Correlates of Role Choice Among High School Senior Females: Family Variables, Sex-Role Orientation, Self-Esteem, and Academic Success

Loretta E. Lobbia
Loyola University Chicago

Follow this and additional works at: https://ecommons.luc.edu/luc_diss

Part of the Psychology Commons

Recommended Citation
https://ecommons.luc.edu/luc_diss/2249

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License.
Copyright © 1983 Loretta E. Lobbia
CORRELATES OF ROLE CHOICE
AMONG HIGH SCHOOL SENIOR FEMALES:
FAMILY VARIABLES, SEX-ROLE ORIENTATION, SELF-ESTEEM,
AND ACADEMIC SUCCESS

by
Loretta E. Lobbia

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

August
1983
ACKNOWLEDGEMENTS

There are many people to whom I wish to extend my appreciation. Their assistance was important to the completion of this project.

I would like to first thank the director of this dissertation, Dr. Patricia Rupert, for her generous availability, support, and assistance throughout every phase of this research. The contributions of the committee members, Drs. James Johnson and Dan McAdams, particularly their willingness to be of help and their worthwhile comments and suggestions, are also acknowledged with appreciation.

In addition, there are several friends and colleagues who contributed toward the completion of this dissertation. Leila Schnarr assisted in the administration of the test materials, and has heightened my sensitivity to and knowledge of women's issues. My parents, Adolph and Julia Lobbia, generously offered their assistance in the coding of the data. Instrumental in data analysis, as well as in the construction of the survey and the designing of this research, was Elicia Herz. I am also indebted to Mike Bresolin for his extremely skilled and generous contributions concerning the computer preparation.
and printing of this manuscript.

I would also like to thank the administrators and senior classes of the two high schools where data collection was conducted. Their cooperation was essential to this study, and their enthusiasm, suggestions, and challenges were inspiring.

Last, but not least, I would like to extend my most sincere thanks to those friends and family who have given so much in terms of their patience, support, and understanding throughout the course of the dissertation. It is most appreciated.
VITA

The author, Loretta E. Lobbia, is the daughter of Adolph Lobbia and Julia (Bertoletti) Lobbia. She was born March 28, 1955, in Chicago, Illinois.

Her elementary education was obtained at the St. Anthony of Padua School in Chicago, Illinois. Her secondary education was completed in 1973 at the Elizabeth Seton High School, South Holland, Illinois.

In September, Ms. Lobbia entered Loyola University of Chicago, receiving the degree of Bachelor of Science in psychology in February, 1977. In 1976, while attending Loyola University, she became a student member of Psi Chi.

In September, 1977, Ms. Lobbia entered the clinical psychology program at Loyola University of Chicago. She received an assistantship at the Charles I. Doyle Guidance Center for 1977-78 and 1979-80, and was granted a National Institute of Mental Health Fellowship in 1978-79. A clerkship was completed at Loyola's Counseling Center in 1980-81, and an internship at the Upstate Medical Center in Syracuse, New York, 1981-82. The Master of Arts degree was conferred in January, 1982.
DEDICATION

To my parents,

with love and gratitude
# TABLE OF CONTENTS

ACKNOWLEDGMENTS .............................................. ii

VITA ................................................................. iv

DEDICATION .......................................................... v

LIST OF TABLES ....................................................... vii

Chapter

I. INTRODUCTION ................................................... 1

II. REVIEW OF RELATED LITERATURE ................................. 3

Family Influence ............................................... 5
Sex-role Orientation ......................................... 21
Self-esteem .................................................... 23
Intelligence .................................................... 28
Statement of the Problem and Hypotheses ................... 29

III. METHOD .............................................................. 32

Subjects ....................................................... 32
Measures ....................................................... 37
Procedure ..................................................... 46

IV. RESULTS ........................................................... 48

Family Influence Variables ................................ 49
Personal Variables ............................................ 57

V. DISCUSSION .......................................................... 61

Family Influence Variables ................................ 62
Personal Variables ............................................ 74
Additional Considerations ................................ 79
Suggestions for Future Research .............................. 85

VI. SUMMARY ............................................................. 88

REFERENCES .......................................................... 90

Appendix

A. SURVEY .............................................................. 97
LIST OF TABLES

Table | Page
--- | ---
1. Group Characteristics of Subjects from School A and School B | 33
2. Correlations of the Self-achievement Ratings of Traditional, Neotraditional, and Nontraditional Girls with Perceived Parental Achievement | 51
3. Group Means of ANOVA Analyses for Family Influence Variables | 55
4. Group Means of ANOVA Analyses for Self-esteem and Academic Success | 58
CHAPTER I

INTRODUCTION

Recent social changes have made available to today's woman a variety of life styles, ranging from that of a traditional homemaker to a career in a male-dominated, that is nontraditional, occupation. Such availability has both social and personal implications in that it allows for the fuller expression and utilization of women's resources.

As the percentage of employed women has risen in the past decade, and particularly as women begin to gradually enter traditionally male-dominated occupations, research in the area of women's nontraditional career choices has grown. Although the results are not wholly consistent, the research tends to find differences between women making traditional versus nontraditional choices in terms of familial influence, sex-role orientation, role model influences, and peer/faculty/family support. Most of this research has compared the majors and career commitments of college women who have, in a sense, already deviated from the traditionally-defined feminine role by seeking higher education.

The purpose of this study is to examine some factors related to women's career aspirations and expectations in a high school popula-
tion, comparing the most traditional women to women planning to attend college in a traditional field of study and those in a nontraditional field. The primary variables to be studied include family background and influence, sex-role orientation, self-esteem, and intelligence. The main question of this research is: How do high school women whose occupational and career expectations deviate radically from the traditional feminine role differ from moderately and highly traditional women in terms of family background and influence, sex-role orientation, self-esteem, and intelligence?
A number of roles are potentially available to women: that of the traditional wife-mother-homemaker, that of a career woman in a traditionally female-dominant field, that of a career woman in a male-dominant field, or some combination of career and family responsibilities. It is logical to assume that women aspiring to each of these life styles will differ from each other in terms of the factors influencing their choices, including background, personality, and attitudinal variables. Correlates of women's career aspirations have been studied by numerous investigators with various aims and methodologies. Most use samples of college women as subjects.

Before reviewing the literature in this area, there are several terms that are used frequently in research on women's career choices that should initially be defined. The traditional and nontraditional nature of an occupation with regard to this area of study has been defined in previous research in terms of the proportion of women in that field (Almquist, 1974; Crawford, 1978; Harren, Kass, Tinsely, & Moreland, 1979; Tangri, 1972; Wolfe & Betz, 1981). A "traditional" occupation or college major is one that is populated predominantly by women. In previous research, a field in which approximately two-
thirds or more of employees or majors are women has typically been considered a female-dominant field. A nontraditional occupation or major is one that is highly populated by men and has usually been defined as those fields in which approximately one-third or less of employed persons are female. A moderate occupation or major is one in which neither men nor women tend to predominate, so that occupations in which the percentages of women are between one- and two-thirds have been considered moderate occupations. The actual percentages of women in a given field can be found in various U.S. Government bulletins toward the categorization of that occupation as traditional, nontraditional, and moderate.

In the research to be reviewed in this chapter, "nontraditional" will denote women in male-dominant majors or occupations, or women who are highly career-oriented. Because college women are usually the population studied, "traditional" usually refers to involvement in a female-dominant field.

Before defining the hypotheses to be studied in this research, the literature pertaining to family influence, sex-role orientation, self-esteem, and intelligence in relation to women's career and educational aspirations and expectations will be reviewed.
Family Influence

The family in our society has a primary responsibility for the socialization of the child. As such, it can be assumed to exert a strong influence on most aspects of our lives. In the occupational sphere, "the family is an important factor in our aspirations, expectations, and opportunities," according to Auster and Auster (1981, p. 254). These authors reviewed the literature pertaining to the role of family influence in women's choice of nontraditional careers. They suggest that women choosing nontraditional careers will more likely than not (authors' emphasis) emerge from a family in which:

1. The mother works, probably in a high-level, nontraditional occupation.
2. The father is an achievement role model and source of occupational identification for the daughter's career orientation.
3. Both parents are supportive of their daughter's career orientation, sometimes in different ways and with varying importance at different stages of the daughter's life.
4. Family socioeconomic status is high.
5. Family size is small and the daughter is firstborn or an "early born" among female siblings.

Again, these hypotheses are largely based on findings from the study of nontraditional choice in college women. One goal of the present research is to test empirically this model as it applies to high school senior females. Thus, the literature pertaining to family
influence on women's role choices will be reviewed in relation to socioeconomic status, birth order and family size, parental education, parental occupation, parental attitudes, and the parent-child relationship. Research on samples of high school females will be highlighted.

**Socioeconomic Status.** A number of social, economic, and psychological factors are related to a family's socioeconomic status (SES) which, in turn, may strongly influence educational aspirations (Sewell & Shah, 1968), occupational choices (Auster & Auster, 1981), and achievement patterns (Darmofall & McCarberry, 1979). SES can influence the family's ability to provide financial support for education after high school. It may also be related to the value system of the family and the types of role models to which one is exposed (Grambs & Waetjen, 1975). Thus, SES is likely to be an important variable influencing the educational, occupational, and career plans of women.

One difficulty in reviewing the literature on SES is that it has been operationalized in many different ways. Some indices that have been used include: 1) family income; 2) father's and/or mother's educational status; 3) father's and/or mother's occupational status; and 4) some combination of these.

This section will review research that defined SES either on the basis of a family income variable or on any combination of income, educational status, and/or occupational status. Research defining SES solely by a parent's education or occupational status will not be dis-
cussed in this section. Instead, those studies will be reviewed in the respective sections on parental education or parental occupation.

Research findings provide evidence that high SES is related to higher levels of educational and occupational achievements in professional women. Standley and Soule (1974) found that 59% of the fathers of a sample of female doctors, lawyers, architects, and psychologists had incomes exceeding $15,000 when the daughters were growing up, which would have been a sizable income 20 to 30 years earlier than 1974. Similarly, Freun, Rothman, & Steiner (1974) reported that female medical school applicants came from families in which the education of both parents and the occupation of father was higher than for male applicants.

With regard to high school samples, Sewell and Shah (1968), using a sample of over 10,000 male and female high school seniors, found that SES explained a statistically significant 22% of the variance in college plans for females. Henry (1965) used parental income tax as an index of family financial power, which can be considered akin to SES. He found that family financial status had a significant, positive effect upon college attendance for male and female high school seniors of both high and medium ability. Ability was based on each student's percentile rank of their class rank standing. When other variables related to college attendance, such as parental educational and occupational level, were controlled, the influence of family financial power was somewhat reduced, but remained significant for
females under nearly every condition.

Alexander and Eckland (1974) found that family status is a stronger determinant of educational attainment than is mental ability for females, while the inverse relationship applied to the educational attainments of men. This is similar to the relationship between ability and status in relation to the college plans of high school males and females found by Sewell and Shah (1968).

Astin (1968) measured various characteristics of 9th-grade girls and then studied these same girls when they were in 12th-grade with regard to their career choices. She found that one of the several ways the girls who were college-bound in 12th-grade differed from those planning to do office work or become homemakers was that they came from families of higher SES, based on SES data gathered during the girls' 9th-grade. She did not specify how SES was measured, nor the probability levels of the significant results.

Not all findings support a relationship between SES, educational attainment, and nontraditional roles, however. A study conducted on college samples of women failed to find that SES was related to career orientation in college women when SES was defined as fathers' occupational and educational status (Almquist & Angrist, 1970).

Thus, the evidence of a relationship between SES and nontraditional roles is unsupported in samples of college women studied in the late 1960's and early 1970's. A relationship is supported among pro-
fessional and graduate student women, and among adult working women in terms of educational attainment. Among high school females, research of the late 1960's demonstrated a relationship between college plans and SES. Generally, SES and nontraditional roles may be related for today's woman, as Auster and Auster (1981) have suggested. Nonetheless, further research is warranted.

**Birth Order and Family Size.** The birth order and number of children in a family may come to influence educational and occupational expectations of women in several ways. One way it can effect women's plans is in its influence on family resources. This is especially true when the interaction effect of SES is considered. Given that the male is traditionally seen as needing to become an adequate breadwinner as the head of his own family, it is possible that a family of limited financial resources will be less willing to finance a college education for their daughters than for their sons, as suggested by McClendon (1976). There is another possible way that variables of family size and birth order may influence educational and occupational plans. Winterbottom (cited in Falbo, 1981) offered a theory regarding the development of achievement motivation that states that achievement motivation is fostered by the imposition of relatively high standards of behavior by parents on their child at relatively early ages. Parents of first and only children are thought to be apt to expect too much from their children due to their relative inexperience with children. Clausen and Kammeyer, also cited in Falbo (1981), have found that first and only borns receive greater parental
pressure for more mature behavior at earlier ages than do later born children.

Research shows that firstborns tend to be higher in achievement motivation (Angelini, cited in Falbo, 1981; Sampson & Hancock, 1967) and educational aspirations and attainment (Bayer, 1966; Schacter, 1963) than children of other birth order categories. Several studies have found that over half the professional women in nontraditional occupations were the oldest or only children (Anderson, 1974; Henning, 1974; Standley & Soule, 1974). In addition, 75% of these women were firstborn among female siblings (Henning, 1974; Standley & Soule, 1974). Falbo (1981) found higher educational aspirations among oldest and only children as compared to middle- and last-borns in a college sample. On the other hand, Crawford (1978) found no significant birth order differences between women in traditional and nontraditional majors in their senior year of college. Thus, while the majority of the literature suggests the notion of a relationship between birth order and career choice, there is some contradictory evidence.

Family size has been found to be negatively related to years of education and achievement motivation; that is, the larger the family, the fewer years of education expected among employed adult women (McClendon, 1976). In a study of college students, Falbo and Richman (1970) found a negative relationship between achievement motivation and family size. The probability level reported for this result was only $p < .10$, however, which suggests that the relationship was actually
only marginally significant and should be interpreted cautiously. In her study of 25 female executives in male-oriented businesses, Hennig (1974) found that none of their families of origin had more than three children. Similarly, Anderson (1974) tabulated family size and birth order data for a small sample \((N=12)\) of nontraditional career women and found that 8.3% were only children, 58.3% had only one sibling, and 25% had only two siblings. Thus, 96.6% of these women had families of origin of three children or less, while 66.6% were from two-child families.

In the one contradictory study, Klemmack and Edwards (1973) failed to find a correlation between family size and nontraditionality of occupational aspirations in their sample of 300 college women. The relationship between family size and career choice thus seems to exist most clearly when considering actual behavior (employment or declared major field of study) as opposed to aspirations.

**Parental Education.** As with SES, parental education may impact on the family in several ways. It may influence the SES of the family, determining financial and cultural milieu factors, and is probably also related to the values transmitted to the child by the parents. It is, in fact, used as an index of SES in some studies. The following review will summarize the findings of research relating each parent's educational level to women's role choice, including that literature in which parental education was used as the sole index of family SES.
With maternal education as the dependent variable, significant positive relationships have been obtained with regard to daughters' nontraditional occupational choice. Almquist and Angrist (1970) found that maternal education was not related to daughters' career salience, that is, the extent to which the daughters actually plan to participate in the labor force. However, in this college sample they did find that the daughters of more educated mothers more frequently chose nontraditional occupations for themselves than the daughters of less educated mothers. Crawford (1978) found that, for college women in nontraditional majors, the education level of the mothers in relation to the fathers was significantly higher than for women in traditional majors.

Contradictory findings are noted. In comparing the influence of each parent's level of education on the educational attainments of white working males and females, McClendon (1972) found no evidence for a stronger same-sex than opposite-sex parent effect, as Treiman and Terrell (1975) suggested. That is, the level of educational attainments of white working males and females was not more substantially related to mothers' educational level than to that of fathers. Klemmack and Edwards (1973) found no correlation between mothers' educational attainment and daughters' nontraditional occupational aspirations in a college sample. The results of a study by Tangri (1972) also failed to relate significantly these variables in a sample of college women.
Fathers' educational level has been found to relate to daughters' occupational aspirations in a high school sample. Burlin (1976) found that daughters of college-educated fathers were more likely to aspire to employment in moderate (neither male- nor female-dominated) occupations, while the daughters of fathers with a high school education or less were more likely to aspire to traditional occupations. Zuckerman (1980) demonstrated an interaction between self-esteem and fathers' education. Daughters' educational goals consistently increased with higher levels of parental education for college women of moderate levels of self-esteem. No relationship was found for the high and low self-esteem groups.

How fathers' education has its impact is unclear. It is not understood whether it is due to its positive relationship to SES, or perhaps to more educated fathers holding less rigid sex-role stereotypes, or to something else, such as a modeling influence. Generally, though, the literature suggests that parental education, particularly that of the mother, is related to women's role choices among college women.

**Parental Occupation.** Parental occupational status is, in part, influenced by education level and, in turn, influences family SES. Financial, cultural milieu, and value factors associated with parental occupation might be related to women's role choices. Fathers' occupational status is sometimes used as an index of family SES, but the following review will include studies in which fathers' occupation
served as the sole definition of family SES.

Research has demonstrated that women making nontraditional role choices tend to have fathers of higher occupational status. In a sample of college students, Allgeier (1975) found that psychologically androgynous versus sex-typed women had fathers and mothers of higher occupational status. Vallentine, Ellinger, and Williams (1975) found that women in graduate school had a higher proportion of professional fathers than did men in graduate school (51% and 34%, respectively). They report no statistical test of these differences, however. Among high school students, Banducci (1970) demonstrated that the percentages of senior females expecting to complete college were positively correlated with fathers' occupational status: approximately 75% of the daughters of fathers of professional status expected to complete four years of college compared to approximately 25% and 20% for fathers of "skilled worker" and "laborer" statuses, respectively.

In a more recent study, however, Ridgeway (1978a) found no significant relationship between fathers' occupational status and career orientation in college women.

In terms of maternal employment, two studies have reported that women in male-dominant (nontraditional) college majors more often had mothers who were employed during the daughters' college years (Almquist and Angrist, 1970; Crawford, 1978). Additionally, Almquist and Angrist (1970) found that career-oriented college women had working mothers more frequently than women who were less career-oriented.
Furthermore, a relationship has been demonstrated between nontraditional occupational choice in daughters and their mothers' employment in a nontraditional occupation in both a college (Tangri, 1972) and 11th-grade high school population (Burlin, 1976).

Once again, not all research supports a relationship between maternal employment and role attitudes and choices in females. Macke and Morgan (1978) looked at this relationship from a slightly different perspective than most of the previous research. They correlated mothers' employment with the work orientations of samples of black and white high school senior females. Work orientation referred to the girls' plans for work in light of plans for childrearing. Thus, high work orientation was indicated by the plan to work continuously either during the childbearing years or with the expectation of not having any children. Low work orientation was indicated by plans never to work, or to do so only when children completed high school. These criteria basically reflect nontraditional and traditional career orientations, respectively. The authors found, however, that, in itself, mothers' employment had no significant relationship with the work orientation of either the black or white girls. Two additional studies failed to relate maternal employment, per se, to the career aspirations (Haber, 1980) or nontraditional attitudes (Baruch, 1972) of college women.

The three latter studies in which maternal employment, as such, was unrelated to daughters' role choices and attitudes (Baruch, 1972;
Haber, 1980; Macke & Morgan, 1978) all found, however, that other variables, including maternal attitudes and the mother-child relationship, are related to daughters' nontraditional choice. These will be discussed further in the following sections.

The literature is more consistent when regarding maternal employment other than current employment. No relationship has been found between daughters' occupational choice and mothers' employment during the daughters' preschool (O'Donnell & Andersen, 1978) or childhood years (Klemmack & Edwards, 1972).

In sum, it appears that parental occupation is related to college women's role choices. Maternal occupational status is important. Paternal occupational status also seems to be a salient variable, although this may be by virtue of its relation to SES. In addition, the nontraditionality of mothers' occupation has been demonstrated to be related to nontraditionality of daughters' choice.

**Parental Attitudes.** Two studies that failed to relate maternal employment to nontraditional roles in daughters found instead that supportive maternal attitudes were related to daughters' career aspirations (Haber, 1980) and attitudes toward women's roles (Baruch, 1972). These findings highlight the fact that the impact of maternal employment in terms of providing a role model for daughters may be mediated by mothers' attitudes toward nontraditional roles for women, including their satisfaction with their own nontraditional role as a working mother. Although it is true that children begin to look out-
side the family for role models and sources of support during adoles-
cence, the influence of parental norms, behaviors, and support proba-
bly continues to play a part in the major decisions that adolescents
make, such as educational and occupational goals. For example, the
strong influence of parents' norms regarding academic achievement on
adolescents' own norms regarding this behavior has been demonstrated
(Biddle, Banks, & Marlin, 1980). Parental attitudes may be particu-
larly influential for high school females at this time, since they are
still living at home and have not traditionally received the same
kinds of independence training that males get as a matter of course.

Perceived parental support and encouragement has been demon-
strated to relate to high career aspirations and achievement motiva-
tion in 10th-grade girls (Farmer, 1980), to college attendance in
female high school seniors (Sewell & Shah, 1968), and to career choice
and high career commitment in college women (Haber, 1980). Perceiving
one's mother as having a positive attitude toward and/or satisfaction
with a nontraditional role has also been shown to relate significantly
to college women's attitudes toward work (Baruch, 1972; Hoffman, 1974;
O'Connell, 1980; Ridgeway, 1978a). That is, women with nontraditional
educational/occupational expectations and aspirations receive parental
support and encouragement for these.

Some exceptions to the relationship between parental support and
nontraditional choices are noted. Ridgeway (1978b) found that favora-
ble attitudes about pursuing graduate work in a college female sample
were not significantly predicted by the daughters' perception of either parent as supporting the idea of continuing her education after college. Among the daughters of college-educated women, Tangri (1972) found that fathers were perceived to agree with college goals while mothers were not. It appears that in this subsample of women, daughters' attitudes about the appropriateness of nontraditional roles for women were more similar to the attitudes of father than mother. These studies suggest the importance of investigating the attitudes and support of both parents with regard to women's nontraditional role choices.

**Relationship with Parents.** One variable that may mediate the influence of parental attitudes on women's role choices is the nature of the parent-child relationship. It is known that one is more apt to imitate a model who is perceived as prestigious and powerful, and as more similar to oneself than other models (Bandura, 1971; Bandura, Ross, & Ross, 1963; Bandura & Walters, 1963). It is of interest to discern whether women choosing more nontraditional roles see themselves as being similar to their father or mother, and in what ways they are similar. Do these women feel close to each parent? Do they see themselves as similar in terms of occupational and educational plans? Variables such as these have been considered indices of identification (Tangri, 1972). A general query in current research is whether identification and interaction patterns relate to women's role choices.
Rossi (cited in Almquist, 1974) concluded from the findings of earlier research that career orientation in college women, whether it be in traditional or nontraditional fields, was frequently related to conflicts in the parent-child relationship, among other factors. However, Almquist (1974) found no support, in a college sample, for the idea that women who aspire to a career and/or who aspire to male-dominant occupations have less harmonious relations with their parents than traditional women. On the contrary, there is some evidence to suggest that daughters in nontraditional careers usually had close relationships with their fathers (Hennig, 1974; Standley & Soule, 1974). In another study, college women were more likely to name their fathers as the primary influence on their choice of college major, while traditional women more often noted their mothers as the primary influence (Weishaar, Green, & Craighead, 1981).

In a study reported earlier, Macke and Morgan (1978) found that maternal employment was not related to daughters' work orientation among high school seniors. In fact, these authors found that this relationship was mediated by the degree of mother-daughter interaction. When interaction was high, the daughters of working mothers planned to work earlier in their own children's lives (i.e., evidenced higher work orientation) than the daughters of nonworking mothers. The authors gave no information regarding the low interaction groups.

In general, there is no evidence of less positive parent-child relationships among nontraditional women than among more traditional
women. While it appears that traditional women may identify more with their mothers, the identification pattern for nontraditional women is less clear. Are they, in part, responding to a traditional mother whom they regard poorly and/or identifying with father, or perhaps identifying with a nontraditional mother whom they hold in high esteem? These are questions that remain to be investigated.

**Summary.** To summarize this section on family influence, the literature suggests that the factors described as important by Auster and Auster (1981) in regard to nontraditional role choice in women - mothers' employment and occupation, identification with father as an occupational and achievement role model, parental support and encouragement, family SES, and being an "early born" among female siblings in a family of small size - are generally found to be significantly related to career choices or plans of college and professional women. The relationship between these variables and the career aspirations of high school women is not as well researched.

It seems, however, that some of the family influence variables studied by previous researchers in relation to nontraditional occupational choices in women are highly intercorrelated and might be grouped together in a more parsimonious manner. The variables of maternal education, sex-role orientation, occupation, satisfaction with her role, and the achievement and occupational role models provided by each parent, can be conceptually linked to a woman's own sex-role orientation. For example, the high school-aged daughter of a
traditional woman who has never worked and is satisfied with her homemaker role may be more traditional than the daughter of a mother who works in a high-status occupation and who is satisfied with that role. Thus, the model suggested by Auster and Auster (1981) might be simplified if the variables of mothers' education, sex-role orientation, occupation, satisfaction with her role, and the achievement and occupational role models presented by each parent are found to be highly correlated with daughters' sex-role orientation. Then the single variable of daughters' sex-role orientation could be studied in relation to nontraditional choice.

**Sex-role Orientation**

Logically, one can link sex-role orientation to occupational and career aspirations and expectations. It seems likely that a traditionally feminine-typed woman would lean toward a homemaker role or perhaps pursue a college education in a female-dominant major. Masculine and androgynous women would also seem apt to have role-congruent educational, occupational, and work aspirations, given controls for SES and intelligence. Although the relationship of sex-role orientation to career and curriculum choice is a relatively new area of study, the logical relationships mentioned above have been empirically demonstrated. All the studies cited below focused their research on college or adult women.

A number of studies have found that women are significantly more likely to be found in a field congruent with their sex-typing (i.e.,

Yanico (1981) found no significant results regarding sex-role orientation and current occupational choice and major in college females, although the trend was in the expected direction. In keeping with earlier findings, sex-role orientation was related to occupational preference, with masculine-typed women evidencing a pattern of having had past nontraditional occupational daydreams compared to feminine-typed women. Androgynous and undifferentiated women fell in between. Masculine-typed subjects also demonstrated significantly more career salience than androgynous or undifferentiated women. However, what to make of a relationship between reports of nontraditional occupational daydreams and sex-role orientation is unclear given that current occupational choices were unrelated to sex-role orientation.

Lyson and Brown (1982) did not demonstrate a relationship between sex-role beliefs (as measured by a nine-item scale constructed for their study) and curriculum, comparing women majoring in home economics (a traditional major) to those majoring in agriculture (a nontraditional major). They did find, however, that sex-role ideology was significantly and positively correlated with educational aspira-
tions and expectations, and with occupational expectations within both the traditional and nontraditional groups. More feminist or nontraditional sex-role orientations were related to higher levels of educational and occupational expectations and educational aspirations. No explanation for the failure of occupational aspirations to relate to sex-role ideology was offered.

In light of the preceding findings, sex-role orientation would be expected to relate to the occupational expectations and role choices of high school females.

**Self-esteem**

An additional personality variable that may be logically related to career choice is that of self-esteem. There is little research on the relationship of self-esteem to women's work and career plans, however. The three studies directly examining this relationship have found contradictory results.


In another study on a high school sample, Cashen, Lewis, and Lemmon (1979) compared institutionalized (n=35) and noninstitutionalized (n=35) female adolescents who attended the same high school in
terms of self-acceptance and occupational aspirations. Their purpose was to test the hypothesis that females with negative concepts of self would tend toward lower occupational aspirations than females with adequate self-concepts, based on Super's theory that vocational choice is an implementation of the self-concept. Subjects were administered the Bills High School Index of Adjustment and Values (HSIAV) and the Jeff Occupational Aspiration Scale for Females (OASF). The results indicated that the institutionalized adolescents had significantly lower levels of self-acceptance than the girls living with their families. They also had significantly lower occupational aspirations than their noninstitutionalized counterparts. However, the groups differ in more ways than simply on levels of self-acceptance by virtue of being institutionalized versus living in a family situation as an adolescent. Any conclusions based on these findings are thus rendered highly tentative.

While the research relating self-esteem to career plans or choices is sparse, there is considerable research demonstrating a relationship between self-esteem and sex-role orientation. Again, college women served as subjects in the studies to be discussed.

Using the Bem Sex Role Inventory to categorize sex-typed, androgynous, and undifferentiated groups of subjects, researchers have generally found that androgynous subjects evidence higher self-concepts than sex-typed and undifferentiated subjects on measures of self-concept such as the Tennessee Self Concept Scale (Hinrichsen, Follansbee,
& Ganellan, 1981; Nevill, 1977), the Texas Social Behavior Inventory (Puglisi & Jackson, 1981), and the Personal Attributes Questionnaire (Spence, Helmreich, & Stapp, 1975).

Antill and Cunningham (1979) sought to determine whether it was androgyny that correlated with higher levels of self-esteem, or whether it was the level of masculinity itself in one's self-description that was the major contributor to self-esteem. These authors correlated scores on three sex-role instruments with scores on two measures of self-esteem in an Australian college population of males and females. They found that masculinity scale scores on each sex-role measure significantly and positively correlated with self-esteem for both males and females. However, average correlations between femininity scale scores and self-esteem were .09 for males and -.14 for females, neither being significant. Additionally, when scores on sex-role scales were used to divide the sample into the masculine, feminine, androgynous, and undifferentiated groups, significant differences were found between the groups on the measures of self-esteem as follows: 1) masculine and androgynous groups, and feminine and undifferentiated groups did not differ from each other on any comparison; 2) the masculine group was significantly higher in self-esteem than both the undifferentiated and feminine group in every comparison; and 3) the androgynous group was significantly higher in self-esteem than the undifferentiated and feminine group in almost every comparison. These authors concluded that the level of masculinity in self-descriptions was, in fact, the major contributing factor to self-es-
Bem (1977) also found that androgynous and masculine-typed subjects did not differ from each other in levels of self-esteem. They were, however, significantly higher on self-esteem than the undifferentiated and feminine-typed groups, who did not differ from each other on self-esteem. Similarly, Stericker and Johnson (1977) used the Stereotype Questionnaire (Rosenkrantz, Vogel, Bee, Broverman, & Broverman, 1968) to classify college students as masculine- or feminine-typed. There was a significant, positive relationship between the masculine-typed sex role and self-esteem, as measured by the TSCS. These authors suggest the following explanations for the fact that self-esteem was positively related to a masculine sex role: 1) greater self-esteem may be required for women to deviate from the traditional sex role; and 2) possessing some masculine qualities, including competence, competitiveness, assertiveness, and mastery, particularly in the educational and occupational arenas, may enhance one's self-esteem. They suggest that these two build on each other in a "mutually reinforcing" (pp. 24-25) way so that strong achievement-related behaviors lead to positive self-esteem, which fuels nontraditional, achievement-oriented behaviors, which enhance self-esteem, etc. This would be in keeping with the findings that American culture tends to place greater value on masculine rather than feminine traits (Broverman, Broverman, Clarkson, Rosenkrantz, & Vogel, 1970).

Tolor, Kelly, and Stebbins (1976) found that women low in sex-
role stereotyping did not differ in self-concept, as measured by the TSCS, from women high in sex-role stereotyping. However, sex-role stereotyping was based on the authors' adaptation of the format and scoring procedures of the Stereotype Questionnaire developed by Rosenkrantz et al. (1968) to assess self-description in relation to societal sex-role stereotypes for men and women. This contradictory finding may be due, in part, to possible problems with the reliability and/or validity of the adapted scale.

Similarly, Nielsen and Edwards (1982) found no difference in positive self-concept for women who perceived their feminine roles as either liberal, traditional, or neutral in orientation. All three groups had Total Positive scores on the TSCS that were above the mean for the normative group. On the basis of their findings, these authors call into question the conclusions drawn from previous research regarding an androgynous sex-role orientation being the most helpful one for women to adopt.

Thus, research has demonstrated higher levels of self-esteem to be related to masculine or androgynous sex-role orientations, so that deviance from traditional orientations may be related to high self-esteem. However, there are some findings that contradict this conclusion. The relationship of self-esteem to women's choice of nontraditional roles has not been sufficiently investigated.
Intelligence

The variable of intelligence is not often included in studies regarding women's nontraditional career choices. This may be because most research uses college populations, who can be assumed to be relatively homogeneous regarding intelligence. Two studies have demonstrated a relationship between intelligence and college plans in a high school population.

Sewell and Shah (1968) found that intelligence, as measured by a test of mental ability, accounted for 12.6% of the variance in college plans among females. Similarly, Henry (1965) found that female high school seniors of high ability (ranked in the 85th to 95th percentile rank band of their high school class) were more likely to be planning to attend college than those of medium ability (in the 65th to 75th percentile band).

Despite these findings, anyone graduating from an accredited high school can, by law, pursue a college degree. Thus, there is no reason why intelligence, per se, need be related to plans to attend college. A variable such as academic success may be a more meaningful one to study, as suggested by Rosen and Aneshensel (1978). Because those who have experienced success (as evidenced by good grades or a high class rank) are more likely to see themselves as competent in academic pursuits, they may have a greater tendency to aspire to continuing their education after high school than those with less positive academic experiences. In keeping with this, Rosen and Aneshensel
(1978) found that academic achievement more strongly influenced high school girls' educational and occupational expectations than did ability. In addition, Zuckerman (1980) found, in a sample of 18- to 25-year old women, that perceiving oneself as intelligent was predictive of nontraditional goals and high career aspirations.

Since employment in many nontraditional occupations, such as medicine, law, engineering, or the sciences, requires more than a college education and/or study in a highly rigorous academic program, academic success could be related to both the choice of attending college and choice of occupation. Women choosing college and nontraditional occupations may have experienced greater academic success than women who choose either not to attend college or who aspire to employment in a traditional occupation. Thus, it seems that a measure of academic success should be included when comparing groups of women choosing to attend college to those not choosing to do so.

Statement of the Problem and Hypotheses

Briefly summarizing, research in the area of women's nontraditional role choice has focused primarily on the study of college populations. One implication of this is that an entire group of women, those typically with the most traditional aspirations of full-time homemaking as wife and mother, is omitted from study and comparison to those women who, by virtue of attending college, have already made some movement outside the traditionally-defined feminine role.
Through the study of female high school seniors, the present research aims to examine the applicability to a high school population of a model for predicting nontraditional role choice in women. This model was offered by Auster and Auster (1981) based on their review of the literature in this area. In addition, the relationship of sex-role orientation, self-concept, and intelligence to deviation from the traditionally-defined feminine role in terms of occupational and career plans will be investigated. That is, this study seeks to determine how women who, in their senior year of high school, see themselves pursuing a nontraditional role differ from their peers who see themselves pursuing more traditional roles.

The following seven hypotheses regarding the role of family influence will test the applicability of Auster and Auster's model. Each hypothesis will be increasingly true at each level of increasing deviation from the traditional role, that is, more true for the Nontraditional than for the Neotraditional than for the Traditional women:

1. Mother works, probably in a high-level, nontraditional occupation.
2. Father is an achievement role model.
3. Father is a source of occupational identification for daughters' career orientation.
4. Family SES is high.
5. Family size is small.
6. Daughter is firstborn or early born among female siblings.
7. Both parents are supportive of the daughters' career orientation.

In addition, the following will also be true for women making less traditional choices, that is, for Nontraditional more than Neotraditional more than Traditional women:

8. Self-esteem is higher.

9. Sex-role orientation is more masculine or androgynous.

10. Academic success is higher.

The following hypothesis will be tested relating family variables to the daughters' sex-role orientation:

11. Mothers' education, satisfaction with her role, sex-role orientation, and parental achievement and occupational role models are significant predictors of daughters' sex-role orientation.
CHAPTER III

METHOD

Subjects

Members of the senior classes of two Chicago area Catholic girls' high schools served as subjects in this study. A total of 500 girls were invited to participate in this research. Of the 200 students completing the test measures, 89 were classified into one of the three groups under study. Of these 89, 64 girls were from School A, 25 from School B. Table 1 summarizes the characteristics of these two groups. The samples from the two schools did not differ significantly on age, $t(87)=-.99$, $p=.33$; on family income, $t(86)=-.88$, $p=.38$; or as to whether or not they were living with both parents, $\chi^2(2)=3.30$, $p=.07$. The average age of the subjects was 17 years, 9 months. The average family income for the subjects was approximately $25,000. In addition, 75% of the overall sample was living in two-parent households.

There was a significant difference in group composition between the two schools, $\chi^2(2)=5.88$, $p=.05$. Of the sample from School A, 34% of the girls fell into the Traditional group, 44% were in the Neotraditional group, and 22% were in the Nontraditional group. In contrast,
### TABLE 1

**Group Characteristics of Subjects from School A and School B**

<table>
<thead>
<tr>
<th>Variable</th>
<th>A</th>
<th>B</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>34%</td>
<td>36%</td>
</tr>
<tr>
<td>Neotraditional</td>
<td>44%</td>
<td>20%</td>
</tr>
<tr>
<td>Nontraditional</td>
<td>22%</td>
<td>44%</td>
</tr>
<tr>
<td><strong>Race</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Black</td>
<td>2%</td>
<td>20%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>11%</td>
<td>8%</td>
</tr>
<tr>
<td>White</td>
<td>87%</td>
<td>72%</td>
</tr>
<tr>
<td><strong>Living with both parents</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>81%</td>
<td>60%</td>
</tr>
<tr>
<td>No</td>
<td>19%</td>
<td>40%</td>
</tr>
<tr>
<td><strong>Rank (based on a percentile)</strong></td>
<td>.48</td>
<td>.32</td>
</tr>
<tr>
<td><strong>Age (in years and months)</strong></td>
<td>17-9</td>
<td>17-10</td>
</tr>
</tbody>
</table>

**Note.** For Rank and Age, the numbers presented represent group means. All other numbers in the table represent the percentages of girls in each category.
while 36% of the girls from School B were categorized as Traditional, only 20% were in the Neotraditional group and 44% fell into the Non-traditional group. Thus, the percentages of students classified as Neotraditional and Nontraditional from each school were almost exactly reversed.

The two samples did differ significantly in terms of race, \( \chi^2(2) = 9.74, p = .008 \). The sample from School A was 2% Black, 11% Hispanic, and 87% White. The sample from School B was 20% Black, 8% Hispanic, and 72% White. The total sample was 7% Black, 10% Hispanic, and 83% White.

The two samples also differed on the class rank variable, \( t(84) = 2.37, p = .02 \), measured by a percentile obtained by dividing each girl's self-reported class rank by the total number of girls in her class. The smaller the number, the higher the ranking. The mean percentile of subjects at School A was .48, while the mean percentile for School B was .32. Thus, the girls participating from School B tended to be those getting higher grades in school than the girls who took part in this study from School A. The mean percentile for the entire sample was .44.

Membership in one of the three groups under investigation was determined on the basis of the girls' responses to questions regarding educational, occupational, career, and family plans contained in a
survey constructed for use in this study. The criteria for each group were as follows:

1. Traditional.
   a) Planned to marry and have children.
   b) Indicated a desire to be a homemaker on at least one of two "career salience" questions taken from Almquist and Angrist (1970).
   c) If any plans to work were noted, wanted to do so only on a part-time basis.
   d) Educational expectations did not include receiving any degree beyond the baccalaureate.

2. Neotraditional.
   a) Planned to marry and have children.
   b) If planned to have a career it was in a female-dominant occupation, that is, one in which over 65% of employed persons are women.
   c) Only wanted to work on a part-time basis.
   d) Educational expectations did not include any degree beyond a masters, such as a doctoral or professional degree.

3. Nontraditional.
   a) Career salience was high, that is, a desire to have a career was indicated on both career salience questions.
   b) Planned to work in a male-dominant occupa-
tion, that is one in which less than 39% of employed persons were women.

c) Planned to work on a full-time basis. Any marriage, family, and educational plans were acceptable for this group.

Of the 200 subjects who participated in this study, 55 were dropped either because they: (a) aspired to moderate occupations; (b) had inconsistent future plans; for example, wanted to be a physician (a male-dominant occupation) but indicated a desire to spend time on sports and leisure activities if she were married, had children, and financially did not need to bring income into the family; or (c) had such global and undifferentiated plans that they could not be classified according to the criteria for group membership. Of the remaining 145 subjects, five had to be dropped from the Traditional group: four who expected to complete masters degrees and one who expected to complete a doctoral degree. Nine girls were dropped from the Neotraditional group on the basis of their wanting to work on a full-time basis, and another one was dropped who intended to get a doctoral degree. Of the Nontraditional group, 41 had to be excluded because they wanted to work only part-time in their field of choice.

Clearly, most girls who participated in this study indicated desires to be married career women with children. That is, they wanted to do everything! The possible implications of this finding will be discussed in Chapter V. The resultant sample size was 89,
with 31 subjects in the Traditional group, 33 in the Neotraditional group, and 25 in the Nontraditional group.

It is important to note here that the Traditional group could not be defined as originally planned. This was to be a group of women not planning to attend college and desiring only to be homemakers. However, most of the girls who participated in this study planned to continue their education. Of the 31 in the Traditional group, 10 planned to attend two-year, career, or business schools. Another 11 planned to attend four-year colleges. Adhering to the original criterion for inclusion into this group would have yielded a group with an \( n \) of 10. This would have been such a small and select sample that interpretations of the findings would have been highly tentative. On this basis, it was decided that the only educational plans that would be considered incompatible with the "traditional" nature of this group would be those plans to pursue a degree at a level higher than college. In combination with all the other criteria, it appeared that this group was still highly traditional in nature.

**Measures**

Three paper-and-pencil self-report measures were employed in this study. Sex-role orientation and self-esteem were measured by the *Bem Sex Role Inventory* (BSRI) (Bem, 1974) and the *Tennessee Self Concept Scale* (TSCS) (Fitts, 1965), respectively. A survey designed for use in this project gathered information about all other variables under study in this research.
**Bem Sex Role Inventory.** The BSRI consists of 60 adjectives (traits) to which the subject responds by rating on a scale of 1 to 7 how true or descriptive each trait is of her. A score of 1 indicates that the trait is never or almost never true of her, while a 7 indicates that it is always or almost always true of her. Of the 60 items, 20 are male sex-typed, 20 are female sex-typed, and 20 are filler items, neutral in sex-typing.

Following administration of the BSRI, two scores were calculated for each subject, the Masculine Scale score (M) and the Feminine Scale score (F), based on the sum of the subject's self-ratings on each of the 20 items for each scale. The median M and F scores for the sample were calculated and, on the basis of a median split procedure, each subject was categorized into one of the four sex-role groups: a) masculine: M above the sample median and F below the sample median; b) feminine: M below the median, F above the median; c) androgynous: both M and F above the sample median; d) undifferentiated: both M and F below the sample median.

Bem (1974) presents normative data based on several populations, including norms for college females (N=340) and adolescent (14- to 17-year old) females (N=30). However, since there are no normative data for an 18-year old population, the median split was based on the medians for the sample rather than on those of any normative group.

Bem (1974) also discusses the psychometric properties of this instrument. Coefficient alpha for each scale (M,F) for two samples of
college males and females ranges from .75 to .87, as an index of the internal consistency of the BSRI. Test-retest reliability correlations at a 4-week interval for college males and females range from .76 to .94, demonstrating the reliability of the instrument.

Research on the validity of the BSRI has typically compared college student subjects classified on the BSRI as to whether the classifications discriminate between individuals who limit their behavior in accordance with sex-role stereotypes and those who do not. Bem (1974) cites the results of empirical research that support the notion that sex-typed subjects are more likely than androgynous or cross-sex-typed subjects to prefer sex-appropriate activity and to avoid sex-inappropriate activity (Bem & Lenney, cited in Bem, 1974).

Researchers have also compared the four groups as to whether they employ "instrumental" and/or "expressive" functions. An instrumental orientation is "a cognitive focus on getting the job done or the problem solved" (Bem, Martyna, & Watson, 1976, p. 1016). This includes such traits as 'individualistic', 'assertive', and 'controlling', and has been associated traditionally with masculinity. An expressive orientation, traditionally associated with femininity, involves "an affective concern for the welfare of others and the harmony of the group" (Bem et al., 1976, p. 1016). It includes such traits as 'openness', 'cooperation', and 'social-orientation'. Androgynous individuals were the only group that typically scored high on instrumental or both instrumental and expressive functions. Nonandro-
gynous subjects were typically low in one or both of these functions (Bem, 1975; Bem et al., 1976).

Thus, the use of the BSRI in this study is justified by the considerable research that supports both its reliability and validity as an experimental measure of sex-role orientation.

**Tennessee Self Concept Scale.** The TSCS consists of 100 self-descriptive statements to be rated on a 5-point Likert scale with categories that range from 'completely true' to 'completely false' as it applies to oneself. Ninety items assess self-concept and ten items assess self-criticism. A total of 29 scores can be obtained using this scale, but only the Total Positive score (TP) (based on the sum of the ratings for the 90 self-concept items) was used for the purposes of this study. TP is an index of overall level of self-esteem. Each subject receives a single score. Higher scores reflect higher levels of general self-esteem.

Test-retest reliability coefficients ranging from .70 to .92 on the various subscales in a college population have been reported by Fitts (1965) and Moore (cited in Nielsen & Edwards, 1982).

Construct validity has been demonstrated (Gable, La Salle, & Cook, 1973; Rentz & White, 1967; Vacchiano & Strauss, 1968). Concurrent and content validity is evidenced in correlations of .50 to .70 with other well-known measures such as the Taylor Anxiety Scale and the Cornell Medical Index (Buros, 1972). Fitts (1965) presented data
on the relationships between TSCS scores and MMPI scale scores. Correlations between the TP score and the 10 MMPI clinical scale scores range from .00 to -.64.

Thus, as a measure of general self-esteem, the TSCS appears to reliable and valid.

Survey. A questionnaire was constructed for use in this study to obtain information such as age, rank, family background data (family income, parental education and occupational status, etc.), educational plans for after high school, occupational plans, family plans, and parental support, role modeling, identifications, etc. (see Appendix A).

All variables besides sex-role orientation and self-concept were operationalized and coded on the basis of survey responses. The following is a list of the variables measured by the questionnaire. The operational definition of each variable is provided, and the item(s) of the questionnaire measuring the variable(s) is found in parentheses.

a) Maternal Employment. Mother was considered employed if she was currently working or had worked at any time during the girls' high school years (see Q 10.d).

b) Occupational Status. Occupational status was determined using the classification scheme of Alba M. Edwards, "the most widely used scale of social-economic groupings of gainful workers in the United States" (cited in Miller, 1970, p.
This scheme serves as the basis for grouping workers by the U.S. Census. There are six categories of occupational status, ranging from Professional and White-collar (rated in this study as a 6) to Service Worker (rated a 1). These ratings were applied to the occupations that the girls gave for each parent. Categorization of occupations was aided by a 1982 census table from the U.S. Bureau of Labor Statistics bulletin *Employment and Earnings* that breaks down the six categories into detailed occupations (Father's occupation, Q 7.a; Mother's, Q 10.e).

c) ** Traditionality of Occupation.** Traditionality or gender-dominance was determined for mother's occupation (Q 10.e) and the occupations in which daughters expected to work (Q 18) on the basis of U.S. Bureau of Labor Statistics data for 1982 contained in *Employment and Earnings*. Occupations employing less than 39% women were considered male-dominant; those employing between 39% and 65% women, inclusive, were considered moderate; those employing over 65% women were coded as female-dominant. This is in keeping with the procedures used in previous research (Almquist, 1974; Crawford, 1978; Harren et al., 1979; Tangri, 1972; Wolfe & Betz, 1981). For daughters' occupations not listed, the percentages of women receiving the level of degree the girl expected to complete (A.A., B.A., M.A., Ph.D., etc.) (Q 15) in her field of study was used to classify the field as male-dominant, female-domi-
nant, or moderate using the U.S. Department of Education's 1982 editions of Earned Degrees Conferred and Associate Degrees and Other Formal Awards Below the Baccalaureate. Again, the percentage cut-offs of 39% and 65% were employed.

Mothers' or daughters' occupations still unclassified were listed and given to three psychologists along with the explanations of male- and female-dominant labelling of occupations. Only three occupations had to be rated in this way. Each person rated each occupation. Only when all three raters agreed was the occupation classified accordingly. The rest were labelled as "moderate".

d) Achievement Role Model. Achievement was measured by having the subject rate herself, her father, and her mother on a 6-point Likert scale in terms of achievement orientation (Q 29), with a score of 6 representing high concern for achievement and a 1 representing low concern. The correlation of the subjects' own rating to those of each parent was employed as an index of achievement role modeling. That is, role modeling was defined as perceiving oneself as similar to a parent, so that for father to be an achievement role model, girls needed to view themselves as significantly similar to their father in the ratings of their achievement behavior.

e) Occupational Identification. Occupational identification was measured using four questions that asked whether the daughter saw herself as most similar to her father, her mother, or
neither parent in terms of chosen occupation (Q 34), and which parent was most influential in terms of choice of occupation (Q 34), choice of major (Q 35), and educational plans (Q 33).

f) Family SES. Family SES was measured by computing and averaging $z$ scores for total family income, parental occupational status (using whichever parent's status was higher), and parental education (using whichever parent's level of education was highest) (Q 8), according to the method used previously by Herz (1983). Family income was defined in terms of a range of expected income for the year (Q 5). Blank incomes were estimated whenever possible by using information on wages contained in the U.S. Bureau of Labor Statistics Occupational Outlook Handbook, 1982-83 edition. This was done in order to avoid losing SES information due to missing data.

g) Family Size. Family size was simply defined by the total number of living children in the family (Q 2).

h) Firstborn or Early born. Being a firstborn or early born among female siblings was defined as being a firstborn female, an only daughter, or being in the top half of the birth order of female children (Q 3).

i) Parental Support. Parental support referred to the subjects' perception of support and was measured separately for each parent on two dimensions: 1) agreement with daughters' post-high school plans as indicated on a 5-point Likert scale
(Q 23,24); and 2) educational encouragement, as indicated on a 4-point Likert scale (Q 26,27).

j) **Academic Success.** A percentile derived by dividing the girls' self-reported class rank by the number of girls in the senior class was used to define academic success. Thus, a girl ranked first in a class of 100 would have a percentile of .01, while a girl who ranked last in a class of 100 would have a percentile rank of 1.00. That is, the lower the percentile, the higher the standing in her class. If a student reported only a range within which her rank fell rather than her actual rank (some girls did not know their rank but knew approximately where they ranked), the midpoint of the range was coded as her rank.

k) **Maternal Role Satisfaction.** Mothers' satisfaction with her role was actually daughters' perception of mothers' satisfaction with either the homemaker or working-mother role, whichever was appropriate (Q 12.b, 11.c, respectively), rated on a 4-point Likert scale.

l) **Maternal Sex-role Orientation.** Mothers' sex-role orientation was determined using a scale constructed by Macke and Morgan (1978) for use in their research. Eight statements on women's roles under various circumstances are presented. In the present study, daughters were asked to respond as their mother would on a 4-point Likert scale of agreement (Q 13). A higher score indicated the belief
that a married woman's appropriate life style is very family-focused. Cronbach's alpha, a measure of internal consistency, was calculated to be .77 for this scale in the present study.

m) Career Salience. Career salience was measured, as has frequently been done in previous research, by using two of the "career salience" items created by Almquist and Angrist (1970). Career salience was defined as a desire to: a) be employed if one were married, a mother, had been trained in the occupation of one's choice, and did not need to work from a financial viewpoint (Q 20); and b) be involved in a career 15 years in the future (Q 21). High career salience assumes career-oriented responses on both items.

Procedure

The experimenter addressed the senior classes of two Chicago area Catholic girls' high schools that had previously given permission to conduct data collection. During these brief meetings, the general nature of the research was discussed, in addition to discussions of confidentiality, the voluntary nature of participation in the study, and the need for parental consent in order to participate. Parental consent forms were distributed, to be returned to school within two days.
In a single session at each school, the test instruments were distributed under group administration conditions. All forms were precoded. Each subject first read and signed their own consent form restating the voluntary nature of participation and the freedom to cease participation at any time without fear of penalty. The measures were completed in a fixed order: BSRI, TSCS, and the survey. An hour's time was allotted for completion of materials, which was a sufficient amount of time. The experimenter and an assistant familiar with the testing instruments were on hand to answer questions during the testing hour.

Once questionnaire packets had been completed, consent forms were separated from the test instruments. Parents' and daughters' consents were paired to ensure that all participants had received parental permission. The code numbers were then cut off the girls' consent form so that no names could then be linked to code numbers.

Each girl was categorized into one of the three groups under study, using the criterion described in Chapter IV. Those who did not fit into one of the categories (such as those aspiring to non-sex-typed, i.e., moderate, occupations) were omitted from further investigation. The BSRI and TSCS were scored, and this data plus the survey information were coded.
CHAPTER IV

RESULTS

The purpose of this research was to study the role of family influence in the career orientations of female high school seniors. In doing so, a model predicting the role of family influence in women's nontraditional choices, suggested by Auster and Auster (based on their review of the literature that largely studied college women) was examined in its applicability to a high school sample. This study also sought to determine whether girls differing in degrees of deviation from the traditional female role would differ on sex-role orientation, self-esteem, and academic success. In addition, the prediction of daughters' sex-role orientation by maternal education, satisfaction, sex-role orientation, and parental occupational and achievement role models was investigated.

One-way ANOVAs were conducted to compare the three groups of girls regarding family SES, family size, parental support, self-esteem, and academic success. Student-Newman-Keuls procedures were the post hoc analyses used to probe the ANOVA results. Pearson product-moment correlations were computed for the achievement rating of self with mother and father. All other analyses were done as chi-square tests.
Family Influence Variables

Based on the model of Auster and Auster (1981), seven hypotheses concerning family background and influence were tested. The results will be reviewed for each hypothesis, keeping in mind that each hypothesis is expected to be more strongly confirmed for the Nontraditional than the Neotraditional than for the Traditional group.

Hypothesis 1: Mother works in a high-level, nontraditional occupation.

For the purpose of testing Hypothesis 1, maternal employment was defined as mother working either currently or during daughters' high school years, whether on a full- or part-time basis. Of the 89 subjects, 71 had mothers who fit this definition of being employed. Results of statistical analyses demonstrated no significant differences between the Traditional, Neotraditional, or Nontraditional groups in terms of:

1. whether mother works (either currently or during the girls' high school years), $\chi^2(2)=1.02, p=.60$;

2. the gender dominance (traditionality) of mother's occupation, $\chi^2(4)=3.37, p=.50$; or

3. mothers' occupational status, $\chi^2(10)=8.24, p=.61$.

Thus, the hypothesis that nontraditional women are most likely from a family in which mother is employed in a high-level, nontraditional occupation does not apply to the high school sample under study.
Post hoc analyses yielded no significant differences among the three groups of girls on: (a) whether mother works full- or part-time, $\chi^2(2)=3.20, p=.20$; (b) the perceived competence of their mothers at her job, $\chi^2(6)=3.93, p=.69$; (c) mothers' satisfaction with her own role as a working mother, $\chi^2(6)=6.34, p=.39$; or (d) mothers' career salience, $\chi^2(6)=4.14, p=.13$. Furthermore, no differences between the groups were found in terms of their perceptions of mothers' competence as a homemaker, $\chi^2(6)=6.46, p=.37$; or of mothers' perceived satisfaction with the homemaker role, $\chi^2(6)=4.14, p=.66$.

These further analyses indicated that daughters' perceptions of mothers' competence, satisfaction, or career salience failed to discriminate between high school seniors making traditional versus non-traditional versus neotraditional role choices.

Hypothesis 2: Father is an achievement role model.

Correlations were conducted between each girl's rating of herself on achievement orientation and the ratings of her father and then mother. As can be seen in Table 2, traditional women's achievement ratings were significantly correlated with mothers' ratings, but not with fathers' achievement ratings. Neotraditional women's self-ratings of achievement orientation were not significantly related to mothers' perceived achievement, but were significantly related to fathers'. Nontraditional women's self-ratings of achievement were significantly related to both fathers' and mothers' achievement behavior.
TABLE 2

Correlations of the Self-achievement Ratings of Traditional, Neotraditional, and Nontraditional Girls with Perceived Parental Achievement

<table>
<thead>
<tr>
<th>GROUP</th>
<th>Traditional</th>
<th>Neotraditional</th>
<th>Nontraditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=30</td>
<td>n=31</td>
<td>n=23</td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>.48**</td>
<td>-.05</td>
<td>.38*</td>
</tr>
<tr>
<td>Father</td>
<td>.20</td>
<td>.32*</td>
<td>.49**</td>
</tr>
</tbody>
</table>

*p<.05.

**p<.01.
These results suggest that Traditional women had their mothers as an achievement role model, and Neotraditional women had their fathers as an achievement role model. Nontraditional women had both parents as such a role model. Since a test of the differences between the correlations was not significant, the hypothesis was not supported in terms of father being a stronger achievement role model for Non-traditional than Neotraditional girls. However, the hypothesis was supported in that father was an achievement role model for both groups.

Hypothesis 3: Father is a source of occupational identification.

Only one of the four tests of this hypothesis approached significance. The three groups were compared on whether they saw themselves as similar to their mother, their father, or neither parent in terms of their chosen occupation. Of the 88 subjects who responded to this item, 43 reported that they were similar to neither parent. Of the remaining 45, there was a trend for Nontraditional women to see themselves as similar to father, while Traditional and Neotraditional women saw themselves as similar to mother, \( \chi^2(4)=8.21, p=.08 \).

No significant differences were demonstrated in comparing the three groups as to which parent (mother, father, or neither) was most influential regarding: choice of major, \( \chi^2(4)=1.00, p=.90 \); choice of
occupation, \( \chi^2(4) = 2.65, p = .62 \); or educational plans, \( \chi^2(4) = 5.87, p = .21 \). Hypothesis 3 is marginally supported in that Nontraditional girls tended to perceive themselves as more similar to their fathers in terms of their occupation than Neotraditional and Nontraditional girls. However, fathers were not seen as a more significant influence on choice of major, choice of occupation, or level of educational expectations for Nontraditional girls than the other groups.

It is important to note that 50% (\( n = 43 \)) of subjects reported that they saw themselves as similar to neither parent in terms of their chosen occupation, 75% (\( n = 63 \)) stated that neither parent influenced their choice of major, 53% (\( n = 47 \)) reported that neither parent influenced their choice of occupation, and 40% (\( n = 25 \)) perceived neither parent as influencing their educational plans. Clearly, most girls were not reporting their parents to be primary influences or role models for their occupational and educational choices. However, among girls who did see their parents as influential in their plans, Nontraditional girls tended to see themselves as more similar to their fathers than their mothers. Because this is quite a small and select subsample of the girls, the marginally significant findings must be regarded as highly tentative.

Hypothesis 4: Family SES is high.

A one-way ANOVA comparing the three groups on family SES was marginally significant, \( F(2, 86) = 2.94, p = .06 \) (see Table 3 for group means). A Student-Newman-Keuls probe demonstrated that Nontraditional girls
tended to come from families of higher SES than the Neotraditional or Traditional girls, as predicted. Thus, for female high school seniors, family SES is marginally related to nontraditional role choice.

Hypothesis 5: Family size is small.

There was a significant difference among the three groups in terms of family size, F(2,83)=7.03, p=.002. The Student-Newman-Keuls procedure revealed that Traditional women came from significantly larger families than both Neotraditional and Nontraditional girls (see Table 3). Family size did not differentiate between the two latter groups.

Auster and Auster's hypothesis of smaller family size for nontraditional women was supported in this high school sample when contrasted to the family size of girls choosing a traditional role.

Hypothesis 6: The daughter is firstborn or early born among female siblings.

No significant differences were found between the three groups in terms of the number of girls who were firstborn or early born among female siblings, \( \chi^2(2)=3.80, p=.15 \). Thus, among female high school seniors, birth order was unrelated to nontraditional role choice.

Hypothesis 7: Both parents support the daughters' career orientation.

When the amount of encouragement each parent offered their daughter in terms of continuing her education after high school was employed as an
### TABLE 3

Group Means of ANOVA Analyses for Family Influence Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
<th>Mean (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family SES</td>
<td>89</td>
<td>-.14 (.76)</td>
<td>-.18 (.74)</td>
<td>.28 (.90)</td>
</tr>
<tr>
<td>Family Size</td>
<td>86</td>
<td>4.80 (1.99)</td>
<td>3.74 (1.57)</td>
<td>3.08 (1.56)**</td>
</tr>
<tr>
<td>Agreement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>89</td>
<td>4.00 (1.18)</td>
<td>4.24 (1.06)</td>
<td>4.48 (1.05)</td>
</tr>
<tr>
<td>Father</td>
<td>85</td>
<td>3.73 (1.14)</td>
<td>4.25 (1.02)</td>
<td>3.78 (1.57)</td>
</tr>
<tr>
<td>Encouragement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>89</td>
<td>4.23 (1.06)</td>
<td>4.67 (.99)</td>
<td>5.00 (1.22)*</td>
</tr>
<tr>
<td>Father</td>
<td>84</td>
<td>4.07 (1.02)</td>
<td>4.84 (1.13)</td>
<td>4.61 (1.23)*</td>
</tr>
</tbody>
</table>

Note. The variables had the following ranges:

Family SES (-2 to 2); Agreement (1 to 5); Encouragement (3 to 6).

*p<.05.

**p<.01.
index of support, mothers' encouragement was significantly higher for the Nontraditional than for the Traditional girls, $F(2,86)=3.62$, $p=.03$, as demonstrated by a Student-Newman-Keuls probe. This procedure also showed that fathers' educational encouragement was significantly higher for the Neotraditional group than for the Traditional group, $F(2,81)=3.38$, $p=.04$ (see Table 3 for group means). However, the level of encouragement by fathers of the educational pursuits of Nontraditional daughters fell in between that of the Neotraditional and Traditional groups, and did not differ significantly from either. Thus, the predicted relationship of Nontraditional women receiving greater parental support than the other two groups was not found in terms of fathers' educational encouragement.

No significant differences were found between the three groups when support was operationalized as each parent's agreement with the daughters' plans following high school, Father: $F(2,82)=1.63$, $p=.20$; Mother: $F(2,86)=1.32$, $p=.27$.

Hypothesis 7 is supported when mothers' educational encouragement constitutes parental support. Neotraditional women differ from the other two groups in terms of fathers' educational support. Both the Neotraditional and Nontraditional groups receive greater support than the Traditional group, as hypothesized. The former group is supported by father and the latter group by mother. These results indicate that parental support is related to role choice.
Personal Variables

Four hypotheses concerning personal variables were tested. The results will be reviewed for each of these hypotheses.

Hypothesis 8: Self-esteem is higher in Nontraditional women.

Although the means for the groups were in the predicted directions, no significant differences among groups were found on self-esteem, as measured by the TSCS TP score, $F(2,86)=1.79$, $p=.17$ (see Table 4). There is no evidence that high school females choosing a nontraditional role have higher self-esteem than their peers who conform more closely to the traditional role, that is, Traditional and Neotraditional girls.

The overall sample TP mean was 334.39, with a standard deviation of 37.18. This is comparable to the group mean and standard deviation of the normative sample: 345.57 and 30.70, respectively (Fitts, 1965). The normative sample consisted of persons from wide ranges of age, educational, social-economic, and racial backgrounds.

Hypothesis 9: Sex-role orientation is more masculine or androgynous among Nontraditional women.

No significant differences were found among the groups on the four categories of sex-role orientation (masculine, feminine, androgynous, undifferentiated) based on the BSRI, $\chi^2(6)=5.80$, $p=.45$. Neither did the groups differ when the masculine and androgynous categories were combined, $\chi^2(4)=5.20$, $p=.27$. There was no evidence of a relationship
### TABLE 4

Group Means of ANOVA Analyses for Self-esteem and Academic Success

<table>
<thead>
<tr>
<th>Variable</th>
<th>Traditional</th>
<th>Neotraditional</th>
<th>Nontraditional</th>
</tr>
</thead>
<tbody>
<tr>
<td>TSCS</td>
<td>89</td>
<td>334.23 (40.13)</td>
<td>326.51 (37.46)</td>
</tr>
<tr>
<td>Class Rank</td>
<td>86</td>
<td>.50 (.28)</td>
<td>.44 (.26)</td>
</tr>
</tbody>
</table>

Note. None of the results reported in this table were significant at the .05 level.
between sex-role orientation and career choice.

The sample medians of the Feminine (F) and Masculine (M) scales of the BSRI were 5.20 and 4.85, respectively. These medians were used as the cut-off scores in the classification of the groups using a median split technique. Normative data from Bem (1974) on college student samples of females had F and M medians of 5.05 and 4.79, respectively. An adolescent sample of 30 female 14- to 17-year olds had medians for the respective scales of 4.90 and 4.99. Thus for the present sample, the median F score is somewhat higher than those of normative groups, while the median M score was more similar to those of the normative groups.

Hypothesis 10: Academic success is greater in Nontraditional girls.

Although the means are in the expected direction, the results of a one-way ANOVA fail to detect any differences between the three groups on academic success, as measured by percentiles derived by dividing class rank by the total number in the class, \( F(2,83)=2.20, p=.12 \) (see Table 4). Thus, in this high school sample, girls choosing nontraditional roles did not evidence greater academic success than girls choosing traditional or neotraditional roles.

Hypothesis 11: Mothers' education, satisfaction with her role, sex-role orientation, and parental achievement and occupational
role models significantly predict daughters' sex-role orientation.

A discriminant analysis was performed on the predictive ability of mothers' education, satisfaction with her role, sex-role orientation, and parental achievement and occupational role models in relation to daughters' sex-role orientation. Three discriminant functions were predicted, none of which were statistically significant. This demonstrates that these variables were not strong predictors of daughters' sex-role orientation.

In summarizing these results, none of the personal variables under investigation in this research were significantly related to girls' role choices. Furthermore, parental variables were not predictive of daughters' sex-role orientation.
CHAPTER V

DISCUSSION

A model has been proposed by Auster and Auster (1981) for predicting nontraditional career choices in women on the basis of family influence variables. The applicability of this model to a female high school senior sample was investigated in the present research. The relationships of self-esteem, sex-role orientation, and academic success to girls' educational/occupational/family plans were also studied. In addition, the predictive power of parental characteristics on girls' sex-role orientation was investigated.

In terms of the predictive power of Auster and Auster's model regarding nontraditional role choice as it applies to late adolescent females, the results of this study demonstrate mixed support. Seven family influence variables were measured: 1) mothers' employment, including the status and gender-dominance of her occupation; 2) father as an achievement role model; 3) father as a source of occupational identification; 4) family SES; 5) family size; 6) birth order among female siblings; and 7) parental support of daughters' career orientation. Of these, only father as an achievement role model, family size, and parental support (in terms of educational encouragement) were significantly related to nontraditional role choice. Family SES

61
was marginally related, as was father as a source of occupational identification.

Of the additional hypotheses, daughters' sex-role orientation was not significantly predicted by mothers' education, satisfaction with her role, sex-role orientation, and parental occupational and achievement role models. With regard to the personal variables, neither self-esteem, sex-role orientation, nor academic success were significantly related to role choice. The results of this research will now be discussed, beginning with the supported hypotheses derived from Auster and Auster's model.

**Family Influence Variables**

**Father as an Achievement Role Model.** The hypothesis that father is an achievement role model for Nontraditional girls was supported in that these girls did see themselves as similar to their fathers in terms of achievement behaviors. Father also appears to be a role model for Neotraditional girls since, like the Nontraditional group, Neotraditional girls also saw themselves as similar to fathers in terms of achievement orientation. As expected, Traditional women saw their own achievement behavior as being similar to their mothers', suggesting that Traditional girls may see their mothers as role models of achievement behavior.

For Nontraditional girls, however, it is important to note that mother was also an achievement role model, since achievement ratings
for self and mother were significantly correlated for this group as well. The fact that Nontraditional girls saw themselves as similar to both parents in achievement orientation differentiated them from the other two groups.

That Nontraditional girls viewed both mother and father as achievement role models is difficult to interpret. Previous research has not directly studied parents as achievement role models, per se. Usually, parental characteristics such as education level or occupational status are investigated. It can be extrapolated that daughters of women employed in nontraditional occupations view their mothers as achievement role models in terms of the kind of life style to aspire toward. Highly educated parents may be seen as role models so that daughters then set high educational goals for themselves. The findings of research on parental education and occupation in relation to daughters' nontraditional role choice are contradictory.

Support for a relationship between maternal educational levels and daughters' role choice was found by Almquist and Angrist (1970) and Crawford (1978), but not by Klemmack and Edwards (1973). Fathers' education and daughters' role choice were found to be related by Burlin (1976). Fathers' occupational status was found to relate to girls' role choice by Allgeier (1975) and Vallentine et al. (1975), but not by Bancucci (1967) or Ridgeway (1978a). Almquist and Angrist (1970) and Crawford (1978) found current maternal employment related to daughters' role choice, while Tangri (1972) and Burlin (1976) found
that mothers' employment in a nontraditional occupation related to daughters' role choice. Baruch (1972), Haber (1980), and Macke and Morgan (1978) failed to relate maternal employment, per se, to daughters' nontraditional role choice. As can be seen, the findings of previous research regarding the relationship between daughters' role choice and parental occupation and education, as a possible index of role modeling, are inconclusive. As such, they offer no explanation for the results obtained in the present study concerning parents as achievement role models.

It may be that seeing oneself as similar to father in terms of achievement orientation, as Neotraditional and Nontraditional girls did, is related to daughters' freedom to choose a less traditional role in life. Having two parental achievement role models may allow a daughter even greater freedom from traditional role standards for women. Societal pressure to conform to traditional sex-role standards may be so great that becoming "free" of these requires a considerable support system. This system may be an internal one generated by an independent, internal locus-of-control orientation in a person. Alternately, it may be an external support system of persons in a similar position or who are reinforcing of nontraditional behavior rather than unrewarding or punishing of such.

The additional perceived similarity to mother in terms of achievement behavior possibly facilitates the adoption of a more nontraditional role, in that one is not seeing oneself as "deviant" in
achievement orientation, at least with respect to parental models and standards. In other words, the girls who identify with both parents on achievement orientation may be less likely to see their nontraditional strivings as incongruent with a woman's role and thus may regard such roles as more acceptable for themselves and for women in general. It would be interesting to have gathered data on the attitudes of the girls' toward women's roles. Without it, the interpretations remain speculative.

Another point to consider in terms of the investigation of the relationship between girls' nontraditional role choice and father as an achievement role model is the operational definition of the role model variable employed in the present study. It may be inaccurate to equate similarity between two people on a trait to actual modeling of that trait in one person by another. Better operationalization of this variable may serve to clarify whether father does indeed serve as an achievement role model for women in nontraditional roles.

Parents as achievement role models appear to be important factors in girls' education/occupational/family plans. This variable is not to be confused with parental identification, however. Parental identification is a variable measured frequently in research in this field, but similarity to parents in terms of achievement orientation is probably only one of numerous aspects of parental identification. In fact, a 20-item scale used in previous research to measure parental identification was included in the present study (Steimel & Suzie-
delis, 1963). In a post hoc analysis, no significant differences were found between the groups in terms of whether they scored as Mother-Identified, Father-Identified, or were identified with neither, $\chi^2(4) = 8.21, p = .13$.

**Father as a Source of Occupational Identification.** The hypothesis that father is a source of occupational identification for Nontraditional girls received limited support. The relationship between role choice and which parent the girls viewed themselves as most similar to in terms of their chosen occupation approached significance. Nontraditional girls tended to view themselves as similar to father and Traditional and Neotraditional girls tended to see themselves as similar to mother in terms of their chosen occupation. Seeing as the gender-dominance of the girls' chosen occupation was used as a criterion for inclusion into each group, this finding is not surprising. Since the other variables used as measures of occupational role modeling, that is, influencer of choice of (a) major, (b) educational plans, and especially (c) occupation, were not significantly related to role choice, it would not be sound to conclude that Nontraditional girls do see their fathers as sources of occupational identification. Better ways of operationalizing the occupational identification variable need to be discovered and then researched in relation to daughters' role choices before the existence of such a relationship can be considered to have been empirically established.

**Parental Support.** In terms of parental support, parental enour-
agement of educational plans was significantly related to role choice. Mothers were most encouraging of their Nontraditional daughters, while fathers were most supportive of their Neotraditional daughters. As postulated for the perceived similarity in achievement orientation, parental encouragement may facilitate the development of role choices in adolescent daughters that are free of traditional role standards for women.

The possibility that the relationship between parental support and daughters' role choice is not causal must be considered, however. The two variables may be related by virtue of a relationship to some third variable, such as SES. That is, parents who can afford to send their children to college may be more encouraging of such behavior, and the daughters of parents who can afford to finance their education might be more likely to consider attending college than the daughters of more financially-pressed parents. Also to be considered is the possibility that the causation is reversed, so that parents are responding to daughters' choices rather than shaping them.

**Family Size and SES.** Family size was significantly related to role choice, as predicted. Nontraditional and Neotraditional women came from smaller families than Traditional women. The larger family size among Traditionals may suggest that their parents were less able to provide support and encouragement for each child's educational/occupational/family plans. More probably, however, the more traditional, and thus more family-oriented, nature of the Traditional group
may be attributed to the fact that these girls have come to value family and family life, so that a primary goal for themselves is to have a family around which to focus their lives.

The larger family size may also reflect a generally more traditional value system in the household regarding the importance of families and family life. In accordance with this, the primary role of the wife may be viewed as that of mother and homemaker. If this is so, these are the values and roles modeled and shaped by the family in their children. Rosen and Aneschensel's "chameleon syndrome" (1976) may be an appropriate explanation for the development of more traditional interests in girls from larger families. They define the syndrome as "an accommodative response to an environment perceived as hostile to inappropriate sex role behavior" (p. 605). In fact, the mothers of the Traditional girls in this study were seen by their daughters as holding more traditional views than the other mothers. A post hoc analysis comparing daughters' perceptions of their mothers' sex-role orientation, using the scale developed by Macke and Morgan (1978), demonstrated significant group differences, $F(2,86)=5.87$, $p=.004$. A Student-Newman-Keuls probe demonstrated that Traditional and Neotraditional girls differed from Nontraditional girls in terms of their perceptions of their mothers' sex-role attitudes. The mothers of the Traditional and Neotraditional girls were perceived as more strongly believing that in the traditional view that the appropriate role for married women is a highly family-centered one than the mothers of Nontraditional girls, who were seen to disagree with the tradi-
tional role for married women in favor of a more modern role in which household and childrearing responsibilities are shared by spouses and married women are free to pursue careers, etc.

The SES factor may interact here also, since the Traditional and Neotraditional groups were marginally lower in SES than the Nontraditional groups. There might be less funds available for girls from larger families to attend college. However, this is not borne out by a comparison of the post-high school educational plans of the girls. Of the Traditional group, 33% had no plans to continue school right after high school. Of the Neotraditional girls, 25% did not plan to continue their schooling after high school. Thus, even though, in comparison to the Neotraditional girls' families, the families of the Traditional girls were similar in SES but larger in size, the SES factor does not seem to have been an important one in differentially influencing the educational aspirations of the Traditional and Neotraditional girls.

The fact that the Traditional and Neotraditional groups were marginally lower in family SES than the Nontraditional also suggests that differential social class variables might be at work in terms of influencing educational/occupational/family plans. These would include cultural milieu factors such as the kinds of role models to which one is exposed and the value placed on educational endeavors, and might account for the development of more traditional aspirations.
Certain of Auster and Auster's proposed family predictors of nontraditional women's role choice were not significantly related to that variable in this sample of female high school seniors. We now turn to a discussion of these.

Maternal Employment, Occupational Status, and Occupational Gender-dominance. In light of the contradictory findings of past research, the failure of mothers' employment to relate to daughters' role choice may not be of great consequence. Some previous research has demonstrated a relationship between maternal employment and daughters' role choice, such as Almquist and Angrist (1970), Burlin (1976), Crawford (1978), and Tangri (1972). On the other hand, Baruch (1972), Haber (1980), and Macke and Morgan (1978) have failed to find such a relationship. It should be considered, however, that the definition of mothers' employment used in this study influenced the results that were obtained. Mothers who had worked at some time during the daughters' high school years were considered to be employed, as were mothers who were currently working. According to this definition of maternal employment, it is possible that a mother worked for six months during the daughters' high school years and then was classified as employed. This would have inflated the number of working mothers in the sample and may have masked between-group differences in current maternal employment.

The current economy is another factor that should be considered in its effects upon employment rates for women in trying to understand
the discrepancy between the findings of the present study and those of previous research regarding maternal employment in relation to daughters' role choices. Now women may need to work, whereas the decision to work five to ten years ago may have been more strongly determined by personal rather than economic concerns. This would mean that many of the mothers in this sample might rather not be working, and thus probably serve as different kinds of models than mothers who choose to be employed for other than financial reasons.

A relationship between both mothers' occupational status and the gender dominance of her occupation with daughters' role choice was not demonstrated. The results with respect to the gender-dominance variable may be related to the fact that the range of jobs the mothers held was quite limited. Of the 67 mothers considered currently employed and for whom the gender-dominance of the occupation could be established, 76% were employed in traditionally female occupations, 22.5% were in moderate occupations, and 1.5% (n=1) were employed in male-dominant occupations. It is likely that the relative homogeneity of the sample in terms of the gender-dominance of occupations in which the mothers were employed necessarily limited the possibility of significant relationships to emerge and be demonstrated in this study.

As for occupational status of the occupations in which mothers were employed, a broader range of occupations was represented. Of the 67 employed mothers for whom this data could be generated, 13% were employed in professional jobs, 7.5% in managerial level jobs, 52% were
in clerical or sales jobs, 3% were in craftsmen level jobs, 7.5% worked as operatives, and 17% were service-worker level jobs. Although more homogeneous than the gender-dominance data, the maternal occupations clustered around middle- and lower-status jobs. This may have also had an influence on the finding that Nontraditional girls did not tend to have mothers employed in jobs of higher status than the mothers of the Traditional and Neotraditional girls.

**Birth Order.** The birth order variable was not related to girls' role choices. This may be due to fact that the majority of the girls are Catholic and may thus come from larger families than those of the more heterogeneous samples studied in previous research. Previous research has frequently found birth order to be related to achievement behavior (Angelini, cited in Falbo, 1981; Sampson & Hancock, 1967), high educational aspirations (Bayer, 1978; Falbo, 1981; Schacter, 1963), and educational attainments (Bayer, 1966; Schacter, 1963). However, it may be that birth order among female siblings is not an important variable in determining whether and how much late adolescent females will deviate from traditional sex-role standards in their educational/occupational/family plans. Additionally, the variable of role choice need not be necessarily related to achievement needs. For example, a high achieving women could desire to finish college, marry, raise a family, and then return to a career after the children have grown. During the years at home, she may channel her achievement strivings into her homemaking and child-rearing tasks. This could be done by mastering new tasks such as furniture-making or canning, for
example, or by striving to provide an enriched atmosphere in the home for her children. Such a woman might become involved in community, volunteer, or other extra-familial activities besides the pursuit of a career. That is, a homemaker needn't necessarily be lower in achievement orientation than girls choosing other life styles.

Additional support for the possibility that birth order is unrelated to women's role choices can be found in Schooler (1972). Her careful examination of previously reported and unreported data on birth order effects revealed little reliable evidence supporting the significance of this variable. According to Schooler, many if not most of the reported birth order effects on intellectual or occupational attainments were most simply explained by social class trends in family size. Thus, it is possible that more carefully controlled studies of birth order effects would fail to find evidence supporting the existence of such effects.

Summary. In summing up the relationship between family influence and girls' deviations from traditional education/occupation/family plans, it seems that only limited support was demonstrated for Auster and Auster's model in predicting nontraditional choice in this female high school senior population. Father as an achievement role model, family size, and parental educational encouragement were the variables found to differentiate between the three groups under investigation.
Perhaps related to the only minimal influence of family variables on career and role choices is the general trend in society of the breakdown of the family system. There was a time when it was not uncommon to live in close proximity to one's extended family and to reside in the same community at least until adulthood. Now, with the high divorce rate and the increased mobility of society, young men and women are exposed to a myriad of other role models and influences besides the family ones.

**Personal Variables**

Maternal variables of education, sex-role orientation, satisfaction with her role, and parents as achievement and occupational role models were not predictive of daughters' sex-role orientation. The single variable of sex-role orientation cannot be used, then, in place of the other frequently studied variables.

The failure of self-esteem, sex-role orientation, and academic success to relate significantly to role choice is puzzling. Of these, the most surprising was the lack of relationship for sex-role orientation.

Sex-role Orientation. That sex-role orientation was not related to role choice is inconsistent with the research findings of Harren et al. (1979), Stockton et al. (1980), Wertheim et al. (1978), and Yanico et al. (1978). One implication of this is that girls may be choosing occupational fields that are incongruent with their predominant inter-
ests. This could lead to job dissatisfaction in the future. On the positive side, it might mean that girls are willing to experiment with various kinds of academic and occupational experiences as they solidify and perhaps broaden their range of interests and skills.

One point to consider in explaining the absence of a sex-role orientation-role choice relationship is that jobs may be becoming less sexually stereotyped. That is, as society becomes more accepting and encouraging of different roles for women, it might be that women of many different personalities and backgrounds will be choosing the same roles. Thus, one may be less likely to succeed in identifying a stereotype of the "nontraditional" female, for example. Women entering nontraditional roles today may not be as deviant or different from the general population as they were 20 or 25 years ago.

A second possibility regarding the lack of relatedness between sex-role orientation and role choice is the developmental level of the subject population under study, particularly in terms of identity formation. In a longitudinal study, Almquist (1974) found that college women in both traditional and nontraditional majors were highly changeable in their occupational choices during their college years. The average age of the girls in the present study was 17 years, 9 months. It may be that identity formation in these young girls is so diffuse at this age that their future plans and goals are not in line with their abilities (as indexed, in part, by academic success), their interests, and their sense of themselves (in terms of sex-role orien-
tation). To say it another way, the occupational and educational goals of a barely 18-year old girl may go through significant changes and revisions as her sense of who she is and what she wants out of life, that is, her identity, emerges and crystallizes.

A third point to explain why sex-role orientation was not demonstrated to relate to role choice has to do with potential problems in the measurement of sex-role orientation. The use of the median split procedure is the most accepted one for classifying subjects in terms of sex-role orientation (Bem, 1977; Kelly & Worrel, 1977). Since appropriate norms of sufficient sample size were unavailable for use in this study as median cut-off scores, the sample medians on the Masculinity (M) and Femininity (F) scales were employed as the cut-off scores. As noted in Chapter 3, the median M score for the present sample (4.85) was comparable to those of the normative groups (4.79 and 4.99). The median F score, however, was somewhat higher for this sample than found in the two normative female samples. In this study, the median F score was 5.20, while in normative studies it was 5.05 and 4.90 (Bem, 1974). It may be that the use of the higher sample median F score influenced the classification of subjects into the sex-role categories in such a way as to eradicate differential sex-role orientations between the three groups under study. If this were the case, the use of the higher F median would cause the number of feminine and androgynous subjects to be depressed and the number of masculine and undifferentiated subjects to be inflated. Comparing the percentages classified into group in this study and in the large norm-
ative college sample studied by Bem (1974) shows that this may have occurred. Bem found the following percentages of women in each sex-role category: masculine- 12.4%; feminine- 39.4%; androgynous- 30.3%; undifferentiated- 17.9%. The respective percentages in the present study were as follows: 25.8%, 25.8%, 23.6%, and 24.7%. The numbers of subjects classified as feminine and androgynous are depressed, while the numbers classified as masculine and undifferentiated are inflated relative to Bem's normative sample. However, there is no evidence that the percentages cited by Bem (1974) represent percentages typically obtained in most studies. So while the use of the sample median scores may have contributed to the fact that group differences on the sex-role orientation variables were not demonstrated, it cannot be assumed that the use of normative medians would have produced such differences. In fact, the appropriateness of using medians based on the data of a different age group is questionable. The lack of relationship, then, can either be explained by the "unformed identity" speculation or can be taken at face value as reflective of an actual lack of relationship between these variables, perhaps due to lessened job sex-role stereotyping. That no relationship was demonstrated raises the question of whether this would be a more global finding or is simply limited to the population under study. This question will be discussed later in this chapter.

**Academic Success.** Academic success was unrelated to role choice. This seems to indicate that girls of different levels of intellectual performance are choosing a variety of life styles, so
that their academic success does not serve as a limiting factor in terms of their future plans. Again, this can be a very positive sign of the girls' freedom of choice and opportunity. On the other hand, if the lack of relationship stems from unrealistic expectations (a possibility to be discussed in greater depth later in this chapter), it constitutes a liability. In that case, when reality hits home, a period of re-adjustment and re-evaluation will need to occur.

Self-esteem. The failure of self-esteem to relate to nontraditional roles is not so surprising. Previous research relating these variables has produced inconsistent results. High school senior girls choosing roles that differ from the traditional feminine one did not demonstrate more positive self-concepts than girls who saw themselves in roles corresponding to the traditional one. It does not seem to be the case, then, that higher self-esteem is required to aspire, at least during the high school years, to roles that deviate from the traditional one for women. From another perspective, girls choosing the wife-mother-homemaker role do not seem to be doing so out of lower self-esteem than girls choosing other roles. That is, they are not doing so out of a sense of themselves as being unable to do something else. This can be seen as quite a positive finding if it reflects the girls' real freedom to choose the life style that they will pursue rather than choosing the role by default. Whether or not this is so is unclear in light of some observations made by this investigator over the course of the study concerning the potentially unrealistic plans of the girls. The nature and possible interpretations and
implications of these will now be discussed.

Additional Considerations

Although not directly related to the hypotheses being tested here, this experimenter made some observations in the course of reviewing the educational, occupational, career, and family plans of the 200 subjects toward assigning them to one of the three groups under study. Although the figures were not compiled, a surprising majority of the 200 respondents expressed the goal of being a married career woman with children. This and other plans often seemed to be quite unrealistic. For example, a girl who was in the bottom quarter of her class in terms of class rank expected to become a physician and have a part-time career while being married with children! Certainly this is an extreme example, but such expectations were not rare. Educational goals were most frequently observed to be potentially unrealistic for a subject in light of her self-reported class rank, although class rank is obviously only a measure of prior academic performance and is not necessarily reflective of intellectual or academic capacity. Less frequent were unrealistic occupational goals in relation to educational plans, such as expecting to become a university professor with only a bachelors degree.

The unformed identities of the girls' speculated upon earlier may also explain or at least be related to the observations of the nature of the girls' future plans. One speculation beyond the age factor is that as society attempts to alleviate the press on women to
be wives and mothers in accord with traditional sex-role stereotypes, the pendulum may have swung too far in the opposite direction. If the sample of girls under study is any indication of the general population, today's woman may currently be pressed to believe that the ideal woman is a "super woman" who combines the male and female role: she pursues a career while at the same time fulfills the feminine role of wife, mother, and homemaker. In that case, it would be no wonder that Nontraditional women did not evidence higher levels of self-esteem than Traditional women. If the Nontraditional woman is actually living up to the role society is advocating for women, then it may actually require a stronger sense of identity and a stronger, more positive self-concept for a girl today to "swim against the current", that is, to aspire to being a homemaker.

Another possible index of the pressure on today's women may be reflected in the results of a post hoc analysis comparing the three groups on their self-ratings of achievement orientation. No hypotheses concerning achievement motivation were advanced because it was felt that a woman who chooses to become a homemaker can channel achievement needs into the activities of homemaking and childrearing. As explained earlier, this could be done by mastering new tasks, by striving to provide an enriched atmosphere in the home, or by becoming involved in extra-familial activities other than the pursuit of a career, to cite a few examples. That is, a homemaker needn't necessarily be lower in achievement orientation than girls choosing other life styles. Interestingly, a Student-Newman-Keuls probe of a post
hoc ANOVA comparing the groups on self-ratings of achievement demonstrated that the Traditional girls did perceive themselves to be significantly lower in achievement orientation than Nontraditional girls, \( F(2,81)=3.59, p=.03 \). Interpretation of this finding is complicated. Are these traditionally-oriented girls actually lower in achievement orientation than their nontraditional counterparts or do they just see themselves as such? The latter may be true if their lower self-ratings of achievement are a reflection of the girls' introjection of the societal prejudice that values typically masculine traits over typically feminine traits (Broverman et al., 1970). That is, girls who aspire to a homemaker role may describe themselves in less achievement-oriented ways because of aspiring to the culturally less-valued traditional feminine role. They may not actually be lower in achievement orientation than less traditional girls, but have only come to see themselves as such. Data would need to be collected on behavioral rather than self-report measures of achievement orientation in order to avoid such a confound.

One wonders if these observations of the plans of the 200 subjects are representative of the goals and expectations of the average high school senior or, more broadly, the average young woman today. An important consideration is whether the finding that the majority of young women today seem to feel drawn toward combining marriage, career, and family, is cohort-, sex-, or age-related. That is, have young people, perhaps out of "youthful idealism," always aspired toward such goals, or are these goals more specific to young people of
the early 1980's? Furthermore, are these aspirations limited to women, or do young men in their senior year of high school also hold quite unrealistic expectations of themselves for the future? The information available to both young men and women regarding the reality of certain aspirations may be limited or disregarded when they project themselves into a future lifestyle. If it were found to be the case that young men also have unrealistic future plans, the above considerations concerning the pressure on today's women would require revision. The amount of pressure and the unrealistic nature of the expectations, if a global phenomenon, would be cause for concern. Not only were the girls themselves frequently unrealistic in their educational and career/family plans, but these goals were usually perceived as also being the level of education the parents expected the daughter to achieve and the lifestyle (marriage, career, and family plans) that mothers hoped their daughters would achieve. It is a heavy burden to share with parents the expectation of completing medical school when in the bottom quarter of the high school class in terms of academic performance. Again, young men may also have their unrealistic expectations, so that conclusions specific to women cannot be drawn here without a male comparison group.

If what has been observed here is a more general trend, then it would be important for parents, educators, and counselors to be aware of and sensitive to the fact that young women today are feeling a great pressure toward taxing and possibly unrealistic goals. The aim of the women's movement, in this researcher's opinion, is to enhance
the development and the use of women's resources in society. Placing women under pressure to plan their lives in some certain way, particularly that they be so many things to so many people (wife, mother, career woman), is directly opposed to the growth-facilitating goals of self-development, self-expression, and freedom of opportunity. It is also to recreate for women society's pressured expectations of men to be successful and driven in a career while taking the time to be a good husband and father of a family.

One obvious problem with this study is that the generalizability of the findings is limited by the characteristics of the sample under study. Several kinds of sample biases are noted. The fact that the girls were attending private high schools indicates that they are not likely representative of the general population, either in terms of SES, religion, race, and possibly academic variables. The families of the girls under study may differ from the general population who send their daughters to public high schools. Parents may have been seeking a high school environment for their daughters that maximizes achievement and academic opportunities. On the other hand, sending their daughter to a private girls' school may speak to a family's tendency to be more traditional in viewpoint or toward being overprotective, since private schools are generally smaller and more homogeneous in student make-up than a public, coeducational high school. Additionally, girls in Catholic high schools are exposed to different kinds of role models and authority figures than public high school students. In contrast to public school systems, the majority of the administra-
tors and faculty of Catholic girls' high schools are women. This heightened exposure to females in positions of authority may set the Catholic high school girls apart from their public school counterparts. They are apt to have available to them in the women of their high school a broader scope of potential role models. The point here is that conducting the same study on a more heterogeneous sample of high school girls might produce quite different results.

A second kind of sample bias needs to be considered. It might be better termed a "subsample" bias. As noted earlier, 500 girls were invited to take part in this study, 200 actually served as subjects, and the data of only 89 girls were used in testing the hypotheses. It is highly probable that the final subject sample was indeed a biased one. This group differed from the other 411 girls in that they participated in this project and had goals and plans that fit the criterion for inclusion into the three groups under study. Some participation bias may have resulted from the fact that the experimenter was probably seen as a career woman, since it was known that she was completing a doctoral degree. Perhaps many girls not similarly inclined felt that their participation in the study was not as important as that of career-oriented girls. Girls with poorer self-images or less academic success might have felt similarly and not volunteered on that basis. Some girls may have been unable to get parental permission to take part in the research, thereby differing in terms of their family system from those whose parents allowed them to take part in the study.
Another possible reason for the slightly low (40%) volunteer rate relates to the fact that the study took place six to eight weeks before the last day of school. End-of-the-year ceremonies appeared to be the main concerns of the girls judging from the agendas of the class meetings at which the experimenter addressed the girls. It is likely that this may have influenced participation, so that a larger sample size may have been obtained had the study been conducted a few months earlier.

Suggestions for Future Research

In conclusion, after reviewing the literature on women's non-traditional role choice, conducting a rather exploratory, information-gathering study, and then attempting to explain the results, this investigator strongly recommends that future research be carefully designed, analyzed, and interpreted. Although many information-gathering studies have been conducted, the meaning of the results is unclear due to the numerous difficulties found in previous research. These include: poor research design, limited sample sizes, determinations of the existence of relationships on the basis of "eyeballing" the data rather than on the basis of statistical tests of relationships, and the tendency to operationalize variables in such numerous ways that: a) many of the variables overlap, and b) some significant results are sure to be found. These factors cause the interpretation of the results of research in this area to be very difficult.
Generally, the abundance of conflicting results and the difficulty in separating out the different effects of family influence variables, such as SES, parental education levels and occupational status, etc., points to the limited utility of further investigation of family influence variables as they impact on women's educational/occupational/family plans. Although some family influence variables are sometimes related to women's career plans, they are not sufficiently and reliably predictive that other variables are rendered unimportant. Of greater utility, it seems, would be to study more subtle personality variables, especially unconscious ones, in relation to role choices.

One avenue of research might be to examine the educational and life style plans of a larger, more heterogeneous sample in order to determine if the finding here that most girls desired, often unrealistically, a role as a married career woman with children is true of the larger population of high school senior females and perhaps young women in general. This might provide a more accurate reading of the effects of the women's movement as it has trickled down into the lives and plans of young women. Replication of the current research on a more heterogeneous high school sample would help differentiate between problems in the application of Auster and Auster's model to a high school sample and problems due to biases of the sample under study. Since the data of 111 subjects had to be dropped from the study because they did not fit into criterion groups under investigation, it is possible that the conceptions of the Nontraditional, Neotradi-
tional, and Traditional roles used in this study are not reflective of these roles as they are being actualized in today's society. An extension of the present research might include some revamping of the group makeup in order to adequately reflect the various roles that women aspire to and fulfill.

In addition, it would be interesting to compare groups of high school males to groups of high school females in terms of the roles to which they aspire. This would provide useful information as to whether the observations made in this study regarding the unrealistic goals of young women are sex-specific or not. Also, the question of whether the results are age- or cohort-specific could be investigated. These results of such studies would have an impact on the kinds of conclusions that could be drawn from such studies as the present one. Until such research is conducted, the interpretations of many aspects of this study remain highly speculative.

Obviously, it would be most interesting and fruitful if longitudinal research could be conducted, particularly beginning in the early high school years. It is clear that college majors (Almquist, 1974) and life goals and plans can change frequently during the college years. Judging by the unrealistic plans of many subjects in the present study, they must necessarily change. Of great interest and utility would be the determination of what factors, including unconscious variables, play a role in these changes, and how they come to have an impact.
CHAPTER VI

SUMMARY

A model proposed by Auster and Auster (1981) for predicting women's nontraditional career choices on the basis of family influence variables was investigated in its applicability to a female high school sample. The relationships of self-esteem, sex-role orientation, and academic success to girls' educational/occupational/family plans were also studied. In addition, the predictive power of parental characteristics on girls' sex-role orientation was investigated.

Senior class members of two Catholic girls' high schools located in the metropolitan area of a large midwestern city served as subjects in this study. Three self-report instruments were administered: the Bem Sex Role Inventory, as a measure of sex-role orientation; the Tennessee Self Concept Scale, as a measure of general self-esteem; and a survey constructed for use in this study to measure demographic and family influence variables. Seven family influence variables were measured: 1) mothers' employment, including the status and gender-dominance of her occupation; 2) father as an achievement role model; 3) father as a source of occupational identification; 4) family SES; 5) family size; 6) birth order among female siblings; and 7) parental support of daughters' career orientation.
On the basis of their educational/occupational/family plans, 89 girls were categorized into one of the three groups under study: Traditional, Neotraditional, and Nontraditional. The Traditional group was defined so as to represent the traditionally-defined feminine role of wife and homemaker. The Neotraditional and Nontraditional groups represented successively more radical deviations from the traditional role for women.

Only limited support for Auster and Auster's model was obtained. Of the family variables they proposed, only father as an achievement role model, family size, and parental support (in terms of educational encouragement) were significantly related to nontraditional role choice. The relationships of family SES and father as a source of occupational identification to role choice approached significance. No other significant results were obtained.

The results of this study are discussed, in part, in terms of sample characteristics and of possible changes in societal definitions of occupational stereotypes and of "appropriate" roles for women. Recommendations for future research are made.
REFERENCES


Baruch, G. K. Maternal influences upon college women's attitudes toward women and work. Developmental Psychology, 1972, 6, 32-37.


Ridgeway, C. L. Predicting college women's aspirations from evaluations of the housewife and work role. *Sociological Quarterly*, 1978, 19, 281-291. (b)


Schooler, C. Birth order effects: Not here, not now! *Psychological Bulletin*, 1972, 78, 161-175.


APPENDIX A
Code Number

Birthdate

Class rank

Age

IDENTIFICATION

1. Are you currently living with both your mother and father?
   --- Yes --- No

   If no, please explain (divorced, father deceased, etc.) and state how long this has been the case:

2. Number of children in your family? 

3. Please list each child in order from first to last by sex and age (not names). Write "self" in the appropriate space denoting your place in the family.

<table>
<thead>
<tr>
<th>Age (approx.)</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td></td>
</tr>
</tbody>
</table>
4. What is your racial-ethnic background: Are you (check one)

- Asian
- Black
- Hispanic
- White
- American Indian
- Something else?
(Specify ____________________________)

5. Would you say that the total income (father's and/or mother's) before taxes for your family in 1982 was:

- below $8,000
- $8,001-15,000
- $15,001-25,000
- $25,001-35,000
- $35,001-50,000
- over $50,000
- have absolutely no idea

6. Please indicate your father's present work status:
1) full-time employment
2) part-time employment
3) laid-off (temporarily not working, but the company hopes to have him back to work as soon as its financially possible)
4) unemployed
5) retired

7. a. Please name the major occupation in which your father has been/had been employed for most of his working life?

b. Is your father's current occupation different from the one he held for most of his working life? _____ Yes _____ No

c. If yes, what is his current occupation?

   How long has he been doing this work? __________

8. Please indicate by placing an M for mother and an F for father on the appropriate line corresponding to the highest grade of school each parent completed. If they both completed the same amount of schooling, put both M and F on the appropriate line.

   grade school
   some high school
   high school completed (cont.)
9. The following questions are about "mother". Please indicate to whom you are referring to in your answers:

___ your natural mother
___ step-mother due to father's remarriage after natural mother's death
___ step-mother due to father's remarriage after divorced from natural mother
___ father's live-in girlfriend
___ other (please specify __________________)

10. Has your mother ever worked for pay? _____ Yes _____ No
    If no, please skip forward to question 11.
    a. If yes, was that outside the home or work that she took into the home?

___ outside the home
___ took in work

b. When did she work? (Check more than one if applicable)

___ before marriage
___ after marriage, before the birth of her first child
___ after all the children were of a certain age (Please indicate what age that was __________________)

c. Altogether, approximately how many years of YOUR life has your mother worked?

___ years

d. WHEN, during your lifetime, did she work? (Check more than one if applicable)

___ before I was in kindergarten
___ during my elementary school years (cont.)
during my high school years
at the present time

e. Please name her occupation in her present or most recent job.

11. If your mother does not presently work, please skip to question
12. If your mother works at the present time...

a. Please indicate if that is on a full-time or part-time basis.
   full-time
   part-time

b. If your family didn't need the money, would you say your mother
   would...
   definitely leave her job
   probably leave her job
   50/50 chance she'd leave her job
   probably NOT leave her job
   definitely NOT leave her job

c. How satisfied would you say your mother is with her role as a
   working mother?
   very satisfied
   somewhat satisfied
   somewhat dissatisfied
   very dissatisfied

d. How competent do you think your mother is at her job?
   very competent
   somewhat competent
   somewhat incompetent
   very incompetent

12. a. How competent do you think your mother is in her role as a home-
   maker?
   very competent
   somewhat competent
   somewhat incompetent
   very incompetent
b. How satisfied would you say your mother is with her role as a homemaker?


13. Imagine how your mother would feel about the following statements. Please indicate if she would strongly agree (SA), agree (A), disagree (D), or strongly disagree (SD) with each by circling the appropriate letters.

1. A married woman’s most important task in life is taking care of her husband and children.


2. A married woman should realize that her greatest reward and satisfaction comes through her children.


3. Having a job herself should be just as important for a woman as encouraging her husband in his job.


4. If she works, a woman should not try to get ahead in the same way a man does.


5. A married woman should be able to make long-range plans for her occupation in the same way that men do.


6. If a man’s wife works he should share equally in the responsibilities of child care.


7. If a mother of a young child works, it should be only while the family needs the money.


8. If a man's wife works, he should share equally in household chores such as cooking, cleaning, and washing.

SA A D SD

FUTURE PLANS

14. Which do you plan to do after graduating from high school?

- get a job
- work for a year and then return to school
- attend a career school (Please specify toward what career)
- attend a 2-year business school
- attend a 2-year college
- attend a 4-year college
- other (Explain briefly)

If you intend to go on in school after high school, what do you expect to major in?

15. Considering your abilities, grades, financial resources, etc, how far do you ACTUALLY expect to go in school?

- not beyond high school
- 2-year business school or college
career school
- 4-year college
- masters degree
doctoral degree (Ph.D.)
- professional degree (doctor, lawyer)

16. If you could do exactly as you desired, how far would you ideally like to go in school?

- not beyond high school
career school
- 2-year college or business school
- 4-year college
- masters degree
doctoral degree (Ph.D.)
- professional degree (doctor, lawyer)
17. If you could do exactly as you desired, what occupation would you ideally like to work in?

18. Sometimes what one would like to do is not exactly what one must do. Which occupation do you think you will actually follow?

19. Are you planning to be married (engaged, set a date) soon after graduation (within two years)? _____ Yes _____ No

20. Assume that you are trained for the occupation of your choice, that you will marry and have children, and that your husband will earn enough so that you'll never have to work unless you want to. Under these conditions, which would you prefer? (Check one)
   ____ to participate in clubs or other volunteer work
   ____ to spend time on hobbies, sports, or other activities
   ____ to work part-time in your chosen occupation
   ____ to work full-time in your chosen occupation
   ____ to concentrate on family and home
   ____ other, explain briefly

21. Fifteen years from now, would you like to be (check one)
   ____ a homemaker with no children
   ____ a homemaker with one or more children
   ____ an unmarried career woman
   ____ a married career woman without children
   ____ a married career woman with children
   ____ other (explain briefly)

22. Which does your mother prefer for you to be?
   ____ a homemaker with no children
   ____ a homemaker with one or more children
   ____ an unmarried career woman
   ____ a married career woman without children
   ____ a married career woman with children
   ____ other
23. How would you say your mother feels about your plans for after high school? Would you say that she:
   ______ agrees strongly
   ______ agrees somewhat
   ______ disagrees somewhat
   ______ disagrees strongly
   ______ doesn't care

24. How would you say your father feels about your plans for after high school? Would you say that he:
   ______ agrees strongly
   ______ agrees somewhat
   ______ disagrees somewhat
   ______ disagrees strongly
   ______ doesn't care

25. How far does your mother actually expect you to go in school?
   ______ finish high school
   ______ finish 2-year college or business school
   ______ finish career school
   ______ finish 4-year college
   ______ masters degree
   ______ doctoral or professional degree

26. How far does your father actually expect you to go in school?
   ______ finish high school
   ______ finish 2-year business school or college
   ______ finish career school
   ______ finish 4-year college
   ______ masters degree
   ______ doctoral or professional degree

27. Generally, how much would you say your mother has urged you to continue your education after high school?
   ______ constantly
   ______ often
   ______ sometimes
   ______ never
   ______ never, but I just know she'd like me to go
   ______ never, in fact she has said that she would rather I just get a job
28. How much would you say your father has urged you to continue your education after high school?

____ constantly
____ often
____ sometimes
____ never

____ never, but I just know he'd like me to go
____ never, in fact he has said that he would rather I get a job

29. Please indicate on a scale from 1 to 6 how you see yourself, your mother, and your father in terms of each's concern with his/her own achievement-related behaviors, such as trying to excel, to get ahead, to master difficult tasks, to persevere, to always do their best, etc.

a. MYSELF

1 2 3 4 5 6
very concerned Not at all concerned

b. MY MOTHER

1 2 3 4 5 6
very concerned Not at all concerned

c. MY FATHER

1 2 3 4 5 6
very concerned Not at all concerned

30.a. Please circle the appropriate letters to indicate whether you strongly agree (SA), agree (A), disagree (D), or strongly disagree (SD) with the following statements about your mother.

1. My mother was more a source of encouragement to me in my childhood than my father.

SA A D SD

2. More of the family decisions were made by my mother than my father.

SA A D SD
3. My mother had more to do with the shaping of my ideals than my father.

SA  A  D  SD

4. As a child I would rather be with my mother than my father.

SA  A  D  SD

5. When I was away from home my mother missed me more than my father.

SA  A  D  SD

6. My mother expects more of me than my father.

SA  A  D  SD

7. I owe more to my mother than to my father.

SA  A  D  SD

8. I feel closer to my mother than my father.

SA  A  D  SD

9. It seems that I am more like my mother than my father.

SA  A  D  SD

10. My mother understands me better than my father.

SA  A  D  SD

b. Now do the same for the following statements about your father.

1. I was more attached to my father than to my mother.

SA  A  D  SD

2. My first interest in my present work was due more to my father than my mother.

SA  A  D  SD

3. My father was more interested in the things I did than my mother.

SA  A  D  SD
4. I enjoy being with my father more than being with my mother.
   SA A D SD

5. As a child, my likes and dislikes were more like my father's than my mother's.
   SA A D SD

6. I would rather be like my father than like my mother.
   SA A D SD

7. It is more important to me to make my father proud of me than my mother.
   SA A D SD

8. If I did not do well in school, it would be a greater disappointment to my father than to my mother.
   SA A D SD

9. If I ever got in trouble, I would prefer to go to my father rather than my mother.
   SA A D SD

10. I am more like my father than my mother.
    SA A D SD

31. How close would you say you are to each parent:

   MOTHER: _____ very close _____ somewhat close _____ somewhat
            _____ very distant
   FATHER:  _____ very close _____ somewhat close _____ somewhat
            _____ very distant

32. Are you your mother and/or father's favorite?
    _____ mother
    _____ father
    _____ neither
    _____ both
33. Which parent has most influenced your plans concerning whether or not to go to school after high school?

____ mother
____ father
____ neither

34. Which parent has most influenced your choice of occupation?

____ mother
____ father
____ neither

35. If you plan to attend college, which parent has most influenced your choice of college major?

____ mother
____ father
____ neither

36. How much would you say each parent understands you?

MOTHER: ____ very much _____ somewhat ____ very little
____ not at all

FATHER: ____ very much _____ somewhat ____ very little
____ not at all

37. How similar do you see yourself to each parent?

MOTHER: ____ very much _____ somewhat ____ very little
____ not at all

FATHER: ____ very much _____ somewhat ____ very little
____ not at all

38. How much would you say you agree with each parent on values?

MOTHER: _____ agree strongly _____ agree somewhat
_____ disagree somewhat _____ disagree strongly

FATHER: _____ agree strongly _____ agree somewhat
_____ disagree somewhat _____ disagree strongly
39. Which parent do you see yourself as most similar to in terms of your chosen occupation?

_____ mother
_____ father
_____ neither

40. Which parent do you see yourself as most similar to in terms of your overall goals for your life?

_____ mother
_____ father
_____ neither
The dissertation submitted by Loretta E. Lobbia has been read and approved by the following committee:

Dr. Patricia A. Rupert, Director
Assistant Professor, Psychology, Loyola

Dr. James E. Johnson
Associate Professor, Psychology, Loyola

Dr. Dan P. McAdams
Assistant Professor, Psychology, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Philosophy.

August 30, 1983
Date

Patricia A. Rupert
Director's Signature