CAREER ASPIRATIONS: AN EXPLORATORY INVESTIGATION OF THE EFFECTS OF ASSERTIVE BEHAVIOR, ANDROGYNY, LOCUS OF CONTROL AND SEX

A Thesis
Presented in Partial Fulfillment of the Requirements for the Degree Master of Arts

by
Rita J. Donley, B.S.W.
The Ohio State University
1980

Approved by

Copyright 1980 by Rita J. Donley
All rights reserved

Adviser
Department of Education
ACKNOWLEDGEMENTS

I would like to express my most sincere appreciation to my advisor, Dr. Gail Hackett, for her support, assistance and friendship throughout the course of this research and my two years of graduate work. Special thanks is also given to Dr. Susan Sears for her helpful suggestions and encouragement.

I would also like to thank the Baker Hall CFC staff, Bev, Becky, Linda, Pat and Jane; and all the residents of the Career Planning Center who assisted in my research work.

I would also like to thank Janie Skarakis, Pete Magolda, Susan Lonborg, and my mother, Lois, for their sense of humor, wisdom and enthusiastic support.
# TABLE OF CONTENTS

Acknowledgements .................................. ii  
List of Tables ...................................... v  

CHAPTER  

I. INTRODUCTION ...................................... 1  
   Introduction and Purpose of the Study .......... 1  
   Definitions ...................................... 5  
   Problem Statement ................................ 7  

II. METHODOLOGY ...................................... 9  
   Review of the Instruments:  
      College Self Expression Scale ................. 9  
      Bem Sex Role Inventory ....................... 15  
      Adult Nowicki Strickland Internal-External Scale .......... 28  
      Career Expectation Scale .................... 30  
      Methodology .................................. 31  

III. REVIEW OF THE LITERATURE ....................... 33  
      Career Development of Women .................. 33  
      Sex Role Socialization ....................... 39  
      Androgyny ................................... 45  
      Locus of Control Orientation ................. 48  
      Assertive Behavior ............................ 50  

IV. RESULTS .......................................... 54  
      Descriptive Statistics ....................... 54  
      Correlation Analyses .......................... 58  
      Multiple Regression Analyses ................. 63  
      Summary ...................................... 70  

iii
Table of Contents (cont'd)

V. DISCUSSION ........................................ 73
   Summary of Results and Experimental Hypotheses .... 73
   Limitations and Implications .......................... 75
   Conclusions ........................................... 79

APPENDICES

A. College Self Expression Scale ..................... 81
B. Bem Sex Role Inventory ............................. 85
C. Adult Novicki Strickland Internal-External Scale ... 87
D. Career Expectation Scale ............................ 89

BIBLIOGRAPHY ........................................... 94
LIST OF TABLES

<table>
<thead>
<tr>
<th>TABLE</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Means and Standard Deviations of Total Group and by Sex, Male and Female</td>
<td>55</td>
</tr>
<tr>
<td>2</td>
<td>Percentage of Subjects in Various Sex Role Groups as Defined by a Median Split of both Masculinity and Femininity on the Bem Sex Role Inventory</td>
<td>61</td>
</tr>
<tr>
<td>3</td>
<td>Pearson Correlation Coefficients: Relationships among BSRI, CES, ANS-IE and CES for Total Group and by Sex, Male and Female, and for Androgyrous Subjects</td>
<td>59</td>
</tr>
<tr>
<td>4</td>
<td>Multiple Regression Analyses of Career Expectations, Career Importance and Career Goals as a Function of BSRI Scales, Assertive Behavior, and Locus of Control Orientation for the Total Group</td>
<td>64</td>
</tr>
<tr>
<td>5</td>
<td>Multiple Regression Analyses of Career Expectations, Career Importance and Career Goals as a Function of BSRI Scales, Assertive Behavior, and Locus of Control Orientation for Androgyrous Subjects</td>
<td>65</td>
</tr>
<tr>
<td>6</td>
<td>Multiple Regression Analyses of Career Expectations, Career Importance and Career Goals as a Function of BSRI Scales, Assertive Behavior, and Locus of Control for Female Subjects</td>
<td>66</td>
</tr>
<tr>
<td>7</td>
<td>Multiple Regression Analyses of Career Expectations, Career Importance and Career Goals as a Function of BSRI Scales, Assertive Behavior, and Locus of Control for Male Subjects</td>
<td>67</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

Introduction and Purpose
of the Study

Career development has become an area of widespread study in the fields of education and psychology. Many theories have been developed to explain the career development process (Ginsburg, 1951; Blau et al., 1956; Roe, 1957; Super, 1957; Crites, 1965; Holland, 1966). Most of these theories have been developed from a masculine perspective and fail to provide a useful vehicle for understanding the career development of women (Osipow, 1968). However, there have been modest attempts to postulate a theory for women and there is agreement that women’s career patterns differ in multiple ways from men and also from other women (Ginsberg, 1966; Super, 1957; Zytowski, 1969; Werner, 1969; Wolfson, 1972). An understanding of what factors influence women’s career development will provide educators the necessary foundation to assist female students in their own career planning process.

A body of research exists which provides information about the educational and career-related discriminations encountered by women, but the implications of
this research are seldom mentioned (Sunswick, 1971). Institutional changes need to take place in order to be able to assist women students in the planning, preparation and actualization of their career goals. While the barriers to full equality for women in the economy have been increasingly acknowledged in the past decade, the psychological barriers to their growth and development have been less well known. Of particular relevance to the career development of women are the studies on sex-role socialization and female aspirations, self-concepts and career patterns. Concern for women's career development is a concern for her uniqueness and individuality as a person and for her ability to make choices in both her personal and professional work life (Hansen and Rapoza, 1978).

Psychological barriers range from fear of success, fear of competency and fear of loss of affiliation to the negative self-images that women have. These self-perceptions result in demigration, depression, low levels of motivation, and keep women from developing and utilizing their potentials (Hansen and Rapoza, 1978). Many of these psychological barriers, are the result of sex-role socialization which inhibits career development. Occupational sex stereotyping occurs early in the socialization of children. For example,
Schlossberg and Goodman (1972) studied children's sex stereotyping of occupations. They found that kindergardeners and sixth graders felt that women's place was clearly not fixing cars or television sets or designing buildings. Harmon (1971) found that college women had considered a very restricted range of occupations during adolescence. Gray-Shelberg, Villereal and Stone (1972) studied the resolution of career conflicts by male and female college students and found that a significant number of women were motivated to subordinate their interests to those of a fiance or husband. The stereotypes in the subject's responses reflect strong societal expectations that a women shall be supportive of a man and not seek self-expression through a career. These three examples only begin to describe the narrowly defined role of women in our society. All women can not be classified as subjects within that narrowly defined scope, but these attitudes and underlying expectations are pervasive in our society and influence women's decisions and behavior.

In an attempt to respond to the changing roles of women many theories, concepts, and ideas acknowledging sex differences have been developed. Based on the knowledge of those differences educators will be better able to help facilitate women's career development. As
was mentioned previously, one of the implications of today's societal expectations of women is how women internalize that information and how it affects their career planning process.

Career aspiration level has a direct bearing on women's career plans. Women's aspiration level traditionally has been defined in terms combining career and family-oriented goals with the underlying assumption being that the homemaker is the model role (Zissis, 1964; Slocum and Bowles, 1967; Rand and Miller, 1972; Zytowski, 1969; Super, 1957). However, as the roles of women are changing and larger numbers of women enter the work force this definition is questionable. I would like to conceptualize career aspiration level in terms of the range of occupations considered by the individual (i.e., traditionally masculine, traditionally feminine, or neutral); and secondly, in terms of the level of those occupations (i.e., professional, semi-professional, skilled, semi-skilled or unskilled) considered. Traditionally "Feminine" occupations have been less valued in our society than "masculine" occupations. The research that has been collected on women's occupational choices has compared women who select masculine occupations with those who choose feminine occupations (Yanco,
Hardin, and McLaughlin, 1978; Tangri, 1970; Tucker, 1971; Levine, 1969). By examining only that relationship many individual differences which may exist among women in the same field but at different levels or within various "feminine" occupations may be ignored. Given that the majority of women in the labor force are employed in traditional fields, this is an important concept which needs further research. In addition, indices of assertive behavior, androgyny, and locus of control orientation will be examined. Their relationship to each other as well as how they relate to career aspiration level will be evaluated.

Definitions

The following are definitions of the terms used in the hypotheses that will be tested in this study:

1. **Androgynous** - the ability to be both masculine and feminine depending on the situational appropriateness of those behaviors (Bem, 1975); a score on the Bem Sex Role Inventory (BSRI) which is above the median on both the masculine and feminine scales.

2. **Feminine** - a culturally defined term which in this culture is defined but not confined to characteristics such as yielding, passive, dependent, and expressive (Bem, 1975); a score on the BSRI that falls above the median on the feminine scale and below the median on the masculine scale.

3. **Masculine** - a culturally defined term which in this culture is defined but not confined to characteristics such as assertive, aggressive, instrumental and independent (Bem, 1975); a score on the
BSRI that falls above the median on the masculine scale and below the median on the feminine scale.

4. Undifferentiated sex type - a score on the BSRI that falls below the medians on both the masculine and feminine scales.

5. Assertive behavior - behavior which enables a person to act in her (his) best interests, to stand up for herself (himself) without undue anxiety, to express her (his) honest feelings comfortably, or to exercise her (his) own rights without denying the rights of others (Emmons and Alberti, 1970); a high score on the College Self Expression Scale (Galaassi and Galaassi, 1974) which measure three types of assertive behavior: positive assertion, negative assertion, and self-denial.

6. Non-assertive behavior - behavior which inhibits people from action in their own best interests, preventing them from standing up for themselves because of feelings of anxiety, preventing them from expressing honest feelings and failing to exercise self-rights; a low score on the CSES indicates non-assertive behavior.

7. Internal locus of control orientation - the perception that positive or negative events are a consequence of one's own actions (Rotter, 1962); a low score as indicated on the Adult Nowicki Strickland Internal-External control scale (Nowicki and Duke, 1974).

8. External locus of control orientation - the perception that positive or negative events are unrelated to one's own actions but related to fate, luck or chance (Rotter, 1962); a high score as indicated on the ANS-IE.

9. High career aspiration level - aspiring to work in occupations in traditional or non-traditional fields at the professional or semi-professional level; a low score as indicated on the Career Expectation Scale (Marecek and Frech, 1977).

10. Low career aspiration level - aspiring to work in traditional and non-traditional fields at unskilled and semi-skilled levels; a high score as indicated on the CES.
Problem Statement

The sex-role socialization messages that women internalize and base their behavior on can be limiting factors in the consideration of career options. Of the variety of potential factors influencing career aspiration level, assertive behavior, androgyny, and locus of control orientation have been selected as most important. By analyzing career aspiration level a determination of career options and self-expectations associated with career choice can be made. Examining assertive behavior will provide an indication of how feelings are expressed through behavior in many situations. Looking at androgyny will show how each subject defines themselves according to their sex role. Finally, by analyzing locus of control orientation I will have an indication of how much control each subject feels she (he) has over their own life. As I reviewed these concepts, I developed the following questions:

1) Is an androgynous, masculine, feminine or undifferentiated sex role definition related to one's career aspiration level?

2) Is assertive, non-assertive or aggressive behavior related to one's career aspiration level?

3) Does a relationship exist between assertive behavior and androgyny?

4) Is a person's locus of control orientation related to/ correlated with their career aspiration level?
5) Does a relationship exist between a person's locus of control orientation and assertive behavior?

6) Does a relationship exist between a person's locus of control orientation and an androgynous sex role definition?

The problem statement in interrogative form may be stated in the null form as follows:

1) Androgyny can be positively correlated with a high career aspiration level.

2) Assertive behavior can be positively correlated with a high career aspiration level.

3) Assertive behavior and androgyny can be positively correlated.

4) An internal locus of control orientation can be positively correlated with a high career aspiration level.

5) Assertive behavior and an internal locus of control orientation can be positively correlated.

6) Androgyny and an internal locus of control orientation can be positively correlated.
CHAPTER II
METHODOLOGY

Review of the Instruments

After reviewing instruments to measure assertive behavior, androgyny, locus of control orientation, and career aspiration level, the following were selected: College Self Expression Scale (CSES) developed by Galassi and Galassi, 1974. This measure of assertive behavior designed for college students taps the expression of a variety of feelings in differing interpersonal contexts: family, strangers, business relations, authority figures and opposite sex and same sex peers. This scale attempts to measure three aspects of assertive behavior: 1) positive assertions consisting of the expression of love, affection, admiration, approval and agreement; 2) negative assertions including expressions of justified anger, disagreement, dissatisfaction and annoyance; and 3) self-denial including over-apologizing, excessive interpersonal anxiety and exaggerated concern for the feelings of others.

The CSES is a fifty item self-report inventory rated on a give point Likert-type scale. A total score for the scale is obtained by summing all negatively
scored items. Low scores are indicative of a generalized non-assertive response pattern. Items for the scale, in part, were derived or modified from work by Lazarus (1971), Wolpe (1969) and Wolpe and Lazarus (1966).

Galassi, DeLo, Galassi and Bastien (1974) administered the CSES to four separate sample populations: ninety-one students enrolled in an introductory psychology course at West Virginia University, forty-seven upper division and beginning graduate students enrolled in a personality theory course, and forty-one elementary and eighty-two secondary school student teachers at Fairmont State College. In all samples, males achieved slightly higher scores than females. The test-retest reliability coefficients for samples one and two were 0.89 and 0.90 respectively.

Construct validity was established by correlating the CSES with the twenty-four scales of the Adjective Check List (ACL, Gough and Heilbrun, 1965). The ACL consists of three hundred common adjectives which compose twenty-four personality scales, fifteen of which operationalize constructs of Murray's need press system. The ACL was administered to seventy-two psychology students. The CSES correlates positively and significantly with the following ACL scales: defensiveness, self-confidence, achievement, dominance, intracception, heterosexuality,
exhibition, autonomy and change. Gough and Heilbrum's (1965) definitions of these characteristics suggest characteristics which typify assertive behavior. The assertive individual is expressive, spontaneous, well-defended, confident and able to influence and lead others. Significant negative correlations were obtained with succorance, abasement, deference, and counseling readiness scales. These results are consistent with non-assertive behavior and indicate an inadequate and negative self-evaluation, feelings of inferiority, a tendency to be over solicitous of emotional support from others, and excessive interpersonal anxiety. The confirmation of a non-significant correlation between aggression and the CSES is of special importance since aggressive behavior is often mistaken for assertive behavior.

Concurrent validity was obtained by correlating the CSES scores of the combined sample of 121 student teachers with ratings of assertiveness made by immediate supervisors. Each student was rated on a five-point CSES Behavioral Rating Form for observers. The correlation between supervisor and self-ratings on assertive behavior was 0.19, p < 0.04. Although this correlation is significant, it is low. The nature of the interaction was for the most part limited to the subject's performance as a classroom teacher.
Additional studies to examine the validation of the CSES were undertaken by Galassi and Galassi in 1974 and 1976. In the 1974 studies, the CSES scores of dormitory residents were correlated with ratings of assertiveness made by their residence hall counselors. It was predicted that male student legislators would score higher on CSES than male dormitory residents; that male dormitory residents would score higher than males enrolled in non-people oriented majors; that female student legislators would be more assertive than female dormitory residents; and that female dormitory residents would be more assertive than women enrolled in a traditional female college major such as home economics; and it was expected that students who either did not seek counseling or sought only vocational-educational counseling would score significantly higher than students who sought personal adjustment counseling.

The results of a correlation between residence hall counselor ratings and self-ratings of assertiveness was .33 (p<.005). A one-way analysis of variance between the four male groups revealed a significant difference (F=6.89, df=3/111, p<.001). A one-way analysis of variance also revealed significant differences among the females (F=4.86, df=2/97, p<.01). Both the female legislators and dormitory residents scored higher than the child development and family relations females.
As was predicted, personal adjustment counselees were significantly less assertive than both vocational-educational counselees and non-counselees (F=6.44, df=2/90, p<.005). No statistics were reported comparing male and female groups or distinguishing which groups were significantly different from each other.

In the 1976 study the CSES was administered to 518 undergraduates at the University of North Carolina of Chapel Hill. A low assertive group was selected randomly from the subset of forty-five students whose scores fell between one and one and one-half standard deviations above the mean (145-155). The moderate assertive group was selected randomly from forty-five students who scored between -.12 and +.12 standard deviations (scores of 122-127). Each subset contained fifteen subjects which represented approximately 9.19% of the total population sampled. Each subject enacted five short role playing scenes, based on McFall and Marston (1970) and McFall and Lillesant (1971) with either a male or female confederate. Each videotaped scene required subjects to make a series of assertive statements in face to face extended interactions with confederates. A self-report scale and behavioral measures were used to evaluate the subject's performance during the role playing situations. The Subjective Unit of Disturbance Scale (Wolpe, 1969) served as an
indicator of subjective anxiety, behavioral indices included percentage of eye contact, response latency (the amount of elapsed time between confederate’s statement and subject’s response) and assertive content.

The data were analyzed using multi-variate and univariate planned non-orthogonal comparisons. Inter-rater reliabilities (Pearson product moment correlations) were 0.95 and 0.85 for response latency and eye contact, respectively. The average inter-rater reliability for assertive content over the five scenes was 0.94. (Fisher Zr transformation) with a range of 0.86 and 0.98. The multivariate analyses indicated significant differences on the combined dependent variables between the low group and the average performance of the moderate and high assertive group (F=4.39=3.51, p<.05) and between low and high groups respectively (F=4.39=2.84, p<.05).

The univariate analyses yielded a significant difference (F(1,42)=11.34, p<.001) between the low group and the combined moderate and high assertive subjects on eye contact and approached significance on assertive content (F(1,42)=2.64, p<.067). It appears that assertiveness as measured by the CSES reflects a combination of verbal and nonverbal behaviors including eye contact, assertive contact of verbal responses and subjectively experienced anxiety.
In a 1979 study by Galassi and Galassi the factor structure of the CSES was compared across sex and population. Two sample populations had test-retest reliability coefficients of 0.89 and 0.91 respectively. The findings supported that assertive behavior is situation specific rather than a generalized trait. They felt that a limitation of their instrument is that many single behaviors expressed to a particular person or group of persons are only measured by one item. In the future there is a need to develop more items to measure assertive behavior in situation specific instances.

Bem Sex Role Inventory (BSRI) was developed by Sandra Bem (1974). The theoretical concept behind the development of this instrument is that a single individual can embody both masculinity and femininity. Traditionally these concepts have been thought to represent complimentary domains of traits and behaviors. This instrument treats masculinity and femininity as two independent dimensions, each measure representing positive aspects of behavior. The basic premise is that to be a fully effective and functioning human being both masculinity and femininity must be tempered by each other and the two must be integrated into an androgynous personality.

The BSRI is a sixty item self-report inventory which contained twenty positive masculine characteristics.
twenty positive feminine characteristics, and twenty neutral characteristics. As a preliminary to item selection for the masculinity and femininity scales a list of approximately 200 personality characteristics that seemed to the author and her associates to be both positive in value and either masculine or feminine in tone was developed. This list served as the pool from which masculine and feminine characteristics were chosen. As a preliminary to item selection for the Social Desirability Scale, an additional list was compiled of 200 characteristics that seemed to be neither masculine or feminine in tone. Of these "neutral" characteristics, half were positive in value and half were negative.

The items were selected if they were judged to be more desirable in American society for one sex than for the other. The judges were asked to utilize a seven point scale ranging from 1 (not at all desirable) to 7 (extremely desirable). In rating the desirability "for a man" or "for a woman" of the 400 characteristics no judge was asked to rate both. The sample of judges consisted of 100 undergraduates at Stanford in 1972 consisting of equal numbers of male and female judges.

A personality characteristic qualified as masculine if it was independently judged by both males
and females in both samples to be significantly more desirable for a man than for a woman. A personality characteristic qualified as feminine if it was independently judged by both males and females in both samples to be significantly more desirable for a woman than for a man. Of those characteristics that satisfied these criteria, twenty were selected for the masculinity scale and twenty for the femininity scale. A personality characteristic qualified as neutral with respect to sex and eligible for the Social Desirability Scale if it was independently judged by both males and females to be no more desirable for one sex than for the other and if male and female judges did not differ significantly in their overall desirability of that trait. Of those items that satisfied the above criteria, ten positive and ten negative personality characteristics were selected for the BSRI social desirability scale in accordance with Edwards and Ashworth (1977) finding that an item must be quite negative or quite positive in tone if it is to evoke a social desirability response set.

After all the items had been selected, mean desirability scores were computed for the masculine, feminine, and neutral items for each of the 100 judges. For both males and females the mean desirability of the
masculine and feminine items was significantly higher for the "appropriate" sex than for the "inappropriate" sex, whereas the mean desirability of the neutral items was no higher for one sex than for the other.

The instrument is designed so that a person is asked to indicate on a seven point scale how well each of the personality characteristics describe herself/himself. The scale ranges from 1 (never or almost never true) to 7 (always or almost always true) and is labeled at each point. On the basis of her/his responses, each person receives three scores: a Masculinity score, a Femininity score, and an Androgyny score. A Social Desirability score can also be computed. The masculinity and femininity scores indicate the extent to which a person endorses masculine and feminine personality characteristics as self-descriptive.

The androgyny score reflects the relative amounts of masculinity and femininity that the person includes in her (his) self-description and best characterizes the nature of the person's total sex role. Originally the androgyny score was defined as the t ratio for the difference between a person's masculine and feminine self-endorsement. However, Spence, Helmreich, and Stapp (1975) and Strahan (1975) have pointed out that this definition of androgyny serves to
obscure what could be an important distinction between those who score high in both masculinity and femininity, and those who score low on both. Therefore, Bem has adopted Orlofsky's (1977) differential median split scoring procedure. This procedure requires: 1) the difference between the masculinity and femininity scales to be multiplied by the constant (2.322) to derive an androgyny ratio; 2) obtaining medians for the masculinity and femininity scores based on the total sample, sexes combined; and 3) classifying subjects according to whether their masculinity and femininity scores are above or below each of the two medians.

Scores above both the medians indicate an androgynous sex role. Scores below both the medians indicate an undifferentiated sex role. Scores above the masculine median and below the feminine median indicate a masculine sex role. Scores above the feminine median and below the masculine median indicate a feminine sex role. The social desirability score indicates the extent to which a person describes herself (himself) in a socially desirable direction on items that are neutral with respect to sex. It is scored by reversing the self-endorsement ratings for the ten undesirable items and then calculating the subject's mean endorsement.
score across all twenty neutral personality characteristics. The social desirability score can range from 1 to 7, with 1 indicating a strong tendency to describe oneself in a socially undesirable direction and 7 indicating a strong tendency to describe oneself in a socially desirable direction.

During the winter and spring of 1973, the BSRI was administered to 444 students in introductory psychology at Stanford University. It was also administered to an additional 117 male and 77 female paid volunteers at Foothill Junior College. In order to estimate the internal consistency of the BSRI, coefficient alpha was computed separately for the scores of subjects in each sample. The results showed all three scores to be highly reliable, both in the Stanford sample (masculinity = .86; femininity = .80; social desirability = .75) and the Foothill sample (masculinity = .86; femininity = .80; social desirability = .70).

The results from these two samples support the idea that the masculinity and femininity scores are independent (Stanford sample: males r = .11, females r = .14; Foothill sample: males r = .02, females r = .07). Both masculinity and femininity were correlated with social desirability. However, the near zero correlations between androgyny and social desirability
confirm that the andrognyn score is not measuring a
general tendency to respond in a socially desirable
direction but it is measuring a very specific tendency
to describe oneself in accordance with sex-typed
standards of desirable behavior for men and women.

The BSRI was administered for a second time to
28 males and 28 females from the Stanford sample approxi-
mately four weeks after the first. All four scores
proved to be highly reliable over the four week interval
(masculinity r = .90; femininity r = .90; andrognyn r = .93;
social desirability r = .89).

Bem (1975) tested an assumption about the
behavioral consequences of sex-role stereotyping.
According to both Kagan (1964) and Kohlberg (1966) the
highly sex-typed person becomes motivated during the
course of sex role socialization to keep their behavior
consistent with an internalized sex role standard; that
is, they become motivated to maintain a self-image as
masculine or feminine, a goal which they presumably
accomplish by suppressing any behavior that might be
considered undesirable or inappropriate for their sex.
Bem (1975) tested her assumption that independence and
kitten-playing represent stereotypically masculine and
feminine behavior, respectively. Twenty-three male
and 19 female undergraduates at Stanford were asked to
judge a series of behaviors for their sex role connotations. They were asked to indicate on a seven point scale how masculine or feminine each of twelve activities would be considered by American society generally. The scale ranged from -3 (very masculine) through 0 (neutral) to +3 (very feminine) was labeled at each point. Embedded in the list of activities were the following two behaviors: "playing with a six week old kitten" and "saying what you believe even when you know those around you disagree." Both males and females rated kitten playing as significantly feminine and the act of independence as significantly masculine.

Sixty-six undergraduates, half male and half female, from Stanford served as subjects. One-third of the subjects of each sex were classified as masculine, feminine, and androgynous. Subjects were told they would be asked to engage in four activities over the course of an hour and they would be asked to fill out a mood questionnaire after each. The four activities were: 1) build something with sixty geometrical plastic discs; 2) to interact with the kitten in anyway they wished; 3) to play a somewhat challenging game of skill called, "Hit the Spot," and 4) the kitten was again placed in the room, but the instruction was that the subject would do anything she (he) wished to do in the room.
Feminine and androgynous males did demonstrate significantly greater overall involvement with the kitten than masculine males (t=3.39, p<.002). Contrary to prediction, feminine and androgynous females did not show significantly greater involvement with the kitten than did masculine females. Feminine females were found to show significantly less overall involvement with the kitten than were androgynous females (t=2.08, p<.02). This result indicates that "feminine" females seem to have the most serious behavioral deficit.

This experiment was significant because it provides empirical support that there exists a distinct class of people who can appropriately be termed androgynous, whose sex role adaptability enables them to behave in both stereotypic "masculine" and "feminine" behaviors.

In a follow-up study, Sem, Martyna, and Watson (1976) examined subjects' responses to a baby. Their hypothesis was that the baby would receive more behavioral nurturance from androgynous and feminine sex roles; however, this failed to receive confirmation. A second experiment to test the hypothesis that feminine and androgynous subjects of both sexes are more nurturant than masculine subjects received tentative support. Eighty-four undergraduates from Stanford were paired with a confederate to find out whether you begin to feel...
close to another person primarily because of the things you learn about the other person or primarily because of the things you tell the other person about yourself. The confederate always served as the talker and the subject the listener. As predicted, masculine subjects were significantly less nurturant than feminine or androgynous subjects ($t (78) = 3.37, p < .002$) and there was no significant difference between feminine and androgynous subjects ($t (78) = 1.38, ns$).

Bem and Lenney (1976) conducted a study with 144 undergraduates to measure how comfortable subjects would be performing masculine, feminine, and neutral activities. One hundred and three sample, everyday activities were pretested for their sex role connotations. These activities were then paired into activities that differed in sex role connotation. Payment for each activity was arranged so that any subject who wished to select the more sex appropriate of the two activities also had selected the lower paying of these activities. Each subject was told that it did not matter how well they could perform each activity or whether they had performed the activity before, but only that they become involved enough with the activity so a convincing picture could be taken.
Males were more likely than females to select the higher paying alternatives when no sex role conflict was involved. The analysis of variance also revealed that sex-typed individuals were significantly more stereotyped than androgynous or sex-reversed subjects ($t (141)=3.43, p<.001$). The results suggest that cross-sex behavior is motivationally problematic for sex-typed individuals and that they actively avoid it as a result. It seems clear that sex typing does restrict one's behavior in unnecessary and perhaps dysfunctional ways.

In an attempt to explore the differences between high-high and low-low score subjects on the BSRI Bem (1977) administered six pencil and paper questionnaires to a group of ninety-five male and seventy-four female undergraduates at Stanford. The instruments administered were: 1) **Texas Social Behavior Inventory (TSBI)** a measure of self-esteem developed by Helmreich, Stapp, and Ervin, 1974; 2) **Attitudes Toward Women Scale (AWS)** a measure of attitudes about the role of women developed by Spence and Helmreich, 1972; 3) **Internal-External Locus of Control Scale** a forced-choice scale measuring how much control subjects feel they have over their lives developed by Rotter (1966); 4) **Mach IV Scale** a measure of how much the subject agrees or disagrees
with Machiavelli's views of human nature developed by Christie and Geis, 1970; 5) Self-Disclosure Scale a measure which indicates how open the subject has been with information about self to specific others developed by Jourard, 1971; and 6) Attitudes Toward Problem Solving Scale a measure which indicates how subject feels about working on problems developed by Carey, 1958. There was a significant main effect of sex role on TSBI, both for males, $F(3.89)=7.76$, $p<.001$, and for females $F(3.67)=6.37$, $p<.001$. There was also a significant main effect of sex role on the AWS for men $F(3.91)=4.90$, $p<.01$, but not for women. One way analysis of variance and multiple regression analyses were also performed on the other four measures and no significant differences emerged in the analysis of variance for either sex.

Recent criticisms of the BSRI by Pedhazur and Teterbaum (1979) is that the instrument is atheoretical: "Instead of defining the domains of masculinity and femininity and attempting to construct measures consistent with the definitions, Bem has chosen a strictly empirical approach." (p. 6) The theory behind BSRI implies that sex-typed individuals will confirm to whatever definitions of masculinity and femininity the culture happen to provide. The theory is a theory of process not content, and the use of judges as "native informants"
about the particular contents of the culture's prescriptions flows directly from the theory itself (Bem, 1979). Pedhazur and Tetenbaum also criticize the item-by-item t tests as the basis for selection. A recent replication of BSRI item selection (Walkup & Abbott, 1978) cross-validated thirty-seven of the forty items. However, they are correct that the two items, "masculine" and "feminine" are responsible for sex differences in self-report on the BSRI. The goal of the instrument, however, is to measure and to investigate within sex differences, not between sex differences.

A short form of the BSRI has recently been developed which contains exactly half of the original items. Two groups of feminine and masculine items, in particular, were eliminated during the development of the short BSRI: 1) the few items, including masculine and feminine that defined the factor correlated with biological sex; and 2) a group of feminine items with relatively low social desirability.

Another critique by Locksley and Colten (1979) questions the conceptual nature of the theory. They believe that a more cognitive approach to sex typing would be more fruitful. Bem feels only future research can support or reject this concept.
Adult Nowicki Strickland Internal-External Scale (ANS-IE) was developed by Stephen Nowicki and Marshall Duke (1974). This instrument was constructed based on the definition Rotter (1962) developed to describe the internal-external control of reinforcement dimension and the Nowicki-Strickland Locus of Control Scale for Children (1970). Rotter defines internal control as the perception that positive and negative events are a consequence of one's own actions; and external control as unrelated to one's actions. Nowicki and Duke modified the children's scale for adults because they felt Rotter's adult scale had a significant relationship with social desirability, confounded different types of locus of control, and was difficult to read. The ANS-IE scale has forty items which are responded to in a yes or no format. The scale is keyed so that the higher the score, the more external the locus of control orientation.

In twelve separate studies Nowicki and Duke (1974) found that the scale was psychometrically sound with split-half reliability ranging from .74 to .86, N=158. Test-retest reliability over a six week period was established, r = .83, n=48. Construct validity was established by obtaining positive correlations between the ANS-IE and Rotter's IE scale: r = .68, df=.47, p<.01; r = .48, df=.17, p<.01; r=.44, df=.33, p<.05.
Positive correlations were also established with the Eysenck Neuroticism Scale (males, $r=.36$, df=.35, $p<.05$; females, $r=.32$, df=.46, $p<.05$) and the Taylor Manifest Anxiety Scale (males, $r=.34$, df=.35, $p<.10$; females, $r=.40$, df=.46, $p<.05$).

Cash and Burns (1977) used the ANS-IE to compare success-failure expectancies and physical attractiveness. Internal consistency was established from .74 to .86. A stability coefficient of .83 was determined. With internal males, their success expectancies and physical attractiveness were all significantly associated with greater activity and greater obtained reinforcement. Males success expectancies were positively related to their enhanced evaluation of events as potentially reinforcing. Results for females were inconsistent. Locus of control is often a predictor of active goal directed behavior among males, while females have more complex relationships (Joe, 1971; Nowicki & Duke, 1974) perhaps caused by differing sex-role norms associated with locus of control (Hockreich, 1975).

Marecek and Frasch (1977) use the ANS-IE with their own Career Expectation Scale to analyze college women's role expectations. They chose the ANS-IE because it has been shown to yield scores that are relatively uncontaminated by social desirability. The
results supported the notion that an external locus of control orientation may act as a psychological barrier to women's occupational participation.

An assessment of three adult locus of control measures done by Dixon, McKee, and McRae (1976) shows that the ANS-IE item construction which contains items worded in both external and internal directions and is addressed directly to the subject introduce less bias toward a particular I-E orientation. Although this analysis found comparable underlying dimensions with the ANS-IE, Rotter's I-E scale, and James I-E scale, item comparability is inadequate. There is a need to construct scales that measure specific environments of interest and importance.

Career Expectation Scale (CES) was constructed by Jeanne Marecek and Christine Frasch (1977). The scale was constructed to examine college women's occupational role expectations and career orientation. This instrument will be modified in two ways: 1) statements or questions that refer to women only will be revised to be applicable to both sexes; 2) included within the instrument will be several questions designed to measure career aspiration level. These questions are currently being constructed with the assistance of my advisor. They will be the major focus of my analysis of this
instrument, while the original format of the CES will provide interesting data to be examined but not analyzed in my thesis.

Methodology

This study will be comparative in nature and employ the use of four instruments: Dependent Variables: 3 Scales from the Career Expectation Scale; \( Y_1 = \) Career Expectations; \( Y_2 = \) Career Importance; \( Y_3 = \) Career Goals. Independent Variables: \( X_1 = \) College Self Expression Scale; \( X_2 = \) Sex Role Inventory; \( X_3 = \) Adult Nowicki Strickland Internal-External Scale. A stepwise multiple regression analysis will be performed to determine which of the variables used in the study would best predict career aspirations.

Subjects: The subjects in this study are residents in the Career Planning Center (CPC). This is a special living/learning program sponsored by OSU Residence and Dining Halls. All of the students voluntarily select to live in CPC, located in Baker Hall. They formally apply to the program and are required to be first quarter students at Ohio State. CPC provides special career-related activities and programs in addition to an academic course to explore majors and vocational choices.
Subject Selection: A copy of this proposal was submitted to the CPC Curriculum Committee composed of members from the Counseling and Consultation Center, two faculty members from Student Personnel Work, representatives from OSU Residence and Dining Halls, and the coordinator of the CPC program. It was approved and ninety-six residents were given a brief explanation of my research and asked to participate. Eighty-four residents were willing to participate. They were asked to sign a consent form.

Test Administration: The instruments were administered during the two-day orientation to CPC. It took between forty-five to sixty minutes to complete all four pencil-paper, self-report instruments.

Confidentiality: The instruments have a code number on them (to insure that the same individuals took all four instruments) which corresponds to the roster of names of the participants; their identity will be known only to my advisor, Dr. Gail Hackett. The instruments are being kept in a locked file cabinet. Data collected on residents of the Career Planning Center becomes the property of the CPC Curriculum Committee. None of the Ss names will be mentioned in my thesis.
CHAPTER III
LITERATURE REVIEW

Career Development of Women

Although most career development theories constructed have been based on the study of career patterns of men, five theoretical approaches which have relevance for women are Super (1957), Roe (1957), Holland (1966), Psathas (1963), and Zytowski (1969).

Super's (1957) theory states that persons strive to implement their self-concept by choosing to enter the occupation they see as most likely to permit self-expression. This implementation is a function of the individual's stage of life development. In order to form a self-concept one must be able to recognize oneself as a distinctive individual, yet be aware of similarities between self and others. This process begins with the self-differentiation that occurs as part of a person's search for identity. Role-playing stimulates the process of identification and further facilitates the development of a vocational self-concept. This is a significant factor to consider when examining women's career development because of the limitations.
of socially "approved" feminine roles which would regulate that identification process.

In addition to the four types of career patterns Super (1957) has identified for men, he provided a possible classification system for women's career patterns: stable homemaking (no significant work experience), conventional (work after education but not after marriage), stable working (single women who work continuously), interrupted (married women who work, then are full-time homemakers, then return to work), unstable (in and out of the work force at irregular intervals), double-track (married women who work continuously), and multiple-trial (a succession of unrelated jobs).

Putnam and Hansen (1972) in a study of eleventh grade females stated that self-concept and feminine role concept were useful in predicting vocational maturity. They discovered that the more the girl viewed her role as being liberal, or contemporary, the higher level of vocational maturity according to Crites measure.

Roe's theory (1957) is concerned with the impact of early childhood experiences on the development of personality. She feels that early experiences influence people's orientation and effects how they interpret the world around them. This interpretation leads them to
move toward or away from people. She developed an occupational classification system which matches people who are people oriented and not oriented toward people to predictions about the type of occupations that they might be interested in. Kriger (1972) studied the careers of sixty-six women and determined that the major vocational decision for women is between "working" and "not working". Traditionally women have been viewed as wives and mothers caring for their loved ones. To follow that pattern could be interpreted as person oriented according to Roe's classification scheme. The effects of early childhood experiences also include socialization reinforcing traditional sex roles and hence require additional consideration when examining the career development of women.

Holland (1966) developed a classification scheme of six types of individuals with six corresponding work environments which he feels categorize most persons. However, he recognized that it is difficult to apply those categories to women because most of the empirical knowledge is based on men. Holland and Whitney (1968) constructed a classification system to study the stability of vocational choice in college women and found that over a year's time eighty-four percent of
the women's choices remained in the same occupational category.

Blau et al. (1956) conceptualized occupational choice as a compromise between preferences for and expectation of being able to enter various occupations. This compromise is not a single choice, but a series of choices with each prior choice affecting future choices. Based on the work of Blau et al., (1956) Paasch (1968) determined a number of factors which influence women's occupational choices. He explains that an initial understanding of the relationship between sex role and occupational role is needed to determine how women's career development differs from men. After this relationship is examined, other factors which warrant special consideration are first order relationships, family finances, social class, education, occupation of parents, and values. In addition, he reiterates the idea that the setting in which occupational choices are made must be compared with the developmental process (Vetter, 1973).

Zytowski (1969) constructed nine postulates in an attempt to explain the distinctive differences in the work lives of men and women. In addition, women's developmental stages, their patterns of participation
in the work force, and the causal factors were explained. The postulates are: 1) The modal life role for women is described as that of the homemaker; 2) The nature of women's role is not static; it will ultimately bear no distinction from that of men; 3) The life role of women is orderly and developmental and may be divided into sequences according to the preeminent task of each; 4) Vocational participation constitutes departure from the homemaker role; 5) Three aspects of vocational participation are sufficient to distinguish patterns of vocational participation: age, ages of entry, span of participation, and degree of participation; 6) The degree of vocational participation represented by a given occupation is defined as the proportion of men to the total workers employed in the performance of that job; 7) Women's vocational patterns may be distinguished in terms of three levels, derived from the combination of entry age(s), span and degree of participation, forming an ordinal scale; 8) Women's preference for a pattern of vocational participation is an internal event and is accounted for by motivational factors; 9) The pattern of vocational participation is determined jointly by preference (representing motivation) and by external (such as situational and environmental) and internal (such as ability) factors.
Wolfson (1972) studied postulates seven and nine and found the variables related to education and marriage were the most dominant predictors of vocational patterns. Postulate four is rejected based on evidence from the Women's Bureau (1971) that forty percent of married women who live with their husbands work outside of the home (Vetter, 1973). Zytowski's theory is a decade old and the roles of women, the world of work, and societal institutions are rapidly changing. Both Super and Zytowski's work are based on the assumption that the modal life role of women is homemaker. As mentioned previously, according to Women's Bureau statistics, that is no longer applicable. Therefore, the major underlying assumption that organizes both Super's and Zytowski's classification schemes has less relevance to the career patterns of today's women. This clearly illustrates the need for additional research so that educators can better understand women's career patterns and enhance the planning and development of programs and services to meet the needs of this client population.
Sex Role Socialization

Of all the barriers that exist that prevent women from developing their maximum potential, the most pervasive is the prevalence of social and occupational stereotypes that reflect the sexist myths and attitudes society holds. Rosenkrantz et al. (1968) define sex role stereotypes as consensual beliefs about the different characteristics of men and women in our society. The crucial factor is not whether sex differences between males and females exist, but whether there is agreement in the belief of the existence of those differences. Beginning with childhood, males and females are viewed differently. Unfortunately, the connotations attached to females suggest inferiority and are applied to every female to the extent that different is interpreted as wrong instead of unique or individualistic.

Sex role stereotyping begins with infants and is apparent by the way male and female infants are touched and held, what types of toys are bought for the child and how the baby is encouraged to behave during preschool years. Toys reinforce and maintain these role-limitations and stereotypes (Schlossberg and Goodman, 1972). The effects of this early
experience influence children's concepts of ability, achievement and status; a conception which reflects and reinforces the differential status of males and females. Schlossberg and Goodman (1972) studied elementary school students' perceptions about appropriate occupational roles for men and women. Their results showed that boys and girls excluded women from men's jobs more than they excluded men from women's jobs. They considered women unable to women's work twice as often as men were considered unable to do women's work. In addition to their perceptions of the sex-appropriateness of occupations students' own career plans reflected occupational stereotyping. Eighty-three percent of the girls and ninety-seven percent of the boys chose occupations traditionally reserved for their sex.

As children grow older and begin their formal education, the educational system plays a major role in influencing their goals and expectations; it is also a major source of the contacts and training that will enable them to pursue those goals (Van Dussen and Sheldon, 1975). Yet important differences exist between men and women both in the level of educational attainment
of each group and in their educational training pursuits. Traditionally education was not viewed as necessary for women because it was felt that men needed jobs and women would marry and have children. However, with sixty-one percent of all women in the labor force (U.S. Department of Labor, 1975) other factors must influence educational attainment level. The authority structure in the school system sends messages to children about the differential status of men and women with eight-five percent of the teachers being women and seventy-nine percent of the principals being men (Levy, 1972). This organizational structure becomes a model embedded in children’s minds of the world of work and men and women’s differential status.

Another potent reinforcer of sex role stereotypes is the media. Children’s books were studied by the New Jersey chapter of the National Organization of Women (NOW, Stacey, Be’reaud, and Daniels, 1974) and compiled the following: out of 2760 stories within 131 books published, boy-centered to girl-centered stories were 5:2, adult male to adult female biographies 6:1, male to female main characters 3:1,
male to female animal stories 2:1, male to female fantasy stories 4:1. Not only did males receive more attention in the literature but they were portrayed as possessing traits that were not only socially desirable but reflected high levels of self-esteem and coping skills. On the other hand, females were described as passive observers in service roles who were lacking skills exhibited by their male counterparts. The NOW task force emphasized that role models are needed to promote socio-psychological development, but that the role models portrayed in the readers were restricting future growth and seems to contribute to maladjustment (Goldberg, 1975). The researchers explained that many of the themes of the stories could reinforce feelings of self-doubt in the minds of young girls in relation to the inferiority of their sex.

In advertising, the media puts women in their place as household servants and sex objects and attempts to keep them there. Kosinar (1971) asks, "Do you ever see a man doing dishes or the laundry? In ads, men are the ones to give the instructions." Although this has changed slightly since 1971, the role portrayals of men and women are still for the most part in accordance
with traditional sex role stereotypes. Advertising executives explain that in many cases a man giving directions or information is deliberate because men are perceived as having the voice of authority (Kostmar, 1971).

Women are consistently portrayed in three ways: woman as seductress, woman as madonna, or woman as stupid. (Wells and Loring, 1972). The woman as seductress image is the favorite of the media which portrays buying particular products as enhancing one's chance of looking like this beautiful woman or luring someone like her into their life. Closely related to this theme is feminine evil, the strange powers of women over which men have no control. Inherent in that concept is that women have the power to destroy men, therefore they should be feared and viewed with suspicion. At the other extreme is the woman as madonna who sets the world right with her humbleness and goodness. By knowing her, seeing her, standing by her side, we all become better, more wholesome people. This image is not only less threatening to men, but one that supports men in their sex role as protector and provider. Related to the last characteristic of women, the third predominant force
depicting women in the media, is the dumb-blond image. Women are stupid, unsure of themselves, and unable to cope in this world without men. These images of women in the media continue to reinforce the stereotypes as inferior stigmatizing all women and allowing little room for individuality.

One of the serious consequences for women of viewing the sexes stereotypically is internal conflict. Komarovsky (1946) found that women in college suffered feelings of uncertainty about occupational and academic success because those norms conflicted with traditional feminine roles. Several investigators (Lipman-Blumen, 1972; McKenzie, 1972) have found that female role ideology does significantly affect educational aspirations and plans. Hansen and Rapoza (1978) state that women's attitudes and level of motivation are products of social norms and socialization processes forcing them into powerful psychological conflict as they attempt to make vocational choices.

According to Field (1951) and Horner (1969) achievement motivation in women is based on the need to be liked. Horner's (1970) findings showed that women perceive female achievement to be incompatible with the values of our culture. Maccoby and Jacklin (1974) indicated that women lack academic self-confidence and are
less competitive with men. However, this lack of self-confidence first appears in high school and college (Alper, 1974). Matthews and Tiedeman (1964) speculate that this difference might be the result of conflicts with marriage and career decisions which are not as pressing at an earlier age. Bardwick (1971) describes a no-win situation where women feel torn between academic achievement and affiliation with the opposite sex and their fear that success in one rules out success in the other.

As long as traditional sex-roles are reinforced and carry with them the myths that women are inferior, women will continue to lose in an environment which treats them as a category instead of as individuals. This no-win concept is internalized creating intra-psychic conflict that can account for low level aspirations and low achievement motivation in women. Until these pervasive attitudes are challenged and refuted, women will continue to feel like victims in a double bind situation as described by Bardwick (1971).

Androgyny

After the previous discussion of the negative consequences of sex-role stereotypes, the concept of psychological androgyny appears to be a humanistic
ideal (Farmer, 1978). The term "psychological androgyny" has been defined by Bem (1974) as the ability to be both masculine and feminine depending on the situational appropriateness of these various behaviors. Both Kagan (1964) and Kohlberg (1966) state that the highly sex-typed individual is motivated to keep his or her behavior consistent with an internalized sex-role standard; a goal she (he) accomplishes by suppressing any behavior that might be considered undesirable or inappropriate for her (his) sex. In contrast, the androgynous individual can shift roles, being comfortable being assertive, self-confident, independent, dependent, nurturant, and tender when appropriate (Farmer, 1978).

In psychology there has been an implicit assumption in most research that sex-typing is a desirable process (Bem, 1974). However, the application of that sex-typing is that healthy women are described by clinicians in ways that contradict the definition of the healthy mature adult (Broverman, et al., 1970). Studies on this phenomena show that highly sex-typed interests retards psychological adjustment in women (Cosentino & Heilbrun, 1964; Gray, 1957; Webb, 1963). The effect on men is unclear due to the conflicting results for men (Gray, 1957; Webb, 1963). It appears
that a high level of sex appropriate behavior does not necessarily facilitate psychological or social adjustment. Maccoby (1966) states that greater intellectual development appears to be related to cross-sex typing. Boys and girls who are less sex-typed have been found to be more creative and more intelligent.

Behavioral measures taken by Bem and Lenney (1976), Bem (1975), and Bem, Martyna and Watson (1976) show that sex-typed individuals were significantly more stereotyped in their choices and more comfortable performing sex appropriate tasks than sex non-appropriate tasks. It appears that cross-sex activity is problematic for sex-typed individuals and traditional sex roles produce avoidance patterns of particular behaviors (Bem, 1975). On the other hand, the androgynous person seems to be more comfortable in performing a variety of tasks regardless of their sex-type connotation. In interpersonal social situations androgynous persons were rated the most effective in interactions with opposite sex and like peers (Kelly, et al., 1977).

As Bem (1979) suggests, individuals of different sex-roles differ in how they perceive the two sexes and these perceptions influence their behavior. Studies by Deaux and Major (1977) and Lippa (1977) support this notion showing that sex-typed individuals differentiated
their interpretations of others along gender specific dimensions more than androgynous individuals. Therefore, based on the prior discussion of sex-role socialization and viewing individuals along sex-type measures it is apparent that this classification affects cognitive and behavioral domains. When examining the research related to the career development of women, one recognizes that there are internal beliefs as well as external barriers that inhibit this process. Therefore, the concept of androgyny which examines both cognitive and behavioral domains seems a concept worth investigating with the hope that it will provide insight into the career development of women and how we, as educators, can help facilitate that growing process.

Locus of Control Orientation
The roles women engage in today are quite different from some women in the past have participated in. This new pattern of roles may require different personality characteristics and behaviors than those traditionally associated with "femininity," especially if women commit themselves to a work role (Marecek and Frasch, 1977). One aspect of the traditional feminine sex role is an external locus of control orientation. Women with external orientations tend to attribute events
and outcomes to forces outside their personal control while women with internal orientations tended to perceive themselves as controlling events (Lefcourt, 1966; Rotter, 1966). There is support that an external orientation is part of the female sex-role stereotype (Hochschild, 1975; Broverman, et al., 1972). Marecek and Frasch (1977) studied junior and senior college women and, as predicted, supported the notion that an external locus of control orientation is associated with low levels of achievement and occupational participation.

While externally oriented people regard obstacles as unsurmountable, internally oriented people believe they are surmountable because they are in control (Brissett and Nowicki, 1973). In terms of commitment to a career, women face many obstacles. Clinging to such a "defeatist" attitude based on an external orientation could prevent women from ever attempting to aim for high level occupations knowing the barriers they face.

High self-esteem is positively correlated with an internal locus of control and high levels of academic achievement (Gordon, 1977; Frieze et al., 1975). Lefcourt (1966) states that externally oriented persons are lacking in self-confidence, which attributes to a low level of aspiration because of their fear of failure.
Nowicki and Strickland (1973) in testing school age children found that sex was a significant variable in predicting an external locus of control. Female students who scored low in terms of social desirability performed academically like males (Nowicki and Strickland, 1973). The research indicates that females who continue to behave traditionally learn to be passive, helpless and dependent (Broverman et al., 1972). This learned helplessness also characterizes one who has an external locus of control orientation. As mentioned previously, those female students who achieved like males and were rated low on social desirability scales had the highest achievement and aspiration levels. Therefore, the traditionally feminine role could be considered a handicap. Behaving in accordance with its descriptors hinders the academic and career development processes. This knowledge poses serious questions for educators and challenges for the profession to become a support group to female students struggling to become their own persons despite the sex-role socialization process they have experienced which continues to influence them.

**Assertive Behavior**

Human liberation movements such as feminism have identified cognitive and behavioral changes for
themselves as a growth enhancing strategy for dealing with social oppression (Flowers, Cooper, and Whiteley, 1975). Feminists are concerned for the rights and personal power of women in a male-dominated society. They feel it is important to educate women and provide women with the necessary skills to cope with and overcome such oppression. Assertion training has been regarded as a useful intervention to meet these goals (Flowers, Cooper and Whiteley, 1975). Assertive behavior is defined by Alberti and Emmons (1970) as behavior which enables a person to act in their best interest, to stand up for themselves without undue anxiety, to express their honest feelings comfortably, and to exercise their rights without denying the rights of others. By examining whether or not a student is assertive, educators will be better able to assess how capable a student is of acting in her (his) own best interests. This is especially important because career planning is a life-long process which has the potential to impact all other aspects of life.

Examining sex differences in assertive behavior has been largely ignored (Hollandsworth and Wall, 1977). Several assumptions appear to provide support for studying sex differences. First, it is assumed by some that women are generally less assertive than men.
This has been explained in terms of differential socialization which rewards women for relying on non-assertive behaviors (Bloom, Coburn, and Pearlman, 1975; Whiteley and Pouloson, 1975). Second, it is often assumed that women's assertiveness problems are uniquely different from the problems of men in this area (Barrett et al., 1974; Jakubowski-Spector, 1973; Pearlman, Coburn and Jakubowski-Spector, 1973). Wolfe and Fodor (1975) report that the most important factor blocking women's effective assertion of their rights and feelings is irrational beliefs that leave them anxious and fearful of losing others, of hurting others' feelings, or of being too aggressive.

Alberti and Dymond (1980) report that an assertive individual is more likely to achieve desired goals since she (he) is more expressive and is able to make choices. Parcell, Berwick, and Heigel (1974) administered a self-acceptance questionnaire and assertiveness inventory and found a significant positive correlation between feelings of self-worth and being assertive. When students are able to feel good about themselves and act in their own best interests then, I believe, they will be better able to examine their own career planning process. Therefore, as an educator interested
in facilitating that procedure, I feel that assertion training which will help students develop assertive behavior is a necessary and worthwhile pursuit.
CHAPTER IV

RESULTS

The following chapter presents the results of the data analyses used in this study. Descriptions and results of each hypothesis tested are also reported. This chapter is divided into four sections: the first section presents descriptive statistics; the second section presents the results of the Pearson product-moment correlation analysis; the third section presents the results of the multiple regression analysis and the fourth section is a summary of the results.

Descriptive Statistics

Table 1 presents the means and standard deviations for the four instruments used in this study (BSRI, CSES, ANS-IE, CES). The table is broken into three sections: data of the total group and by sex, male and female. As presented in Table 1 the means for males and females on both the masculine and feminine BSRI scales (Males: masculinity mean 3.5, femininity mean 3.16; and Females: masculinity mean 3.15, and femininity mean 3.36) were lower than those reported by Bem (1974)
### Table 1

#### Section A
**Means and Standard Deviations of Total Group (N=54)**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN</th>
<th>STANDARD DEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSRI Scales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSRI FRE</td>
<td>3.33</td>
<td>.47</td>
</tr>
<tr>
<td>BSRI F</td>
<td>3.26</td>
<td>.32</td>
</tr>
<tr>
<td>CSES</td>
<td>2.63</td>
<td>.39</td>
</tr>
<tr>
<td>ANS-IE</td>
<td>9.60</td>
<td>4.04</td>
</tr>
<tr>
<td>CES Scales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CES EXP</td>
<td>6.65</td>
<td>1.90</td>
</tr>
<tr>
<td>CES IMP</td>
<td>6.65</td>
<td>2.08</td>
</tr>
<tr>
<td>CES GLS</td>
<td>6.18</td>
<td>1.10</td>
</tr>
</tbody>
</table>

#### Section B
**Means and Standard Deviations of Female Subjects (N=42)**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN</th>
<th>STANDARD DEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSRI Scales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSRI M</td>
<td>3.16</td>
<td>.43</td>
</tr>
<tr>
<td>BSRI F</td>
<td>3.36</td>
<td>.32</td>
</tr>
<tr>
<td>CSES</td>
<td>2.62</td>
<td>.37</td>
</tr>
<tr>
<td>ANS-IE</td>
<td>9.10</td>
<td>3.75</td>
</tr>
<tr>
<td>CES Scales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CES EXP</td>
<td>6.64</td>
<td>1.95</td>
</tr>
<tr>
<td>CES IMP</td>
<td>6.57</td>
<td>2.13</td>
</tr>
<tr>
<td>CES GLS</td>
<td>5.67</td>
<td>1.08</td>
</tr>
</tbody>
</table>

#### Section C
**Means and Standard Deviations of Male Subjects (N=42)**

<table>
<thead>
<tr>
<th>VARIABLE</th>
<th>MEAN</th>
<th>STANDARD DEV</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSRI Scales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSRI M</td>
<td>3.50</td>
<td>.44</td>
</tr>
<tr>
<td>BSRI F</td>
<td>3.16</td>
<td>.29</td>
</tr>
<tr>
<td>CSES</td>
<td>2.63</td>
<td>.42</td>
</tr>
<tr>
<td>ANS-IE</td>
<td>10.10</td>
<td>4.30</td>
</tr>
<tr>
<td>CES Scales:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CES EXP</td>
<td>6.67</td>
<td>1.88</td>
</tr>
<tr>
<td>CES IMP</td>
<td>6.71</td>
<td>1.88</td>
</tr>
<tr>
<td>CES GLS</td>
<td>6.69</td>
<td>.87</td>
</tr>
</tbody>
</table>

-55-
| NOTE: | aBSRIM= Bem Sex Role Inventory "masculine" scale;  
bBSRIF= Bem Sex Role Inventory "feminine" scale;  
cCSES= College Self Expression Scale;  
dANS-IE= adult Nowicki Strickland Internal-External Scale;  
eCESEXP=Career Expectations for Career Expectation Scale;  
fCESIMP= Importance of Career from the CES;  
gCESGLs=Career goals from CES |

| -56- |
in a Stanford study, (Males: masculinity mean 4.57, femininity mean 4.44; Females: masculinity mean 4.57, femininity mean 5.01) and another study with students from Foothill Junior College (Males: masculinity mean 4.96, femininity mean 4.62, Females: masculinity mean 4.55, femininity mean 5.08).

The CSES means, as reported in Table 1 for both the total group and for males and females separately were most like the scores reported by Galassi (1974) on the West Virginia University Upper Division and Graduate Students pre-test and post-test. The means and standard deviations of this study were scaled down and divided by fifty, the number of items in the questionnaire. This accounts for the differences in these scores and those reported in other studies. The CSES means and standard deviations for this population were: Total group: \( \bar{x} = 2.63, SD = .39 \); Males: \( \bar{x} = 2.63, SD = .42 \); Females: \( \bar{x} = 2.62, SD = .37 \).

The ANS-IE means and standard deviations scores for the total group and male and female are a little higher than previous research done by Nowicki and Duke (1973) [\( \bar{x} = 9.06, SD = 3.89, N = 154 \)]. The results of this study indicate that the means and standard deviations are: Total group: \( \bar{x} = 9.60, SD = 4.04 \); Male: \( \bar{x} = 10.10, SD = 4.30 \); Female: \( \bar{x} = 9.10, SD = 3.75 \).
The Career Expectation Scale, designed by Christine Frasch and Jeanne Marecek, was used as part of a research study done to complete a masters thesis. However, in this study only three scales (Career Expectations, Career Importance and Career Goals) were analyzed. Their means and standard deviations are:

Total Group: Career Expectations $\bar{x}=6.65$, SD=1.90; Career Important $\bar{x}=6.65$, SD=2.08; Career Goals $\bar{x}=6.18$, SD=1.10. Females: Career Expectations $\bar{x}=6.64$, SD=1.95; Career Importance $\bar{x}=6.57$, SD=2.13; Career Goals $\bar{x}=5.67$, SD=1.08. Males: Career Expectations $\bar{x}=6.67$, SD=1.88; Career Importance $\bar{x}=6.71$, SD=1.88; Career Goals $\bar{x}=6.69$, SD=1.89.

Correlation Analyses

Pearson product moment correlations were conducted between each variable and are presented in Table 3. These correlations were run on the total group, by sex, male and female, as well as on those subjects who were classified as androgynous on the Bem Sex Role Inventory. Table 2 presents a breakdown of the total group by sex role orientation.

For the total group, assertiveness as measured by the College Self Expression Scale (CSES) correlated significantly with the masculine scale of the Bem Sex
<table>
<thead>
<tr>
<th>Variable</th>
<th>Section A</th>
<th>Relationships Among BSRI, CSES, ANS-IE &amp; CES For all Subjects (N=84)</th>
<th>Section B</th>
<th>Relationships among BSRI, CSES, ANS-IE &amp; CES For Androgynous Subjects (N=21)</th>
<th>Section C</th>
<th>Relationships among BSRI, CSES, ANS-IE &amp; CES for Female Subjects (N=42)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>BSRI</td>
<td>BSRIF</td>
<td>CSES</td>
<td>ANS-IE</td>
<td>CESEXPF</td>
<td>CESIMP</td>
</tr>
<tr>
<td>BSRI</td>
<td>-0.10</td>
<td>0.42***</td>
<td>-0.15</td>
<td>0.01</td>
<td>0.26**</td>
<td>0.40***</td>
</tr>
<tr>
<td>BSRIF</td>
<td></td>
<td>-0.05</td>
<td>-0.07</td>
<td>0.10</td>
<td>-0.11</td>
<td>-0.04</td>
</tr>
<tr>
<td>CSES</td>
<td></td>
<td></td>
<td>-0.25***</td>
<td>-0.04</td>
<td>0.12</td>
<td>0.30**</td>
</tr>
<tr>
<td>ANS-IE</td>
<td></td>
<td></td>
<td></td>
<td>0.002</td>
<td>-0.07</td>
<td>-0.03</td>
</tr>
</tbody>
</table>
### Section D) Relationships among BSRI, CSES, ANS-IE & CES for Male Subjects (N=42)

| Variable | BSRIM | BSRIF | CSES | ANS-IE | CESEX | CESIM | CESGLS
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>BSRIM</td>
<td>-0.11</td>
<td>0.36*</td>
<td>-0.009</td>
<td>-0.09</td>
<td>0.39**</td>
<td>0.21</td>
<td></td>
</tr>
<tr>
<td>BSRIF</td>
<td>-0.28</td>
<td>0.04</td>
<td>-0.04</td>
<td>-0.33*</td>
<td>-0.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CSES</td>
<td>-0.16</td>
<td>-0.07</td>
<td>0.30*</td>
<td>0.37*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANS-IE</td>
<td></td>
<td>-0.01</td>
<td>-0.14</td>
<td>-0.26</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TABLE 2

Percentage of Subject in Various Sex-Role Groups as defined by a median split of both masculinity and femininity using the Bem Sex Role Inventory Total (N=84)

<table>
<thead>
<tr>
<th>Sex Role</th>
<th>Females</th>
<th></th>
<th>Males</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>X</td>
<td>N</td>
<td>X</td>
</tr>
<tr>
<td>Feminine</td>
<td>17</td>
<td>20</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Masculine</td>
<td>4</td>
<td>5</td>
<td>16</td>
<td>19</td>
</tr>
<tr>
<td>Androgynous</td>
<td>11</td>
<td>13</td>
<td>10</td>
<td>12</td>
</tr>
<tr>
<td>Undifferentiated</td>
<td>10</td>
<td>12</td>
<td>9</td>
<td>11</td>
</tr>
</tbody>
</table>
Role Inventory \( r = .42; p < .001 \), and the Goals Scale of the CES \( r = .40; p < .01 \), and negatively with the Adult Nowicki-Strickland Internal-External Scale (ANS-IE) \( r = -.25; p < .001 \). Since low scores on the ANS-IE indicate internality, high levels of assertiveness are therefore correlated with an internal locus of control. Lastly, the BSRIM score was significantly correlated with a high score on the Importance (CNS_IMP) scale of the Career Expectation Scale \( r = .26; p < .01 \).

Those individuals who were identified as androgynous according to the Ben Sex Role Inventory (BSRI) were also analyzed to see if differences arose in the patterns of correlations on the different measures. For "androgynous" individuals, assertiveness scores on the College Self Expression Scale (CSES) were negatively correlated with scores on the ANS-IE \( r = -.46; p < .05 \). Scores on the Goals scale of the CES were positively correlated with scores on the ANS-IE and the BSRI masculine scale \( r = .52; p < .05; r = .47; p < .05 \) respectively.

For female subjects, assertiveness as measured by the College Self Expression Scale (CSES) correlated significantly with the masculine scale of the BSRI \( r = .55; p < .001 \). The Adult Nowicki-Strickland Internal-External Scale (ANS-IE) correlated negatively with the BSRI masculine scale and assertiveness \( r = .46; p < .001 \);
For male subjects, the BSRI Feminine Scale was negatively correlated with assertiveness and career importance $[r = .28, p < .001; r = .33, p < .001$ respectively]. The BSRI masculine scale was positively correlated with assertiveness and career importance $[r = .36, p < .05; r = .39, p < .01$ respectively]. Assertiveness as measured by the College Self Expression Scale (CSES) was positively correlated with career importance and career goals $[r = .30, p < .01; r = .37, p < .01$ respectively].

Multiple Regression Analyses

Results pertaining to the stepwise multiple regression analyses used to predict career aspiration level are presented in Tables 4 through 7. Three scales on the Career Expectation Scale (Career Expectations, Career Importance, and Career Goals) were selected as measures of career aspiration. This analysis was employed to determine if career aspirations could be predicted from the scores from the College Self Expression Scale (CSES), Bem Sex Role Inventory (BSRI), and the Adult Nowicki-Strickland Internal-External Scale (ANS-IE). Contained in these tables were the independent variables included in the multiple regression equations, the unstandardized regression (coefficients for each of these independent
### Section A
Multiple Regression Analysis of Career Expectations as a Function of BSRI Scales, Assertive Behavior, and Locus of Control

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R^2$</th>
<th>$df$</th>
<th>$F$</th>
<th>$p$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Group (N=84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple R</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$B$</td>
<td>.02</td>
<td>4.79</td>
<td>.29</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>BSRIF</td>
<td>-0.64</td>
<td>4.79</td>
<td>0.89</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td>-0.34</td>
<td>4.79</td>
<td>0.32</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>BSRIM</td>
<td>0.11</td>
<td>4.79</td>
<td>0.99</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>ANS-IE</td>
<td>-0.93</td>
<td>4.79</td>
<td>0.03</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

### Section B
Multiple Regression Analysis of Career Importance as a Function of BSRI Scales, Assertive Behavior and Locus of Control

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R^2$</th>
<th>$df$</th>
<th>$F$</th>
<th>$p$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Group (N=84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple R</td>
<td>.29</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$B$</td>
<td>.05</td>
<td>3.80</td>
<td>2.55</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>BSRIF</td>
<td>1.12</td>
<td>3.80</td>
<td>5.30</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>BSRIM</td>
<td>-0.62</td>
<td>3.80</td>
<td>0.78</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>ANS-IE</td>
<td>-0.20</td>
<td>3.80</td>
<td>0.13</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

### Section C
Multiple Regression Analysis of Career Goals as a Function of BSRI Scales, Assertive Behavior and Locus of Control

<table>
<thead>
<tr>
<th>Variables</th>
<th>$R^2$</th>
<th>$df$</th>
<th>$F$</th>
<th>$p$</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Group (N=84)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Multiple R</td>
<td>.17</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$B$</td>
<td>.17</td>
<td>3.80</td>
<td>6.72</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>BSRIF</td>
<td>0.80</td>
<td>3.80</td>
<td>9.49</td>
<td>.001</td>
<td></td>
</tr>
<tr>
<td>CS</td>
<td>0.49</td>
<td>3.80</td>
<td>2.35</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>ANS-IE</td>
<td>0.17</td>
<td>3.80</td>
<td>0.35</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>
### TABLE 5

**Section A**

Multiple Regression Analysis on Androgynous Subjects of Career Expectations as a Function of BSRI Scales, Assertive Behavior and Locus of Control

<table>
<thead>
<tr>
<th>Total Group (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple R</strong></td>
</tr>
<tr>
<td><strong>R²</strong></td>
</tr>
<tr>
<td>0.34</td>
</tr>
<tr>
<td><strong>Variables</strong></td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>CSBS</td>
</tr>
<tr>
<td>BSRIM</td>
</tr>
</tbody>
</table>

**Section B**

Multiple Regression Analysis on Androgynous of Career Importance as a Function of BSRI Scales, Assertive Behavior, and Locus of Control

<table>
<thead>
<tr>
<th>Total Group (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple R</strong></td>
</tr>
<tr>
<td><strong>R²</strong></td>
</tr>
<tr>
<td>0.55</td>
</tr>
<tr>
<td><strong>Variables</strong></td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>CSBS</td>
</tr>
<tr>
<td>BSRIF</td>
</tr>
<tr>
<td>BSRIM</td>
</tr>
<tr>
<td>ANS-IE</td>
</tr>
</tbody>
</table>

**Section C**

Multiple Regression Analysis on Androgynous Subjects of Career Goals as a Function of BSRI Scales, Assertive Behavior, and Locus of Control

<table>
<thead>
<tr>
<th>Total Group (N=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Multiple R</strong></td>
</tr>
<tr>
<td><strong>R²</strong></td>
</tr>
<tr>
<td>0.80</td>
</tr>
<tr>
<td><strong>Variables</strong></td>
</tr>
<tr>
<td>B</td>
</tr>
<tr>
<td>ANS-IE</td>
</tr>
<tr>
<td>BSRIM</td>
</tr>
<tr>
<td>BSRIF</td>
</tr>
<tr>
<td>CSBS</td>
</tr>
</tbody>
</table>
### Section A
Multiple Regression Analysis of Career Expectations for Female Subjects as a Function of BSRI Scales, Assertive Behavior, and Locus of Control

Total Group (N=42)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Multiple R</th>
<th>R²</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSRIF</td>
<td>-1.02</td>
<td>0.01</td>
<td>37</td>
<td>1.02</td>
<td>NS</td>
</tr>
<tr>
<td>BSRIM</td>
<td>0.94</td>
<td>0.37</td>
<td>37</td>
<td>1.06</td>
<td>NS</td>
</tr>
<tr>
<td>CSES</td>
<td>-0.44</td>
<td>0.37</td>
<td>37</td>
<td>0.13</td>
<td>NS</td>
</tr>
<tr>
<td>ANS-IE</td>
<td>-0.32</td>
<td>0.37</td>
<td>37</td>
<td>0.11</td>
<td>NS</td>
</tr>
</tbody>
</table>

### Section B
Multiple Regression Analysis of Career Importance for Female Subjects as a Function of BSRI Scales, Assertive Behavior, and Locus of Control

Total Group (N=42)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Multiple R</th>
<th>R²</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSRIM</td>
<td>1.42</td>
<td>0.42</td>
<td>37</td>
<td>2.06</td>
<td>NS</td>
</tr>
<tr>
<td>CSES</td>
<td>-1.29</td>
<td>0.37</td>
<td>37</td>
<td>1.32</td>
<td>NS</td>
</tr>
<tr>
<td>BSRIF</td>
<td>0.59</td>
<td>0.37</td>
<td>37</td>
<td>0.30</td>
<td>NS</td>
</tr>
<tr>
<td>ANS-IE</td>
<td>0.29</td>
<td>0.37</td>
<td>37</td>
<td>0.08</td>
<td>NS</td>
</tr>
</tbody>
</table>

### Section C
Multiple Regression Analysis of Career Goals for Female Subjects as a Function of BSRI Scales, Assertive Behavior and Locus of Control

Total Group (N=42)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Multiple R</th>
<th>R²</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSRIM</td>
<td>0.89</td>
<td>0.37</td>
<td>37</td>
<td>3.94</td>
<td>.01</td>
</tr>
<tr>
<td>ANS-IE</td>
<td>0.86</td>
<td>0.37</td>
<td>37</td>
<td>3.34</td>
<td>.05</td>
</tr>
<tr>
<td>BSRIF</td>
<td>0.64</td>
<td>0.37</td>
<td>37</td>
<td>1.65</td>
<td>NS</td>
</tr>
<tr>
<td>CSES</td>
<td>0.57</td>
<td>0.37</td>
<td>37</td>
<td>1.25</td>
<td>NS</td>
</tr>
</tbody>
</table>

-66-
### TABLE 7

**Section A**
Multiple Regression Analysis of Career Expectations for Male Subjects as a Function of BSRI Scales, Assertive Behavior and Locus of Control

<table>
<thead>
<tr>
<th>Variables</th>
<th>R²</th>
<th>df</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>0.13</td>
<td>4.37</td>
<td>0.20</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>BSRIM</td>
<td>-0.33</td>
<td>4.37</td>
<td>0.70</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>BSRIF</td>
<td>-0.50</td>
<td>4.37</td>
<td>0.21</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>CSES</td>
<td>-0.31</td>
<td>4.37</td>
<td>0.15</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>ANS-IE</td>
<td>-0.81</td>
<td>4.37</td>
<td>0.01</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

**Section B**
Multiple Regression Analysis of Career Importance for Male Subjects as a Function of BSRI Scales, Assertive Behavior and Locus of Control

<table>
<thead>
<tr>
<th>Variables</th>
<th>R²</th>
<th>df</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>BSRI</td>
<td>0.51</td>
<td>4.37</td>
<td>3.31</td>
<td>0.025</td>
<td></td>
</tr>
<tr>
<td>BSRIF</td>
<td>1.53</td>
<td>4.37</td>
<td>4.78</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>ANS-IE</td>
<td>-1.86</td>
<td>4.37</td>
<td>3.26</td>
<td>0.025</td>
<td></td>
</tr>
<tr>
<td>CSES</td>
<td>0.45</td>
<td>4.37</td>
<td>0.35</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

**Section C**
Multiple Regression Analysis of Career Goals for Male Subjects as a Function of BSRI Scales, Assertive Behavior and Locus of Control

<table>
<thead>
<tr>
<th>Variables</th>
<th>R²</th>
<th>df</th>
<th>df</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSES</td>
<td>0.76</td>
<td>4.37</td>
<td>2.31</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>ANS-IE</td>
<td>0.69</td>
<td>4.37</td>
<td>4.03</td>
<td>0.01</td>
<td></td>
</tr>
<tr>
<td>BSRIM</td>
<td>0.28</td>
<td>4.37</td>
<td>0.37</td>
<td>NS</td>
<td></td>
</tr>
<tr>
<td>BSRIF</td>
<td>0.20</td>
<td>4.37</td>
<td>0.42</td>
<td>NS</td>
<td></td>
</tr>
</tbody>
</table>

-67-
variables, and the degrees of freedom and the F test of the beta weights for each of the independent variables.

As shown in Table 4, Section A, the multiple regression analysis produced an equation which included independent variables of the BSRI scales, assertive behavior, and locus of control to predict career expectations of the entire sample. The multiple regression coefficient is .12. This R only accounted for 2% of the variance in predicting career expectations. In Section B, the multiple regression coefficient is .29. This R accounted for 8% of the variance in predicting career importance. The independent variable, BSRIW, contributed significantly to the 8% of explained variation in career importance. In Section C, the multiple regression coefficient is .41. This R accounted for 17% of the variance in predicting career goals.

Results pertaining to the separate multiple regression analysis for androgynous subjects are presented in Table 5. In Section A, the multiple regression coefficient is .34. This R accounts for 11% of the variance in predicting career expectations. In Section B, the multiple regression coefficient is .55. This R accounts for 30% of the variance in predicting career importance. In Section C, the multiple regression
coefficient is .80. This R accounts for 64% of the variance in predicting career goals. The obtained differences found in multiple regression coefficients between the total group and androgynous subjects indicate a much stronger relationship for androgynous subjects and this is substantially contributed to by both the BSRI masculine scale and the ANS-IE.

Results pertaining to the separate multiple regression analysis for female subjects are presented in Table 6. In Section A, the multiple regression coefficient is .23. The R accounts for 5% of the variance in predicting career expectations. In Section B, the multiple regression coefficient is .26. This R accounts for 7% of the variance in predicting career importance. In Section C, the multiple regression coefficient is .49. This R accounts for 24% of variance in predicting career goals. Table 7 presents results of separate multiple regression analyses on male subjects. In Section A, the multiple regression coefficient is .13. This R accounts for 2% of the variance in predicting career expectations. In Section B, the multiple regression coefficient is .51. This R accounts for 26% of the variance in predicting career importance. In Section C, the multiple regression coefficient is .45. This R accounts for 20% of the variance in predicting career goals.
Summary

Hypothesis 1 was "Androgyny can be positively correlated with a high career aspiration level." This hypothesis was supported in the multiple regression analysis showing that androgynous subjects' scores had a much stronger relationship with the dependent variables representing career aspirations than subjects classified as masculine, feminine or undifferentiated by the Bem Sex Role Inventory.

Hypothesis 2 was "Assertive behavior can be positively correlated with a high career aspiration level." This hypothesis was partially confirmed for the total group, male and female subjects. There was a positive correlation for these three groups on assertiveness and career goals. It is important to note that this relationship is extremely weak because career goals was only one of three indicators of career aspiration level. For androgynous subjects, this hypothesis was not confirmed.

Hypothesis 3 was "Assertive behavior and androgyny can be positively correlated." This hypothesis was tested by examining CSES scores for androgynous subjects. This hypothesis was rejected because no scores reached significant level.
Hypothesis 4 was "An internal locus of control orientation can be positively correlated with a high career aspiration level." This hypothesis was rejected because no scores reached significance. On the Pearson product moment correlations comparing ANS-I2 scores with all the dependent variables representing career aspiration level (career expectations, career importance, and career goals).

Hypothesis 5 was "Assertive behavior and an internal locus of control orientation can be positively correlated." This hypothesis was confirmed for the total group, androgynous subjects and female subjects, but not male subjects.

Hypothesis 6 was "Androgyny and an internal locus of control orientation can be positively correlated. This hypothesis was not confirmed. In fact, just the opposite occurred for career goals, a CES scales indicating career aspiration level. This was a surprising finding, but reflects the inconsistencies reported in locus of control research on women. Nowicki (1973) reports that college aged females are more likely than males to adopt an expressed external orientation to be congruent with the expected female cultural role of passivity and that within a group of verbally expressed external females there may be a large number of internally
behaving females. This group of androgynous subjects was a mixed sex group which could account for this finding.
CHAPTER V

DISCUSSION

The purpose of this chapter is to discuss the results of the data analyses in this study; to suggest limitations in the current study and implications for further research; and to draw conclusions from this study.

Summary of Results and Experimental Hypotheses

The purpose of the present study was to examine the extent to which androgyny, assertive behavior and locus of control orientation were related to career aspiration level. All relationships were weak, indicating the complicated nature of career aspirations. The instrument used to measure career aspirations, the Career Expectation Scale was modified for this study. Only three scales were used. Alternatives were considered, but at the time this research began Archibald Haller's (1957) Occupational Aspiration Scale seemed to be the only instrument designed solely to look at the concept of aspiration level. Haller's instrument was designed for an all-male population and seemed inappropriate for a mixed sex group.

-73-
Results indicated that sex-role stereotyping as reflected by the Bem Sex Role Inventory was the most crucial factor in predicting career aspiration level. In particular, the BSRI masculine scale seemed to be an important factor in relation to career aspirations. Correlations also indicated that there was a significant relationship between assertive behavior and an internal locus of control for all subject populations. This result did not reach significance for the analyses conducted on only male subjects. This result supports the hypothesis suggesting that the more assertive people are the more internally controlled they will be. The relationship between career goals and assertive behavior was significant for all subject populations except androgynous subjects. One especially surprising significant relationship was between externality and career goals for androgynous subjects. This finding is in keeping with the findings in previous research on women and locus of control.

The differences between male and female subjects were minimal. The one difference centered around which scale representing career aspirations was more significant. For males "career importance" was more statistically significant; while females aspirations were more related to "career goals."
The results imply several things. The significance of the "masculine" scale in predicting career aspirations is an important fact for educators and counselors to recognize as they interact with and assist female students in the career planning process. Male and female students have been socialized to follow traditional role expectations. This research, however, does not point out significant differences between men and women. In order to maximize students' options it is important to encourage them to experiment with new situations and expand their repertoire. The fact that the "masculine" scale was an important factor should not imply that a masculine sex role orientation is the most viable. An androgynous sex role, one which allows a person to engage in both "masculine" and "feminine" behaviors will best support individuals in this changing society.

Limitations and Implications

An obvious limitation of the present study concerns the generalizability of these findings to other populations. The sample employed in this study contained 84 first quarter students living in the Career Planning Center. A larger sample of students would have been more heterogeneous, more generalizable, and would have provided more statistical power.
A second major limitation concerns the measurement used to indicate career aspirations, the Career Expectation Scale. Limited information was provided by the use of three independent scales, Career Expectations, Career Importance and Career Goals. This study emphasizes the need for an instrument which would more accurately reflect career aspirations. Frieze, Parsons and Ruble (1972) have developed a questionnaire which has one section that addresses personal level of aspiration. Their findings suggest that personality and situational factors are the most important factors in determining career aspirations. This suggests that a concept such as assertive behavior, which is situationally dependent might be an important factor to explore in further research. Another interesting study might be conducted to see what relationships exist, if any, among personality traits, androgyny and locus of control orientation.

A third limitation concerns not measuring other attitudinal and personal data information which has been hypothesized to affect aspirations. This would include socio-economic status, parents' level of education and occupational status and interest in or involvement with the feminist movement. This information might have assisted in distinguishing among a fairly homogenous group.
A fourth limitation centers around the instrumentation and the fact that it consists of four paper-pencil, self-report instruments. It is difficult to know how accurate those self-reports were. In order to give these self-reports more validity, a behavioral measure or rating from one of the instructors in CPC might have given a better indication of how accurately self-reports reflected levels of androgyny, assertive behavior, and locus of control orientation.

Further research is necessary in order to more thoroughly investigate the limitations of this study by examining other subject populations, by developing a more accurate measure of career aspirations, and by searching for and developing a composite of factors that influence career aspirations.

In summarizing the implications of the present research one question is evident: What factors do influence career aspirations? Despite the weak relationships among androgyny, assertive behavior, and locus of control orientation, this study does partially support the hypotheses that suggest that these factors are related to aspirations.

Frieze et al. (1972) felt that attitudinal and personality variables were more related to levels of aspiration in college women than demographic or
socialization variables. Situational variables were particularly important predictors of level of aspiration. This suggests that further work needs to be done to determine what types of situational and personality factors influence aspirations.

Focusing on the possibility that situational variables do influence aspirations indicates that a program like the Career Planning Center can provide an environment which introduces students to new situational contexts to challenge current beliefs and actions. The small mixed sex classes and coed corridors allow these students an opportunity to test out new behaviors and ideas and are introduced to new options based on the collective sharing of classes and the programming goals on those resident's corridors. Friese et al. (1972) found that male peer support was an important predictor for high levels of aspiration. The program is designed to provide self-generated support given that all students have indicated that they are undecided concerning major and career choices. Student's career planning process can be supplemented with the introduction of constructs such as assertiveness, androgyny, and locus of control by explaining what these constructs are and how they can allow a person more options. These concepts can be further operationalized when discussing or presenting
models of decision making, (who and what influences your decisions?), and skill identification (what are all the possible areas you could utilize those skills?), and orientation to the world of work (changing employment trends, new roles for women, etc.).

Further research possibilities seem endless given the complicated nature of career aspirations, but several seem especially relevant. These options include using another instrument to measure career aspirations and performing the same analyses using a larger, heterogeneous population and the BSRI, CSES, and ANS-IE as independent variables. Another possibility would be taking a large sample of people from the same career field and examining the differences in aspirations. For example, to select education as the field and then measure aspirations to students in different majors in education, followed by examining educational professionals who have been in that field.

Conclusions

The purpose of this study was to examine the relationship among career aspiration level, androgyny, assertive behavior and locus of control orientation. The following tentative conclusions can be drawn from this study:
1. There is a positive relationship between androgyny and career aspiration level. Androgynous subjects' scores had a stronger relationship with the career aspiration indicators than other sex-typed groups.

2. There is a partial relationship between assertive behavior and career goals. This relationship was indicated for the total group, male subjects and female subjects. It is important to note, however, that this relationship only existed with one of the three indicators of career aspirations.

3. No significant relationship exists between assertive behavior and androgyny.

4. No significant relationship exists between an internal locus of control orientation and career aspiration level.

5. There is a positive relationship between an internal locus of control orientation and assertive behavior. This relationship exists for the total group of subjects, androgynous subjects, and female subjects, but does not exist for male subjects.

6. No significant relationship exists between androgyny and an internal locus of control orientation.
APPENDIX A
COLLEGE SELF EXPRESSION SCALE
The following inventory is designed to provide information about the way in which you express yourself. Please answer the questions by circling the appropriate number on the answer sheet. Circle:
0 = Almost Always or Always
1 = Usually
2 = Sometimes
3 = Seldom
4 = Never or Rarely

depending on how you generally express yourself in each situation.

1. Do you ignore it when someone pushes in front of you in line?
2. When you decide that you no longer wish to date someone, do you have marked difficulty telling the person of your decision?
3. Would you exchange a purchase you discovered to be faulty?
4. If you decided to change your major to a field which your parents will not approve, would you have difficulty telling them?
5. Are you inclined to be over-apologetic?
6. If you were studying and if your roommate were making too much noise, would you ask him/her to stop?
7. Is it difficult for you to compliment and praise others?
8. If you are angry at your parents, can you tell them?
9. Do you insist that your roommate does his/her fair share of the cleaning?
10. If you find yourself becoming fond of someone you are dating, would you have difficulty expressing these feelings to that person?
11. If a friend who has borrowed $5.00 from you seems to have forgotten about it, would you remind this person?
12. Are you overly careful to avoid hurting other people's feelings?

13. If you have a close friend when your parents dislike and constantly criticize, would you inform your parents that you agree with them and tell them your friend's assets?

14. Do you find it difficult to ask a friend to do a favor for you?

15. If food which is not to your satisfaction is served in a restaurant, would you complain about it to the waiter/waitress?

16. If your roommate without your permission eats food that he/she knows you have been saving, can you express your displeasure to him/her?

17. If a salesperson has gone to considerable trouble to show you some merchandise which is not quite suitable, do you have difficulty saying no?

18. Do you keep your opinions to yourself?

19. If friends visit when you want to study, do you ask them to return at a more convenient time?

20. Are you able to express love and affection to people for whom you care?

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

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

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

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

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

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

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

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

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

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

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

49. Do you express your feelings to others?

50. Do you avoid asking questions in class for fear of feeling self-conscious?
In the following page, you will be shown a large number of personally characteristics. We would like you to use those characteristics in order to describe yourself. That is, we would like you to indicate, on a scale from 1 to 7, how true of you these various characteristics are. Please do not leave any characteristic unmarked.

Example: sly

Mark a 1 if it is NEVER OR ALMOST NEVER TRUE that you are sly.
Mark a 2 if it is INEQUALLY NOT TRUE that you are sly.
Mark a 3 if it is SOMETIMES NOT INFREQUENTLY TRUE that you are sly.
Mark a 4 if it is OCCASIONALLY TRUE that you are sly.
Mark a 5 if it is OFTEN TRUE that you are sly.
Mark a 6 if it is USUALLY TRUE that you are sly.
Mark a 7 if it is ALWAYS OR ALMOST ALWAYS TRUE that you are sly.

Thus, if you feel it is sometimes but infrequently true that you are "sly," mark or almost always true that you are "malicious," always or almost always true that you are "irresponsible," and often true that you are "carefree," then you would rate these characteristics as follows:

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sly</td>
<td>3</td>
</tr>
<tr>
<td>Malicious</td>
<td>1</td>
</tr>
<tr>
<td>Irresponsible</td>
<td>7</td>
</tr>
<tr>
<td>Carefree</td>
<td>5</td>
</tr>
<tr>
<td>Trait</td>
<td>Always True</td>
</tr>
<tr>
<td>-------</td>
<td>-------------</td>
</tr>
<tr>
<td>Self-reliant</td>
<td></td>
</tr>
<tr>
<td>Yielding</td>
<td></td>
</tr>
<tr>
<td>Helpful</td>
<td></td>
</tr>
<tr>
<td>Resilient</td>
<td></td>
</tr>
<tr>
<td>Courteous</td>
<td></td>
</tr>
<tr>
<td>Modest</td>
<td></td>
</tr>
<tr>
<td>Independent</td>
<td></td>
</tr>
<tr>
<td>Sincere</td>
<td></td>
</tr>
<tr>
<td>Resolute</td>
<td></td>
</tr>
<tr>
<td>Artistic</td>
<td></td>
</tr>
<tr>
<td>Resourceful</td>
<td></td>
</tr>
<tr>
<td>Sensitive</td>
<td></td>
</tr>
<tr>
<td>Vocal</td>
<td></td>
</tr>
<tr>
<td>Strong personality</td>
<td></td>
</tr>
<tr>
<td>Persistent</td>
<td></td>
</tr>
<tr>
<td>Active</td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td></td>
</tr>
<tr>
<td>Loyal</td>
<td></td>
</tr>
<tr>
<td>Unpredictable</td>
<td></td>
</tr>
<tr>
<td>Fearless</td>
<td></td>
</tr>
<tr>
<td>Tenacious</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Personality Traits</th>
<th>Always True</th>
<th>Usually True</th>
<th>Sometimes True</th>
<th>Occasionally True</th>
<th>Seldom True</th>
<th>Almost Never</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reliable</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analytical</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sympathetic</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Jealous</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Independent leadership</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sensitive to the needs of others</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Trustful</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Willing to take risks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Understanding</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intuitive</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Makes decisions easily</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cooperative</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concise</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-sufficient</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ready to make hard decisions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cautious</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambitious</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soft-spoken</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Witty</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>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>1.</strong> Do you believe that most problems will solve themselves if you just don't feel them?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>2.</strong> Do you believe that you can stop yourself from causing a lot?</td>
<td>T</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>3.</strong> Are some people just born lucky?</td>
<td>T</td>
<td>B</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>4.</strong> Most of the time do you feel that getting good grades means a great deal to you?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>5.</strong> Are you often blamed for things that just aren't your fault?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>6.</strong> Do you believe that if somebody studies hard enough maybe he can pass any subject?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>7.</strong> Do you feel that most of the time it doesn't pay to try hard because things never turn out right anyway?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>8.</strong> Do you feel that if things start out well in the morning that it's going to be a good day no matter what you do?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>9.</strong> Do you feel that most of the time parents listen to what their children have to say?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>10.</strong> Do you believe that nothing can make good things happen?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>11.</strong> When you get punished does it usually seem just for no good reason?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>12.</strong> Most of the time do you find it hard to change a friend's (adult) opinion?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>13.</strong> Do you think that wishing more than luck helps a team win?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>14.</strong> Did you feel that it was nearly impossible to change your parent's mind about anything?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>15.</strong> Do you believe that parents should allow children to have most of their own decisions?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>16.</strong> Do you feel that when you do something wrong there's very little you can do to make it right?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>17.</strong> Do you believe that most people are just born good at sports?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>18.</strong> Are most of the other people your age stronger than you are?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>19.</strong> Do you feel that one of the best ways to handle most problems is just not to think about them?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>20.</strong> Do you feel that you have lots of choice in deciding how your friends are?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>21.</strong> If you find a four-leaf clover, do you believe that it might bring you good luck?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>22.</strong> Did you often feel that whether or not you did your homework had next to do with what kind of grades you got?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>23.</strong> Do you feel that when a person your age is angry at you, there's little you can do to stop him/her?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>24.</strong> Have you ever had a good luck charm?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>25.</strong> Do you believe that whether or not people like you depends on how you act?</td>
<td>Y</td>
<td>N</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
26. Did your parents usually help you if you asked them to? Y N
27. Have you felt that when people were angry with you it was usually for no reason at all? Y N
28. Most of the time, do you feel that you can change what might happen tomorrow by what you do today? Y N
29. Do you believe that when bad things are going to happen they are just going to happen no matter what you try to do to avoid them? Y N
30. In your view, does people can get their own way if they just keep trying? Y N
31. Most of the time do you find it useless to try to get your own way at home? Y N
32. Do you feel that when somebody puts what's little you can do to change matters? Y N
33. Do you feel that it's easy to get friends to do what you want them to do? Y N
34. Do you feel that it's easy to get friends to do what you want them to do? Y N
35. Do you usually feel that you have little to say about what you get to eat at home? Y N
36. Do you feel that when someone doesn't like you there's little you can do about it? Y N
37. Did you usually feel that it was almost useless to try in school because most other children were just plain smarter than you are? Y N
38. Are you the kind of person who believes that planning ahead makes things turn out better? Y N
39. Most of the time, do you feel that you have little to say about what your family decides to do? Y N
40. Do you think it's better to be smart than to be lucky? Y N
APPENDIX D

CAREER EXPECTATION SCALE
Career and Life Role Expectations

1. Do you expect to have an occupation for the major portion of your life? YES NO (please check)
   If yes, what? ____________________________
   If undecided, please check ____________

2. How likely is it that your ambitions will be realized?
   (Please circle the appropriate response)
   Very Unlikely Somewhat Unlikely Opinion Likely Very Likely
   1 2 3 4 5 6 7 8 9

3. What extent would you let the following factors keep you from realizing your ambitions?
   Factor                                      To a Great Extent     To Some Extent     Just at Expect        At All
   a) Not qualifying for advanced training necessary for the occupation. 1 2 3
   b) Changing your mind. 1 2 3
   c) Becoming a wife and/or mother of husband and/or father. 1 2 3
   d) Finding out that the salary for that occupation isn't enough. 1 2 3
   e) Finding out that you didn't enjoy the work. 1 2 3
   f) Discrimination against women in that occupation. 1 2 3
   g) Disapproval from parents, spouse, or friends. 1 2 3
   h) Advice from a career counselor that the occupation is unsuitable for someone like you. 1 2 3
4. How likely is it that this occupation will become the primary focus of your energy and source of satisfaction in your future life?

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Somewhat Unlikely</th>
<th>Opinion</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

5. Ideally, for how long do you want to work?

(please check appropriate response)

- 1) Not at all.
- 2) Until I get married.
- 3) Until I have children.
- 4) Until my husband/wife can support our family.
- 5) I plan to work except when my children are still living at home.
- 6) I plan to work except when my children are of pre-school age.
- 7) I plan to work until retirement, full or part-time depending on child-rearing responsibilities.
- 8) I plan to work full-time until retirement.
- 9) Other.

Realistically, how likely are you to work the length of time you specified above?

<table>
<thead>
<tr>
<th>Very Unlikely</th>
<th>Somewhat Unlikely</th>
<th>Opinion</th>
<th>Somewhat Likely</th>
<th>Very Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

6. How important are the following factors likely to be in deciding when you will get married?

<table>
<thead>
<tr>
<th>Important</th>
<th>Somewhat Important</th>
<th>Unimportant</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) Being finished with school or career training.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>b) Parents' wishes.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>c) Feeling psychologically ready to get married.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>d) Fiancé's wishes.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>e) Feeling psychologically ready to have children.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
### 7. What were the major factors in your decision what to do after high school graduation? (Please check all that apply)

1. I only felt qualified to do one thing.
2. It will allow me to pursue my interest.
3. It will allow me to be near my girlfriend/boyfriend, husband/wife, and/or friends.
4. Finances.
5. Parental influence.
6. The career I have chosen requires that I have more schooling.
7. Other (specify)

### 6. How frequently do you think about your future?

<table>
<thead>
<tr>
<th>Very Infrequently</th>
<th>Somewhat Infrequently</th>
<th>Occasionally</th>
<th>Frequently</th>
<th>Very Often</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

9. The following is a list of emotions people experience when thinking about careers. How often have you felt each of them? Please mark them: NEVER; 1=SOMETIMES; 2=OFTEN; 4=VERY OFTEN; and 5=VERY OFTEN.

<table>
<thead>
<tr>
<th>excited</th>
<th>overwhelmed</th>
<th>inadequate</th>
</tr>
</thead>
<tbody>
<tr>
<td>confused</td>
<td>self-confident</td>
<td>in control</td>
</tr>
<tr>
<td>depressed</td>
<td>apprehensive</td>
<td>of things</td>
</tr>
<tr>
<td>ambivalent</td>
<td>adequate</td>
<td></td>
</tr>
</tbody>
</table>
10. In trying to decide about a future occupation, how often have you done the following? Please mark the responses: 1=NEVER; 2=SELDOM; 3=SOMETIMES; 4=OFTEN; 5=VERY OFTEN.
   _ talk to parents
   _ talk to faculty/high school teachers
   _ talk to someone in that occupation
   _ talk to a career counselor or recruiter

11. Have you done, or will you do, any of the following before graduation?
   Please respond by circling yes, no, or not sure.
   1) participate in a internship program
      YES  NO  NOT SURE
   2) work as a volunteer or summer worker in occupations that are likely careers
      YES  NO  NOT SURE
   3) take time off from school to work in occupations that are likely careers
      YES  NO  NOT SURE
   4) Other
      YES  NO  NOT SURE

12. To what extent do you feel that people in general expect women to enter traditionally feminine occupations, such as service professions, teaching, and secretarial work?

Not at  Very  Somewhat  Rather Much  Very Much
All    Little
1    2    3    4    5    6    7    8    9

13. To what extent would you feel uncomfortable if you held a nontraditional occupation in which your sex were a clear minority?

Very  Somewhat  Somewhat  Very Un-
Comfortable  Comfortable  Neutral  Uncomfortable  Comfortable
1    2    3    4    5    6    7    8    9
Please circle the appropriate number: 1=Strongly disagree; 2=Disagree; 3=Neutral; 4=Agree; 5=Strongly agree.

1. Motherhood is the most fulfilling role for women.  1 2 3 4 5
2. It is important for me to be physically attractive to the opposite sex.  1 2 3 4 5
3. A woman should not be able to obtain an abortion merely because she wants one.  1 2 3 4 5
4. I would place my children in a day-care center.  1 2 3 4 5
5. There are circumstances in which women should be paid less than men for equal work.  1 2 3 4 5
6. There are some jobs for which women are temperamentally unfit.  1 2 3 4 5
7. A man’s sexual satisfaction is more important than a woman’s.  1 2 3 4 5
8. A woman’s career should be secondary to her husband’s.  1 2 3 4 5
9. The wife should not always have primary responsibility for household duties.  1 2 3 4 5
10. A mother should have primary responsibility for care and nurturance of her children.  1 2 3 4 5
BIBLIOGRAPHY


Bem, S.L. *Psychology looks at sex roles: where have all the androgynous people gone?* Paper presented at UCLA Symposium on Women, May 1972.


Cone, J.D. Locus of control and social desirability. *Journal of Consulting and Clinical Psychology*, 1971, 36, 449.


Heilbrun, A.B. Measurement of masculine and feminine sex role identities as independent dimensions. *Journal of Consulting and Clinical Psychology*, 1976, 44, 2, 183-190


McKenzie, S.P. A comparative study of feminine role perceptions, selected personality characteristics, and traditional attitudes of professional women and housewives. *Dissertation Abstracts*, 1972, 32, 9615A.


Zissis, C. A study of the life planning of 550 freshman women at Purdue University. *Journal of the National Association of Women Deans and Counselors*, 1964, 18, 153-159.