am with someone else I do most of the decision-making. (Masc)

I try to get at least some sleep every night. (Infreq)

I don't mind being conspicuous. (Masc)

I am afraid of a full-fledged disagreement with a person. (SE)

I would never pass up something that sounded like fun just because it was a little hazardous. (Masc)

I get a kick out of seeing someone I dislike appear foolish in front of others. (Fem)

When someone opposes me on an issue, I usually find myself taking an even stronger stand than I did at first. (Masc)

I feel adequate more often than not. (SE)

When two persons are arguing, I often settle the argument for them. (Masc)
44. I will not get out of my way to behave in an approved way. (Masc)
45. I am quite independent of the people I know. (Fem)
46. I frequently doubt my sexual attractiveness. (SE)
47. I make all my clothes and shoes. (Infreq)
48. If I were in politics, I would probably be seen as one of the forceful leaders of my party. (Masc)
49. I prefer a quiet, secure life to an adventurous one. (Masc)
50. I prefer to face my problems by myself. (Masc)
51. I'm pretty sure of myself. (SE)
52. I try to get others to notice the way I dress. (Fem)
53. When I see someone who looks confused, I usually ask if I can be of any assistance. (Fem)
54. It is unrealistic for me to insist on becoming the best in my field of work all of the time. (Masc)
55. I often kick myself for the things I do. (SE)
56. The good opinion of one's friends is one of the chief rewards for living a good life. (Fem)
57. If I get tired while playing a game, I generally stop playing. (Masc)
58. I could easily count from one to twenty-five. (Infreq)
59. When I see a baby, I often ask to hold him. (Fem)
60. I have a good deal of initiative. (SE)
61. I am quite good at keeping others in line. (Masc)
62. I feel uncomfortable when people are paying attention to me. (filler)
63. I am quite soft-spoken. (filler)
64. I usually have the feeling that I am just not facing things. (SE)
65. I think it would be best to marry someone who is more mature and less dependent than I. (Fem)
66. I would resist anyone who tried to bully me. (filler)
67. I don't want to be away from my family too much. (Fem)
68. I am sexually attractive. (SE)
69. I can run a mile in less than four minutes. (Infreq)
70. Once in a while I enjoy acting as if I were tipsy. (Fem)
71. I feel incapable of handling many situations. (Masc)
72. I delight in feeling unattached. (Masc)
73. I often feel inferior. (SE)
74. I would make a poor judge because I dislike telling others what to do. (Masc)
75. Seeing an old or helpless person makes me feel that I would like to take care of him. (Fem)
76. I usually make decisions without consulting others. (Masc)
77. I feel emotionally mature. (SE)
78. It doesn't affect me one way or another to see a child being spanked. (Fem)
79. My goal is to do at least a little bit more than anyone else has done before. (Masc)
80. I usually wear something warm when I go outside on a cold day. (Infreq)
81. To love and be loved is of greatest importance to me. (Fem)
82. I take a positive attitude toward myself. (SE)
83. I avoid some hobbies and sports because of their dangerous nature. (Masc)
84. One of the things which spurs me on to do my best is the realization that I will be praised for my work. (Fem)
85. People's tears tend to irritate me more than to arouse my sympathy. (Fem)

* For each item, the underlined response (T or F), is scored as designated (Fem= feminine, Masc= masculine, SE= self-esteem, Infreq= infrequency) if circled by the subject. The number of masculine and feminine responses determines the sex-type category (androgynous, masculine, feminine, indeterminate) as specified by cutoff scores.
APPENDIX C
(Assertion Inventory—Gambrill and Richey, 1975)

**SITUATIONAL SELF-RATING SCALE**

Many people experience difficulty in handling interpersonal situations requiring them to assert themselves in some way. Please indicate your degree of discomfort or anxiety in the space provided before each situation listed below. Utilize the following scale to indicate degree of discomfort:

1 = none
2 = a little
3 = a fair amount
4 = much
5 = very much

Then, go over the list a second time and indicate after each item the probability or likelihood of your displaying the behavior if actually presented with the situation. Utilize the following scale to indicate response probability:

1 = always do it
2 = usually do it
3 = do it about half the time
4 = rarely do it
5 = never do it

*Note. It is important to cover your discomfort ratings (located in front of the items) while indicating response probability. Otherwise, one rating may contaminate the other and a realistic assessment of your behavior is unlikely. To correct for this, place a piece of paper over your discomfort ratings or cover them with your hand while responding to the situations a second time for response probability.*

<table>
<thead>
<tr>
<th>Degree of discomfort</th>
<th>Situation</th>
<th>Response probability</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Turn down a request to borrow your car</td>
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<td></td>
<td>2. Compliment a friend</td>
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<td></td>
<td>3. Ask a favor of someone</td>
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<tr>
<td>Degree of discomfort</td>
<td>Situation</td>
<td>Response probability</td>
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<td>----------------------</td>
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<td></td>
<td>4. Resist sales pressure</td>
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<td></td>
<td>5. Apologize when you are at fault</td>
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<td></td>
<td>6. Turn down a request for a meeting or date</td>
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<td></td>
<td>7. Admit fear and request consideration</td>
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<td></td>
<td>8. Tell a person you are intimately involved with when he/she does something that bothers you</td>
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<td></td>
<td>9. Ask for a raise</td>
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<td></td>
<td>10. Admit ignorance in some area</td>
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<td></td>
<td>11. Turn down a request to borrow money</td>
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<td></td>
<td>12. Ask personal questions</td>
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<td></td>
<td>13. Turn off a talkative friend</td>
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<td>14. Ask for constructive criticism</td>
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<td></td>
<td>15. Initiate a conversation with a stranger</td>
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<td></td>
<td>16. Compliment a person you are romantically involved with or interested in</td>
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<td></td>
<td>17. Request a meeting or date with a person</td>
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<td>18. Your initial request for a meeting is turned down and you ask the person again at a later time</td>
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<td>19. Admit confusion about a point under discussion and ask for clarification</td>
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<td></td>
<td>20. Apply for a job</td>
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<tr>
<td>Degree of discomfort</td>
<td>Situation</td>
<td>Response probability</td>
</tr>
<tr>
<td>----------------------</td>
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<tr>
<td>21.</td>
<td>Ask whether you have offended someone</td>
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<td>22.</td>
<td>Tell someone that you like them</td>
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<td>23.</td>
<td>Request expected service when such is not forthcoming, e.g., in a restaurant</td>
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<td>24.</td>
<td>Discuss openly with the person his/her criticism of your behavior</td>
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<td>25.</td>
<td>Return defective items, e.g., store or restaurant</td>
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<td>26.</td>
<td>Express an opinion that differs from that of the person you are talking to</td>
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<td>27.</td>
<td>Resist sexual overtures when you are not interested</td>
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<td>28.</td>
<td>Tell the person when you feel he/she has done something that is unfair to you</td>
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<td>29.</td>
<td>Accept a date</td>
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<td>30.</td>
<td>Tell someone good news about yourself</td>
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<td>31.</td>
<td>Resist pressure to drink</td>
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<tr>
<td>32.</td>
<td>Resist a significant person's unfair demand</td>
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<td>33.</td>
<td>Quit a job</td>
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<td>34.</td>
<td>Resist pressure to &quot;turn on&quot;</td>
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<td>35.</td>
<td>Discuss openly with the person his/her criticism of your work</td>
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<td>36.</td>
<td>Request the return of borrowed items</td>
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<tr>
<td>Degree of discomfort</td>
<td>Situation</td>
<td>Response probability</td>
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<tr>
<td></td>
<td>37. Receive compliments</td>
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<td>38. Continue to converse with someone who disagrees with you</td>
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<td>39. Tell a friend or someone with whom you work when he/she says or does something that bothers you</td>
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<td></td>
<td>40. Ask a person who is annoying you in a public situation to stop</td>
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</tbody>
</table>

* Scores are determined by adding the numbers in each column. Cutoff scores determine into which category each subject falls.*
APPENDIX D
SOCIAL ATTITUDE QUESTIONNAIRE

For each of the following items, please choose which one of the two statements (a or b) most closely describes your opinion, and circle the appropriate letter.

1. a. Children get into trouble because their parents punish them too much.
   b. The trouble with most children nowadays is that their parents are too easy with them. (filler)

2.* a. Many of the unhappy things in people's lives are partly due to bad luck.
   b. People's misfortunes result from the mistakes they make.

3. a. One of the major reasons why we have wars is because people don't take enough interest in politics.
   b. There will always be wars, no matter how hard people try to prevent them.

4. a. In the long run people get the respect they deserve in this world.
   b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5. a. The idea that teachers are unfair to students is nonsense.
   b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6. a. Without the right breaks one cannot be an effective leader.
   b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7. a. No matter how hard you try some people just don't like you.
   b. People who can't get others to like them don't understand how to get along with others.

8. a. Heredity plays the major role in determining one's personality.
   b. It is one's experiences in life which determine what they're like. (filler)

9. a. I have often found that what is going to happen will happen.
   b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10. a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
    b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11. a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
    b. Getting a good job depends mainly on being in the right place at the right time.

12. a. The average citizen can have an influence in government decisions.
    b. This world is run by the few people in power, and there is not much the little guy can do about it.
13. a. When I make plans, I am almost certain that I can make them work.
   b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14. a. There are certain people who are just no good.
   b. There is some good in everybody. (filler)

15. a. In my case getting what I want has little or nothing to do with luck.
   b. Many times we might just as well decide what to do by flipping a coin.

16. a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
   b. Getting people to do the right thing depends upon ability, luck has little or nothing to do with it.

17. a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand, nor control.
   b. By taking an active part in political and social affairs the people can control world events.

18. a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
   b. There really is no such thing as "luck."

19. a. One should always be willing to admit mistakes.
   b. It is usually best to cover up one's mistakes. (filler)

20. a. It is hard to know whether or not a person really likes you.
   b. How many friends you have depends upon how nice a person you are.

21. a. In the long run the bad things that happen to us are balanced by the good ones.
   b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22. a. With enough effort we can wipe out political corruption.
   b. It is difficult for people to have much control over the things politicians do in office.

23. a. Sometimes I can't understand how teachers arrive at the grades they give.
   b. There is a direct connection between how hard I study and the grades I get.

24. a. A good leader expects people to decide for themselves what they should do.
   b. A good leader makes it clear to everybody what their jobs are. (filler)

25. a. Many times I feel that I have little influence over the things that happen to me.
   b. It is impossible for me to believe that chance or luck plays an important role in my life.

26. a. People are lonely because they don't try to be friendly.
   b. There's not much use in trying too hard to please people, if they like you, they like you.
27. a. There is too much emphasis on athletics in high school.
   b. Team sports are an excellent way to build character. (filler)

28. a. What happens to me is my own doing.
   b. Sometimes I feel that I don't have enough control
      over the direction my life is taking.

29. a. Most of the time I can't understand why politicians
      behave the way they do.
   b. In the long run the people are responsible for bad
      government on a national as well as on a local level.

* The score is the number of external items (underlined).