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SELF-CONCEPT, FAMILY BACKGROUND, AND PERSONAL TRAITS
WHICH PREDICT THE LIFE GOALS AND SEX-ROLE ATTITUDES
OF TECHNICAL COLLEGE AND UNIVERSITY WOMEN

DISSERTATION

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

By
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The Ohio State University
1977

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CHAPTER 1
INTRODUCTION AND STATEMENT OF THE PROBLEM

The sex-role expectations of our culture have shown remarkable stability in this century, withstanding dramatic changes in the technological, medical, and communications spheres as well as the influence of several wars. Attitudes towards the female role have fluctuated, but recent studies have demonstrated that male and female stereotypes have persisted and are shared by a broad cross-section of men and women in this country (Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972).

One area of concern which has become increasingly popular in the last two decades is women's career goals. The research has focused on two major areas: 1) the comparison of women who plan, expect, or pursue a full-time career (called career-oriented women or career women) with women who are oriented primarily toward the traditional homemaking role (called homemaking-oriented women and full-time homemakers) and 2) the comparison of women who aspire to or choose careers in male-dominated occupations (called pioneers or role innovators) with those aspiring to or choosing traditional female occupations (called traditionals). Traditional careers are usually defined as ones in which two-thirds or more of those employed are women, and pioneer careers are ones in which two-thirds or more of those employed are males; in this paper, careers which are between one-third and two-thirds male or female are referred to as "androgynous" careers.
The segregation of men and women in the labor force remained stable between 1900-1960 (Almquist, 1974). Since 1960, women have made a relatively impressive shift into male-dominated professions, in some cases doubling and even tripling the number or proportion of women in fields that had been almost exclusively male. This coincided with an increase of women in the labor force, from 37.4% of all women in 1960 to 44.2% in 1973 (Schiffler, 1975). The changes occurring between 1960 and 1970 appeared dramatic, but since the number of women employed in these male-dominated professions was initially so small, the number and proportion of women involved is still very low. For example, the proportion of women in carpentry tripled—but only from .4% to 1.3% (Flanders, 1974). Similarly, what was considered a large increase of women in the crafts resulted in their now representing 1.1% of all plumbers, 1.8% of the electricians, and 2.0% of the auto mechanics. In the professions, women have made smaller gains in terms of percentages, but because the number of women in these fields was larger than in the crafts, the number of women involved in these shifts is greater and their gains are more visible. Between 1962 and 1974, the increases for women were from 5.5% to 9.8% of American physicians, from 2.8% to 7.0% of lawyers and judges, from 8.6% to 14.0% of chemists, and from 19.2% to 30.9% of college and university teachers (Garfinkel, 1975). These and related statistics are presented in Appendix A.

A woman's educational level has been found to be consistently correlated with the probability of her being employed outside the home (Schiffler, 1975), so it is not surprising that women's educational levels showed a similar stability from
1900 to 1960, and a sudden increase since 1960. In 1900 women received 20% of
the bachelor's degrees and 20% of the master's degrees (Ginzberg, 1966). In
1930 they accounted for 40% of the bachelor's, 40% of the master's, and 15% of
the doctorates. Between 1930 and 1960 the number of both men and women in
graduate school increased sharply, and the proportion of graduate degrees awarded
to women decreased to 30% of the master's and 10% of the doctorates. The pro­
portion of bachelor's degrees awarded to women remained stable at 40%, although
it decreased between 1940-50 as the male war veterans entered college and as the
women left college to marry at younger ages (Carnegie Commission, 1973).

By 1970 women comprised 45% of college entrants and 43% of those
receiving bachelor's degrees, and they received 40% of the master's degrees and
13.4% of the doctorates (Carnegie Commission, 1973). Between 1970-75, the
enrollment of women in graduate and professional schools increased 75%; in 1975,
earnly half of the first year graduate and professional students were women (Roark,
1977). The increase in the number of women professionals since 1960 reflects the
relatively large proportion of women enrolled in graduate schools in recent years,
but this increase is also due to the fact that in the years immediately preceeding
1960, women's representation in graduate schools was at its lowest level since
1920.

Although the number of women employed outside the home has increased,
and 90% of American women are employed at some point in their lives (Blai, 1970),
careers are still considered a male domain. Women are sometimes expected to work
to help out with the husband's education or with family expenses (Hewer & Gerhard,
1964). However, the woman who thinks of a career as an important aspect of her life or identity, similar to a man's attitude toward his career, has been viewed as an exception. Women are expected to justify this unusual choice, especially if it appears to take precedence over marital or family involvement or responsibilities. Those who work are expected to limit their choices to traditional female jobs, and most women do so; according to the Carnegie Commission statistics for 1970, 64% of the American women employed in professional and technical fields work as teachers, nurses, and social workers (1973).

Earlier in this century, the major decision confronting a woman who was interested in a career was whether the career was more important than marriage; marriage meant family responsibilities which could not co-exist with a full-time career. Several developments, including more effective birth control measures, a declining birth rate, and improved labor-saving devices in the home have altered the situation. However, the taboo against careers for women has been persistent, and the conflict between the behaviors considered appropriate for women and the behaviors necessary for success in a career has continued to be an insurmountable obstacle for many women. Nevertheless, there are also pressures which encourage women to choose careers, especially in male-dominated fields. As Levin (1969) points out, "Careers—even jobs—are the social criterion of status and role, influence and power" in our culture. Although the emphasis is on the man's career, it is also possible for a woman to establish her identity and position through her own career. And although women are socialized to choose traditional female occupations, it is the pioneer professions that confer the most status (Clark
& Seals, 1975; Plost & Rosen, 1974).

Why do some women decide to confront the traditional female stereotype by becoming career women, and why do some go one step further by choosing traditionally male fields? Despite the persistence of the traditional view of woman as homemaker, a consistent minority of women have chosen to pursue careers, and in the last 15 years the number of these women has grown substantially. How have these working women differed from those content to devote the majority of their energies to homemaking activities, and are the differences between employed women and full-time homemakers the same today as they were in the 1950's and early 1960's, when career women were even rarer? The increase in the number of working women is most dramatic among married women under 35 years old (Waldman, 1967); do these women differ from the typical career women of the 1940's, 1950's and 1960's on other dimensions as well? These questions can be answered through the replication of earlier studies on a broader scale, examining various goals and attitudes of women from different backgrounds and with different personal characteristics. Such research would also serve to clarify the sometimes conflicting results of the research literature, and might also help determine the reasons for the recent changes in the role of the American woman.
CHAPTER II
REVIEW OF THE LITERATURE

The emphasis on women's careers has fluctuated somewhat during this century, but the late 1960's and the 1970's have been a period of more dramatic change. The reasons for this have not been clear, although one obvious potential source of influence has been the rebirth of the American feminist movement. Social scientists have speculated about the reasons for the new feminist movement itself, and its relationship to the civil rights activism of the 1960's has been compared to the relationship between the Abolition Movement and the first feminist movement in the nineteenth century (Mitchell, 1971). Furthermore, the increasing popularity of questioning religious assumptions and the development of the Anti-war Movement in the 1960's may have stimulated an assumption-questioning atmosphere. As men and women questioned traditional beliefs and attitudes in certain areas, and became more concerned with equal rights and opportunities, a rebirth of interest in egalitarian male-female relationships may have been fostered.

Nontraditional Goals and Attitudes

Whether or not assumption-questioning in one sphere tends to foster assumption-questioning in other spheres has yet to be proven. However, there is evidence that questioning assumptions about one aspect of the traditional female role fosters assumption-questioning in similar areas. In studies conducted in the
last 20 years, college women who expected to devote a substantial portion of their adult lives to their careers were more likely to aspire to nontraditional careers than were women with weaker career commitment (Almquist, 1974; Hoyt & Kennedy, 1958; Munley, 1974; Tangri, 1972; Vetter & Lewis, 1964; Wagman, 1966; White, 1959, Zissis, 1964). Women who were career-oriented also tended to express less traditional attitudes towards women's role in the family and the community (Angrist, 1970; Farley, 1970; Goldschmidt, Gergen, Quigley, & Gergen, 1974; Lipman-Blumen, 1972; Tipton, 1976). Similarly, women with nontraditional career goals tended to express more feminist attitudes toward the female role than women with traditional goals (Karman, 1973). Since higher educational levels are necessary for many pioneer careers, it is not surprising that educational aspirations are associated with pioneer career goals (Moore & Veres, 1975). In addition, higher educational goals are also associated with career commitment (Lozoff, 1968; Riley, Johnson & Bookcock, 1963; Zissis, 1964) and feminism (Lipman-Blumen, 1972).

Since the research literature indicates that women's career goals and attitudes towards the female role are related to one another, it appears that these variables can be studied together in order to explore more thoroughly the dynamics involved in the development of women who challenge the traditional female role. The relationships between these variables and demographic and family background and personal characteristics have been studied for two decades; however, few conclusions can be drawn from the literature. The results were often contradictory, and the generalizability of the research has been greatly limited by the focus on high school students and first year college students (often in a psychology or
sociology class at a single college), the lack of racial comparisons, the diversity of measurements, and the different criteria used. In addition, the dramatic changes in women's goals and attitudes in the last decade has made it increasingly difficult to compare results of studies conducted several years apart.

Self-Concept and Self-Esteem

Some of the most consistent findings in the literature concern a nontraditional self-concept in terms of conventionality and religiousness. Women who are unconventional tend to be more career-oriented (Birnbaum, 1975; Rand, 1968), role innovative (O'Leary & Braun, 1972; Tangri, 1972), and feminist (Joesting, 1971). Similarly, women who are less religious tend to be more career-oriented (Cook, 1968; Wagman, 1966), role innovative (McKenzie, 1972), and feminist (Dempewolff, 1973; Tavris, 1973).

Self-esteem is a variable which one might expect to be associated with nontraditional career goals and attitudes, since the traditional "feminine" personality is devalued in our culture (Broverman et al., 1972) as are traditional careers (Clark & Seals, 1975; Plost & Rosen, 1974). There is evidence that career women have higher self-esteem than full-time homemakers (Birnbaum, 1975), but this does not address the question of whether women who decide to pursue nontraditional career goals have higher self-esteem than their classmates. Almquist (1974) found that college women with pioneer goals had higher self-esteem than women with more traditional career goals; however, two studies found no differences in self-esteem between college women with traditional or pioneer career goals (McKenzie, 1972; Resnick, Fauble, & Osipow, 1970).
The relationships between self-esteem and career commitment and feminism are supported by the results of several studies which used specific measures of self-esteem related to intelligence or attractiveness (Rand, 1968; Stoloff, 1973). In contrast, studies using measures of general self-esteem showed conflicting results, possibly related to cultural differences (Katz, 1969). Since self-esteem tends to be lower for females than for males (Crandall, 1969), its relationship to nontraditional goals and attitudes deserves further attention.

Physical appearance is an area that has been virtually ignored, despite the cultural emphasis on the importance of a woman's appearance. Social scientists have completely ignored women's size, although research has demonstrated that perceived height is related to status for men (Rump & Delin, 1973). One might expect that women who perceive themselves as taller than most people (male and female) would be more likely to challenge the traditional female role than women who perceive themselves as shorter than most people; as a result of their height, tall women would probably not fit the "feminine" stereotype as easily as other women and would be perceived as more competent. Similarly, self-described strength would be expected to influence a woman's self-image and the perceptions that others have of her as a woman. Women who are strong by "feminine" standards might also be treated as more competent than more delicate women, and perceive themselves as more capable of success in "masculine" tasks or careers. Nontraditional self-concept in terms of both height and strength may therefore be important variables to evaluate vis-a-vis women's life goals and sex-role attitudes.
Demographic and Family Background

The most consistent findings in the literature concern race, mother's employment status, and birth order and family size. There is substantial evidence that college-educated black women aspire to higher degrees (Baird, Clark, & Hartnett, 1973; Wilson, 1969), are more career-oriented (Fichter, 1963; Turner & McCaffrey, 1974; Wilson, 1969), and are more likely to become lawyers and physicians (Epstein, 1973) than college-educated white women. In a study which evaluated both preferred and expected career commitment, black women were more likely to prefer less career involvement than they expected, whereas the opposite was true for white women (Turner & McCaffrey, 1974). The literature strongly demonstrates that women with working mothers are more career-oriented (Almquist & Angrist, 1970; Erickson & Nordin, 1974; Katz, 1969; Veres & Moore, 1975; Zissis, 1964) and express less traditional views of the female role (Broverman et al., 1972; Regan, 1973). However, a recent study (Almquist, 1974) suggests that this situation may be changing. First born women and women from small families have been more likely to attain graduate degrees (Astin, 1969; Carlson, 1970) and to aspire to nontraditional careers (Cartright, 1972; Edwards & Klemmack, 1973). There is some evidence that women without brothers are more likely to pursue pioneer careers (Hennig, 1974).

Racial differences in terms of feminism have not been studied, although a pilot study found that white college women are more feminist on the Spence and Helmreich Attitudes Toward Women Scale (Zuckerman, 1977). The influence
of the mother's employment status on the daughter's educational and career goals is not clear, although there is some evidence that pioneer mothers tend to have pioneer daughters (Tangri, 1972). Fathers with nontraditional careers may have a similar impact since they would also serve as a model for nonstereotypic career choices; however, fathers' nontraditional careers have not been studied. Similarly, one would expect that parents with nontraditional careers would have daughters with nontraditional sex-role attitudes, although there is no research in this area.

There is substantial evidence that socio-economic status (SES), as measured by family income or parents' education, is unrelated to college women's career commitment (Almquist & Angrist, 1971; Goldsen, Rosenberg, Williamson, & Suchman, 1960; Kosa, Rachiele, & Sommer, 1962; Siegel & Curtis, 1963). However, higher SES was related to career commitment for high school students in one study (Astin, 1968a), possibly because of the wider SES range among high school students. Higher SES tended to predict more nontraditional career goals for college women (Almquist, 1974; Cartwright, 1972; Karman, 1973; Veres & Moore, 1975; Werts, 1965) and the results were inconsistent for feminism (Dempewolff, 1974; Goldschmidt et al., 1974; Lipman-Blumen, 1972; Peterson, 1975). The range of SES in most college samples is narrow, and it appears likely that a sample of college women with a broad range of SES would result in significant relationships between SES and career goals and attitudes. There are no studies of the relationship between SES and educational goals, although doctoral students were found to have more highly educated parents than women who did not go beyond a bachelor's degree in one study.
Religious upbringing and ethnic group membership are two variables which have not been evaluated in terms of their relationships to women's life goals and sex-role attitudes. Since many of the college women with nontraditional goals and attitudes considered themselves atheists or agnostics, it is possible that the impact of religious upbringing differs from the impact of religious affiliation. However, if college women with Catholic, Jewish, and Protestant upbringing are equally likely to label themselves as nonaffiliated, the results for religious upbringing will be similar to those for religious affiliation. The impact of ethnic group affiliation can not be predicted since there are no comparable data for college women. However, one would expect that ethnic group affiliation would be a significant predictor of women's goals and attitudes, especially since ethnicity is related to religious upbringing.

Personal Characteristics

Personal traits which have been studied in terms of women's goals and sex-role attitudes include religious affiliation, marital status, age, intelligence, and college class. There is evidence that Jewish women are most likely to aspire to pioneer careers and that Catholic women are least likely to do so (Karman, 1973), and that Jewish women and atheists are more feminist than other women (Dempewolff, 1974; Tavris, 1973). Lipman-Blumen (1972) found that converts are also more feminist than other women; however, this may be because many of the "converts" in her sample had converted from an organized religion to atheism. The literature also suggests that career-oriented women and women with graduate
degree aspirations and pioneer career goals tend to marry at a later age or remain single (Almquist & Angrist, 1970; Astin, 1969; Katz, 1969) and have fewer children (Astin, 1969; Lozoff, 1970). There is some evidence that women with pioneer career goals and feminist attitudes are more intelligent than their classmates (Houts & Entwisle, 1969; Joesting, 1971); in contrast, the results regarding the relationships between intelligence and career goals and feminism are inconsistent (Zuckerman, 1977). There are few studies evaluating age or college class differences; however, Angrist (1970) found that college women's career goals become increasingly traditional as their education progresses. Older women returning to school have not been systematically studied, but one would expect that their return to school reflects a relatively strong career commitment. There is no reason to predict that they would differ from other college women in terms of career choice, educational goals, or sex-role attitudes.

Height and weight have not been studied in terms of women's goals or sex-role attitudes; however, these two variables would presumably have a similar impact to self-described height and strength.

The final variables pertaining to personal characteristics which are considered are choice of college and major field of study. Although there are no studies comparing the goals and sex-role attitudes of women in different types of colleges, it is usually assumed that women in midwestern and southern schools are more traditional than women enrolled in East Coast or West Coast schools, and that women at state universities are more traditional than women at private universities since they represent lower SES families. The increased
popularity of technical colleges presents new questions about the differences between technical college women and university women; although the technical colleges are vocationally-oriented, it is often assumed that the women students are not career-oriented, but are instead interested in working only until they marry and raise families. Similarly, one expects that women with traditional college majors are interested in traditional careers, are less career-oriented than other women, and will express more traditional sex-role attitudes.

Longitudinal and Retrospective Research

There have been few longitudinal studies concerned with the development of women's educational and career goals and career commitment, and no studies of the development of nontraditional sex-role attitudes over time. A few studies of career goal stability have evaluated high school and/or college women for 4-5 years (Almquist & Angrist, 1970, 1971; Astin, 1968a, 1968b). These studies suggest that interests, intelligence, and abilities in high school are predictive of particular career choices in college; however, the comparisons between students aspiring to traditional and nontraditional career goals and life styles, those aspiring to associate's, bachelor's or graduate degrees, or between feminists and nonfeminists have not been evaluated. Of course, historical changes in cultural attitudes influence goal and attitude development, so one would expect most women's goals and attitudes to change over time. Nevertheless, longitudinal or retrospective data can provide insights into the development of nontraditional goals and attitudes more accurately than other research techniques.
Overview

In the present study, the focus is on the variables associated with challenging the cultural assumptions about the female role: educational aspirations, career commitment, nontraditional career goals, and feminism (referred to as the "major variables"). The study was designed to evaluate the extent to which these variables are correlated with one another, and with the family background variables and self-concept and personal characteristics discussed earlier in this chapter. By replicating and expanding on earlier research, the present study aims to determine whether previous research findings concerning the predictive power of race, mothers' employment status, birth order and family size, conformity and religiousness vis-a-vis nontraditional goals and attitudes have been maintained as these nontraditional goals and attitudes have become more common. It will also examine SES more thoroughly than previous studies, since technical college women are included in the sample, and will evaluate religious affiliation, self-concept and self-esteem, age, marital status, college class, and intelligence; these variables have been studied but the results have been inconsistent. Variables which have not usually been studied, including religious upbringing, ethnic affiliation, size, strength, type of college, and college major, are also evaluated. The inclusion of many variables should help to clarify how the variables are related to one another and will make it possible to control for the confounding influence of related variables. The retrospective data should provide further information and clarification of the processes involved. Students
nearing the completion of a degree were chosen since their plans are more predictive of their actual choices.
CHAPTER 3

METHOD

Sample

The sample included 541 female students enrolled at two two-year technical colleges in Columbus, Ohio; two private universities (in Ohio and Massachusetts); and two state universities (in Ohio and Massachusetts). The students were volunteers from classes which were randomly selected from lists of courses in accounting, biology, economics, education, English, journalism, medical technology, nursing, secretarial science, and social science fields. In the universities, classes with primarily juniors and seniors were used.

The sample was analyzed in terms of three major groups: white women between the ages of 18-25 (N=455); black women between the ages of 18-25 (N=40); and white women who were 26 years old or older (N=46).

Questionnaire

The questionnaire, which took 15-20 minutes to complete, was designed to elicit information on educational and career goals; expected and preferred degrees of career commitment; self-concept in terms of height, strength, attractiveness, conformity, intelligence, and religiousness; demographic and family background; height; weight; college class; major; and cumulative grade point average (GPA). The ten-item Rosenberg Self-Esteem Scale and the 25-item...
Spence and Helmreich Attitudes Toward Women Scale (AWS) were also included.¹

The questionnaires were identical for all students, except for minor modifications necessary for the different schools. The questionnaire, instruction sheet, and explanation of these modifications are shown in Appendices B, C, and D.

Interest Inventory and Achievement Test

The American College Testing (ACT) achievement scores and interest inventory, which were completed in the eleventh or twelfth grade, were evaluated for 36 students enrolled at the state university in Ohio for whom this information was available and who permitted access. The achievement scores are in the areas of English, math, social science, and natural science; a cumulative score was also tabulated. The interest inventory included questions about expected college major and career choice, extracurricular activities, parents' income, need for financial aid for college, and honors and advanced placement courses. The ACT inventory questions are presented in Appendix E.

Procedure

Questionnaires were distributed by the instructors during class time in 40 classes, and distributed in students' mailboxes to randomly selected nursing students at the state university in Ohio since distribution in nursing classes was prohibited at that school. In 35 of the classes, students were given adequate time to complete the questionnaires, and the response rate was 98%. In the

¹The test-retest correlational coefficient of the Rosenberg Scale is .85 (Silber & Tippett, 1965). For the AWS, Cronbach alphas are .91 for both sexes (Spence, 1975).
five classes where the students completed the questionnaires after class, the
response rate ranged between 50-90%; and the response rate for the students who
received the questionnaires in their mailboxes was 45%. Of the respondents
enrolled at the state university in Ohio, 54% permitted access to their ACT
scores and inventories, and records were available for 72% of these women.

Although the questionnaires were distributed to all class members, those
completed by men, Oriental women, nonwhite women who were 26 years old or
older, or first-year students and graduate students at the universities were
excluded from analysis.

**Hypotheses**

The majority of the hypotheses are supported by the research literature to
some extent; therefore, confirmation of the hypotheses would indicate that the
variables which predicted nontraditional goals and attitudes in the studies of
college women prior to the mid-1970's are still predictive of nontraditional goals
and attitudes among today's black, white, and older technical college and univer-
sity women.2

The hypotheses to be examined are as follows:

**Major Variables:**

1) Black women are more nontraditional in terms of educational goals,

2The exceptions are Hypotheses #6, 13, 17, 19 and 23; the bases for
these hypotheses are discussed in Chapter 2. The sections of Hypothesis #10
regarding fathers' careers and the relationships between feminism and parents'
occupations, and Hypothesis #12 are based on research results in related areas.
career goals, and career commitment and more traditional in terms of AWS scores, compared with white women in the same age group (18-25). The white women tend to prefer greater career commitment than they expect, whereas the opposite is true for black women.

2) The white college women over 26 years old are more career-oriented than the younger white women.

3) Women are more nontraditional in terms of the major variables than the college women in previous studies (i.e., Baird et al., 1973; Erickson & Nordin, 1974; Hoffman & Nye, 1974; Karman, 1973; Spence, Helmreich, & Stapp, 1975).

4) There are significant positive correlations between the major variables of career commitment, educational aspirations, pioneer or androgynous career goals, and feminism as measured by the AWS.

Self-Concept and Self-Esteem:

5) A nontraditional self-concept in terms of unconventionality and non-religiousness predicts nontraditional responses to the major variables.

6) A nontraditional physical self-concept in terms of height and strength predicts nontraditional responses to the major variables.

7) A positive self-concept in terms of attractiveness, intelligence, and general self-esteem predicts nontraditional responses to the major variables.

Family Background:

8) Mothers' and fathers' educational attainment predict nontraditional responses in terms of educational goals, career commitment, career goals, and
9) Mothers' employment predicts greater career commitment and feminism than homemaker status, and mothers' full-time employment predicts greater career commitment and feminism than part-time employment.

10) Mothers' or fathers' androgynous or pioneer careers predict daughters' nontraditional career goals and feminism.

11) First born status, only child status, and lack of brothers predict higher educational goals and nontraditional career goals. Fewer siblings predicts higher educational goals.

12) Jewish upbringing predicts nontraditional responses to the major variables and Catholic upbringing predicts traditional responses.

13) Ethnic group membership is associated with differences in terms of the major variables. (This variable has not been studied previously; therefore, directional hypotheses are not possible).

**Personal Characteristics:**

14) Single status predicts nontraditional responses to the major variables, whereas motherhood predicts traditional responses.

15) For the women between 18-25, age and college class predict traditional responses to the major variables.

---

3The hypothesized relationship between SES and career commitment is contrary to the research results for college women, and is based on the assumption that the wider range of SES in the present sample will result in significant differences between career-oriented and homemaking-oriented women.
16) Jewish affiliation, nonaffiliation with organized religions, and religious conversion predict nontraditional responses to the major variables. Catholic affiliation predicts traditional responses.

17) Larger size, in terms of height and weight, predicts nontraditional responses to the major variables.

18) Type of college is associated with the major variables. Massachusetts women (vs. Ohio women), women enrolled in the private universities (vs. state universities) and women enrolled in the universities (vs. technical colleges) are more nontraditional in terms of the major variables.

19) Nontraditional majors predict nontraditional responses to the major variables.

20) Academic aptitude, as measured by GPA, predict nontraditional responses to the major variables.

Retrospective Data:

21) The women express more traditional goals in college than they did in high school.

22) High school goals significantly predict college goals.

23) High school educational and career goals are predicted by the same self-concept and family background variables as are college educational and career goals.

24) Academic aptitude, as measured by ACT achievement scores and advanced courses, predicts nontraditional responses to the major variables.
25) Nontraditional interests and accomplishments in high school predict nontraditional responses to the major variables in college.

Data Analysis

The principal analyses used are stepwise multiple regression analyses, which will assess the extent to which the self-concept, family background, and personal characteristic variables predict responses to the major variables for each sample. Correlations, t tests, MANOVAs, ANOVAs, and chi-square comparisons are used to compare various subsamples in terms of the major variables. Only those results which are significant at the .05 level are reported.

Canonical correlations will provide additional analyses for the sample of white women between 18-25. These analyses will focus on the relationships between self-concept, family background, and personal characteristics and the major variables.
CHAPTER 4

RESULTS

Major Variables

The responses to the questions concerned with educational and career goals, preferred and expected career commitment and full-time employment, and feminism indicate that the majority of the women aspire to graduate degrees, prefer and expect full-time careers during most of their adult lives, and express nontraditional sex-role attitudes. Approximately half of the women plan nontraditional careers. These goals are presented in Tables 1 and 2, and goals and attitudes are discussed below.

MANOVAs were performed to compare the two white samples and the black and white samples of women between 18-25 years old in terms of educational and career goals, preferred and expected career commitment, and feminism.\(^1\) The younger and older white samples do not differ significantly, whereas the young black and white samples are significantly different (F=3.50, p < .005). ANOVAs performed for each major variable indicate that the racial difference is primarily caused by higher AWS scores for the white women than the black women (F=5.04, p < .05).

\(^1\) Full-time employment measures are analyzed separately.
<table>
<thead>
<tr>
<th></th>
<th>Certificate</th>
<th>Associate Degree</th>
<th>Bachelor's</th>
<th>Master's</th>
<th>PhD/Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>White women, Ages 18-25 (N=450)</strong></td>
<td>5.8%</td>
<td>11.3%</td>
<td>27.8%</td>
<td>41.6%</td>
<td>13.6%</td>
</tr>
<tr>
<td><strong>Black women, Ages 18-25 (N=39)</strong></td>
<td>0</td>
<td>20.5%</td>
<td>15.4%</td>
<td>43.6%</td>
<td>20.5%</td>
</tr>
<tr>
<td><strong>White women, Over 26 years (N=45)</strong></td>
<td>2.2%</td>
<td>24.4%</td>
<td>33.3%</td>
<td>28.9%</td>
<td>11.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Traditional</th>
<th>Androgynous</th>
<th>Pioneer</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>White women, Ages 18-25 (N=422)</strong></td>
<td>54.0%</td>
<td>22.3%</td>
<td>23.7%</td>
</tr>
<tr>
<td><strong>Black women, Ages 18-25 (N=37)</strong></td>
<td>37.8%</td>
<td>32.4%</td>
<td>29.7%</td>
</tr>
<tr>
<td><strong>White women, Over 26 years (N=44)</strong></td>
<td>65.9%</td>
<td>11.4%</td>
<td>22.8%</td>
</tr>
</tbody>
</table>
### Table 2
College Women’s Career Commitment and Full-time Employment Plans

#### Preferred and Expected Career Commitment

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>White women, Ages 18-25 (N=422)</td>
<td>.4%</td>
<td>12.6%</td>
<td>15.3%</td>
<td>51.1%</td>
<td>15.0%</td>
</tr>
<tr>
<td>Black women, Ages 18-25 (N=38)</td>
<td>0</td>
<td>5.0%</td>
<td>12.5%</td>
<td>65.0%</td>
<td>7.5%</td>
</tr>
<tr>
<td>White women, Over 26 (N=45)</td>
<td>2.2%</td>
<td>6.7%</td>
<td>17.8%</td>
<td>46.7%</td>
<td>20.0%</td>
</tr>
</tbody>
</table>

#### Preferred and Expected Full-time Employment

<table>
<thead>
<tr>
<th>Preferred:</th>
<th>Continuous</th>
<th>Return When Children Under 3 years</th>
<th>Return When Children Under 6 years</th>
<th>Return With Primary School Children</th>
<th>Return With Teenagers</th>
<th>Return with Children 18 &amp; Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>White women, Ages 18-25 (N=277)</td>
<td>28.9%</td>
<td>6.1%</td>
<td>41.5%</td>
<td>20.2%</td>
<td>2.2%</td>
<td>1.1%</td>
</tr>
<tr>
<td>Black women, Ages 18-25 (N=29)</td>
<td>41.4%</td>
<td>17.2%</td>
<td>34.5%</td>
<td>2.6%</td>
<td>2.6%</td>
<td>0</td>
</tr>
<tr>
<td>White women, Over 26 (N=26)</td>
<td>61.5%</td>
<td>7.7%</td>
<td>26.9%</td>
<td>3.8%</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Expected:            

<table>
<thead>
<tr>
<th>Expected:</th>
<th>Continuous</th>
<th>Return When Children Under 3 years</th>
<th>Return When Children Under 6 years</th>
<th>Return With Primary School Children</th>
<th>Return With Teenagers</th>
<th>Return with Children 18 &amp; Older</th>
</tr>
</thead>
<tbody>
<tr>
<td>White women, Ages 18-25 (N=249)</td>
<td>21.7%</td>
<td>6.8%</td>
<td>47.0%</td>
<td>20.1%</td>
<td>3.2%</td>
<td>1.2%</td>
</tr>
<tr>
<td>Black women, Ages 18-25 (N=24)</td>
<td>25.0%</td>
<td>25.0%</td>
<td>41.7%</td>
<td>4.2%</td>
<td>4.2%</td>
<td>0</td>
</tr>
<tr>
<td>White women, Over 26 (N=26)</td>
<td>57.7%</td>
<td>7.7%</td>
<td>26.9%</td>
<td>3.8%</td>
<td>3.8%</td>
<td>0</td>
</tr>
</tbody>
</table>
Educational goals. For the black and white women between 18-25 years old, the modal expected degree is the master's, and a substantial minority plan to attain doctorates or professional degrees. The 73% of the university women who plan to attain graduate degrees is comparable to the 76% of college seniors planning to attend graduate school in a national sample in 1971 (Baird et al., 1973).

For the white women over 26, the modal expected degree is the bachelor's, although 29% plan to attain master's degrees and 11% plan to attain doctorates or professional degrees.

Career goals. Although the majority of the white women under 26 plan traditional careers, 24% plan pioneer careers and 22% plan androgynous careers. In the sample of black women, 30% plan pioneer careers and 32% plan androgynous careers. In the sample of white women over 26, approximately two-thirds aspire to traditional careers.

Since the samples were drawn from randomly selected classes representing selected fields of study, rather than classes which are proportionally representative of the women in each major, the reported career goals may not accurately represent the career goals of all the female students in these colleges. However, the majority of the women in these samples are enrolled in liberal arts or traditional curricula, not in pioneer fields. Therefore, the data suggest that, despite fairly traditional majors, college women are aspiring to relatively nontraditional careers. When comparisons are made with previous studies, it appears that college women have become increasingly nontraditional; for example, only 6% of the college women
reported pioneer career goals in a study of upperclasswomen at 38 colleges and universities in 1968-69 (Karman, 1973). Combining traditional and androgynous career goals into one category in order to make the present study comparable to the Karman study, the present sample is significantly more likely to aspire to pioneer careers rather than traditional or androgynous careers than are the women in Karman's sample ($\chi^2=138.81$, $p<.0001$).²

Career commitment. Preferred and expected career commitment are also strong in the present sample. The proportion of women that report preferring to become full-time homemakers after marriage or childbearing ranges between 5-13% for the three female samples, and the proportion of women reporting that they expect to become full-time homemakers after marriage or childbearing ranges between 10-16%. A substantial minority of women report that they prefer or expect to remain single and/or childless; 18-27% of the women in the three samples prefer one of these choices and 13-31% expect one of these choices. Overall, 72% of the younger white women, 83% of the black women, and 73% of the older white women prefer full-time careers. The present samples are significantly more likely to prefer a future without a husband and/or children than was a sample of Kansas State women in 1973 ($\chi^2=15.34$, $p<.001$) (Erickson & Nordin, 1974).

²All $\chi^2$ comparisons in this study are 2 x 2 comparisons, with one degree of freedom.
Of the women planning to combine a full-time career with family responsibilities, 29% of the younger white women, 41% of the black women, and 62% of the older white women report that they would prefer to work continuously, rather than take time off from employment for full-time homemaking. Similarly, 22% of the younger white women, 25% of the black women, and 58% of the older white women expect to be able to work continuously. Of the women planning full-time careers with time off for full-time homemaking, the majority of the women in all three groups prefer and expect to return to their careers when their youngest children are infants or pre-school age. The comparisons between the preferred and expected full-time employment measures for the three samples were not included in the MANOVAs since only those women planning full-time careers responded to these questions. Using $\chi^2$ comparisons, the racial differences are not statistically significant; however, the older white women are more likely to prefer and expect to work continuously or return to work when their youngest children are under three years of age than are the younger white women (Prefer: $\chi^2=10.41$, $p < .001$; Expect: $\chi^2=13.06$, $p < .001$).

Since the majority of studies measuring career commitment did not measure the specific age of the children when the mother planned to return to work, it is difficult to compare the results of the present study with previous findings. However, the proportion of women who prefer or expect to work while their children are under six years of age is significantly greater than the proportion of women who presently do so. Of the women in this study who plan to become mothers, 68% of the younger white women and 86% of the black women report that they would prefer
to work with children under six, and 28% of the white women and 47% of the nonwhite women in the work force in 1971 actually did so (Hoffman & Nye, 1974). These differences are statistically significant for the white women ($\chi^2=52.42, p<.0001$) and for the black women ($\chi^2=14.32, p<.001$). In terms of expectations, 65% of the white women who expect to become mothers and 71% of the black women expect to work while their children are under six. This is significantly greater than the proportion of women who actually did so in 1971 for the white sample ($\chi^2=39.14, p<.0001$), and for the black sample ($\chi^2=4.76, p<.05$).

The statistics for preferred and expected career commitment and full-time employment presented in Table 2 demonstrate a very similar pattern for black and white college women. Moreover, 71% of the women under 26 have identical responses for preferences and expectations, and among those whose preferences and expectations differ, 63% expect less career commitment than they prefer. Black and white women's response patterns do not differ significantly, in contrast to the Turner and McCaffrey study (1974), in which black women expected greater career commitment than they preferred more often than white women.

**Feminism.** Scores on the AWS indicate that the women express relatively feminist attitudes. The mean score is 60.9 for white women ages 18-25, 56.5 for black women, and 61.6 for the white women over 26; the median score for all women is 64. The mean score of 60.6 for all women is significantly higher than the mean of 53.2 at the University of Texas ($t=5.36, p<.001$) in a recent study (Spence, Helmreich, & Stapp, 1975), and slightly more than one standard deviation away from the maximum score of 75. Although the black women in the
present sample are significantly less feminist than the white women, the comparison
with the University of Texas data suggests that the racial difference is small com­
pared to the changes that have occurred among all college women in the last few
years.

**Intercorrelations.** For the younger white women, AWS scores are signifi­
cantly correlated with all of the other major variables. These statistics are
presented in Table 3. Women with higher AWS scores tend to report higher
educational goals, more nontraditional career goals, and greater preferred and
expected career commitment and full-time employment compared with women with
lower AWS scores. In addition, the correlations between preferences and expect­
tations for career commitment and full-time employment are very strong and
significant. The significant correlation between educational goals and nontradi­
tional career goals indicates that the women with nontraditional career aspirations
tend to be interested in the more prestigious fields which require higher educa­
tional attainment. Higher educational goals are also significantly correlated with
greater preferred career commitment, which suggests that the women who prefer
greater career involvement are also more willing to pursue the higher degrees
necessary for more prestigious jobs. Greater preferred career commitment and
full-time employment are correlated with nontraditional career choices, but both
correlations are below .20, and therefore account for less than 4% of the variance.
Educational goals and nontraditional career goals are not significantly correlated
with expected career commitment or full-time employment, and educational goals
and preferred full-time employment are also unrelated.
Table 3
Correlations Between Educational and Career Goals, Career Commitment, Full-time Employment, and Feminism
For Black and White College Women Between 18-25 Years Old

<table>
<thead>
<tr>
<th>Attitudes Toward Women Scale (AWS)</th>
<th>Educational Goals</th>
<th>Career Goals</th>
<th>Preferred Career Commitment</th>
<th>Preferred Full-time Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educational Goals</td>
<td>.43****</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Goals</td>
<td>.23****</td>
<td>.29****</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred Career Commitment</td>
<td>.36****</td>
<td>.20****</td>
<td>.17***</td>
<td></td>
</tr>
<tr>
<td>Preferred Full-time Employment</td>
<td>.24****</td>
<td>.07</td>
<td>.19****</td>
<td></td>
</tr>
<tr>
<td>Expected Career Commitment</td>
<td>.28****</td>
<td>.13</td>
<td>.07</td>
<td>.71****</td>
</tr>
<tr>
<td>Expected Full-time Employment</td>
<td>.25****</td>
<td>.08</td>
<td>.13</td>
<td>.87****</td>
</tr>
</tbody>
</table>

White College Women, Ages 18-25 (N=455)

| Educational Goals | .58**** | .49*** | .10  |
| Career Goals      | .32*    | .49*** | .17  |
| Preferred Commitment | .28* | .08     | -.10 |
| Preferred Employment | .04  | .21     | .17  |
| Expected Commitment | .50***| .15     | .05  | .49***|
| Expected Employment | .14  | .09     | .02  | .64***|

Black College Women, Ages 18-25 (N=40)

- AWS scores range from 0-75; feminist scores are higher
- Career goals are coded as follows: 1=traditional, 2=androgynous, 3=pioneer.
- Career commitment and full-time employment are scored from 1-6; higher scores are more nontraditional.
- *p < .05, 1-tailed
- **p < .01, 1-tailed
- ***p < .005, 1-tailed
- ****p < .001, 1-tailed
The statistics for the black sample which are presented in Table 3 demonstrate that fewer of the intercorrelations between the major variables are significant for the black women. AWS scores are correlated with higher educational goals and expected career commitment at the .01 level, and with nontraditional career goals and preferred career commitment at the .05 level. Nontraditional career goals are strongly correlated with higher educational goals, indicating that black women who aspire to nontraditional careers are especially likely to choose the higher prestige careers which require advanced degrees. The correlations between preferred and expected career commitment and full-time employment are also significant.

There are few significant correlations between the major variables for the older white women, as is shown in Table 4. Feminism is significantly correlated with educational aspirations and preferred career commitment. Preferred and expected career commitment are modestly correlated, and this correlation is significantly weaker than is the case for the younger white women ($z=3.74$, $p < .001$); however, preferred and expected full-time employment are correlated at the .001 level.

**Summary.** Overall, the data indicates that the majority of the women in all three samples express goals and attitudes that have been considered nontraditional for women. Hypothesis #1 receives limited support: black women are less feminist than white women, but the two samples do not differ significantly in terms of the other major variables. Hypothesis #2 also receives mixed support: the older women prefer and expect greater full-time career involvement than the
Table 4
Correlations Between Educational and Career Goals, Career Commitment, Full-time Employment, and Feminism
For White Women Over 26 Years Old

<table>
<thead>
<tr>
<th>Attitudes Toward Women Scale (AWS)</th>
<th>Educational Goals</th>
<th>Career Goals</th>
<th>Preferred Career Commitment</th>
<th>Preferred Full-time Employment</th>
</tr>
</thead>
<tbody>
<tr>
<td>White College Women, Over Age 26 (N=46)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational Goals</td>
<td>.37**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career Goals</td>
<td>.15</td>
<td>.02</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Preferred Career Commitment</td>
<td>.25*</td>
<td>.13</td>
<td>.07</td>
<td></td>
</tr>
<tr>
<td>Preferred Full-time Employment</td>
<td>-.07</td>
<td>-.26</td>
<td>.06</td>
<td></td>
</tr>
<tr>
<td>Expected Career Commitment</td>
<td>.03</td>
<td>.18</td>
<td>-.14</td>
<td>.28*</td>
</tr>
<tr>
<td>Expected Full-time Employment</td>
<td>.08</td>
<td>.07</td>
<td>.15</td>
<td>.63***</td>
</tr>
</tbody>
</table>

*aThe AWS scores range from 0-75; feminist scores are higher

*bCareer goals are coded as follows: 1=traditional, 2=androgynous; 3=pioneer.

*cCareer commitment and full-time employment is scored from 1-6; higher scores are more nontraditional.

*p < .05, 1-tailed
**p < .01, 1-tailed
***p < .005, 1-tailed
younger women, but the two groups do not differ significantly on the other measures of career commitment. Although the educational goals of the university women in all three samples are comparable to the educational goals of seniors in a study conducted in 1971, the technical college and university women in the present study are significantly more nontraditional in terms of career goals, career commitment, and feminism than were college women in previous studies. Therefore, most of the differences included in Hypothesis #3 are supported. The data also demonstrate that nontraditional goals and attitudes in terms of education, careers, and sex-roles are associated with one another, particularly for the young white women, which supports Hypothesis #4. The exceptions to this hypothesis for all three samples tend to be the preferred and expected career commitment and full-time employment measures. The full-time employment measures were intended as a more sensitive measure of career commitment; however, they are so strongly skewed toward the nontraditional pole that they are of minimal usefulness. The fact that the preferred and expected career commitment variables tend to be correlated only with each other and with AWS scores suggests that the educational goals and type of career planned are no longer as strongly related to career commitment as they were in earlier studies. It is also apparent that preferred career commitment tends to be more strongly related to feminism than expected career commitment for the white samples, suggesting that preferences are more closely related to attitudes than are expectations for these groups.
Self-Concepts and Self-Esteem

Self-concepts were assessed in terms of self-described unconventionality, intelligence, attractiveness, religiousness, height and strength. Self-esteem was assessed by the Rosenberg scale. Stepwise regressions were used to determine the predictive power of these self-concept and esteem variables for each of the major variables.

White women, ages 18-25. For the younger white women, nontraditional responses to each of the major variables are significantly predicted by unconventionality, intelligence, and/or nonreligiousness. The statistics are presented in Table 5 and Table 6. Unconventionality and intelligence account for 6% of the variance for women's educational goals and 3% of the variance for nontraditional career goals. Unconventionality, intelligence, and nonreligiousness account for 15% of the variance for AWS and 10% of the variance for preferred career commitment. Unconventionality and nonreligiousness account for 4% of the variance for expected career commitment, and nonreligiousness alone accounts for 7% of the variance for preferred full-time employment and 5% of the variance for expected full-time employment.

Overall, the predictive powers of the self-concept variables are modest for this sample, with preferred career commitment and AWS scores most strongly predicted by self-concept. General self-esteem and self-described attractiveness, height and strength are not significant predictors of any of the major variables.

Black women, ages 18-25. For the black women, preferred career commitment is the only major variable which is significantly predicted by self-concept.
Table 5
Self-Concept Variables Which Predict
College Women's Educational Goals, Career Goals, and Feminism

### Educational Goals

Self-concept measures account for 6% of the variance for this measure for the sample of 439 white women, ages 18-25 ($F=14.67$, $p < .0001$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconventionality</td>
<td>+</td>
<td>8.27</td>
<td>$p &lt; .005$</td>
</tr>
<tr>
<td>Intelligence</td>
<td>+</td>
<td>15.45</td>
<td>$p &lt; .0001$</td>
</tr>
</tbody>
</table>

### Career Goals

Self-concept measures account for 3% of the variance for this measure for the sample of 411 white women, ages 18-25 ($F=6.47$, $p < .0025$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconventionality</td>
<td>+</td>
<td>5.68</td>
<td>$p &lt; .025$</td>
</tr>
<tr>
<td>Intelligence</td>
<td>+</td>
<td>4.66</td>
<td>$p &lt; .05$</td>
</tr>
</tbody>
</table>

### Feminism

Self-concept measures account for 15% of the variance for this measure for the sample of 438 white women, ages 18-25 ($F=24.67$, $p < .0001$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconventionality</td>
<td>+</td>
<td>10.13</td>
<td>$p &lt; .0025$</td>
</tr>
<tr>
<td>Intelligence</td>
<td>+</td>
<td>21.22</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Religiousness</td>
<td>-</td>
<td>31.74</td>
<td>$p &lt; .0001$</td>
</tr>
</tbody>
</table>

Self-concept measures account for 25% of the variance for this measure for the sample of 39 white women over 26 ($F=5.85$, $p < .01$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unconventionality</td>
<td>+</td>
<td>6.04</td>
<td>$p &lt; .025$</td>
</tr>
<tr>
<td>Religiousness</td>
<td>-</td>
<td>4.66</td>
<td>$p &lt; .05$</td>
</tr>
</tbody>
</table>
Table 6
Self-Concept Variables Which Predict College Women's Preferred and Expected Career Commitment and Full-time Employment

<table>
<thead>
<tr>
<th>Preferred Career Commitment</th>
<th>Self-concept measures account for 10% of the variance for this measure for the sample of 441 white women, ages 18-25 (F=15.97, p &lt; .0001).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Beta Value</td>
</tr>
<tr>
<td>Unconventionality</td>
<td>+</td>
</tr>
<tr>
<td>Intelligence</td>
<td>+</td>
</tr>
<tr>
<td>Religiousness</td>
<td>-</td>
</tr>
</tbody>
</table>

One self-concept measure accounts for 12% of the variance for this measure for the sample of 39 black women, ages 18-25.

<table>
<thead>
<tr>
<th>Expected Career Commitment</th>
<th>Self-concept measures account for 4% of the variance for this measure for the sample of 440 white women, ages 18-25 (F=10.02, p &lt; .0001).</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Beta Value</td>
</tr>
<tr>
<td>Unconventionality</td>
<td>+</td>
</tr>
<tr>
<td>Religiousness</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Preferred Full-time Employment</th>
<th>One self-concept measure accounts for 7% of the variance for this measure for the sample of 270 white women, ages 18-25, who prefer full-time careers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Beta Value</td>
</tr>
<tr>
<td>Religiousness</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Expected Full-time Employment</th>
<th>One self-concept measure accounts for 5% of the variance for this measure for the sample of 242 white women, ages 18-25, who expect full-time careers.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source</td>
<td>Beta Value</td>
</tr>
<tr>
<td>Religiousness</td>
<td>-</td>
</tr>
</tbody>
</table>
Nonreligiousness predicts greater preferred career commitment, accounting for 12% of the variance.

White women, over 26 years old. For the older white women, feminism is the only major variable which is significantly predicted by self-concept. Nonreligiousness and unconventionality predict higher AWS scores, accounting for 25% of the variance.

Comparisons of the three samples. The three samples differ in terms of the predictive power of specific self-concept variables; however, nonreligiousness predicts nontraditional responses for all three samples, and unconventionality predicts nontraditional responses for both white samples. Therefore, Hypothesis #5 is supported by most of these analyses. Hypothesis #7 receives limited support: intelligence is the only positive self-concept variable which predicts nontraditional responses, and this predictive relationship is present for the young white sample only. Hypothesis #6, which concerns the predictive power of self-described height and strength, is not supported.

Family Background

The variables which assess family background include mothers' and fathers' educational attainment, mothers' employment status (homemaker vs. employed and full-time vs. part-time employment), the type of career of each parent (traditional, androgynous, or pioneer), family constellation (only child, first born status, last born status, and number, sex, and birth order of siblings), religious upbringing, and ethnic affiliation. The range of responses is presented in Appendix E. Stepwise regressions were used to determine the predictive power of these background
variables for each major variable; the statistics are presented in Table 7.

White women, ages 18-25. For the younger white women, educational goals and AWS scores are significantly predicted by background variables. Non-Protestant religious upbringing and mothers' educational attainment predict higher educational goals, accounting for 7% of the variance; whereas Jewish upbringing and fathers' educational attainment predict higher AWS scores, accounting for 4% of the variance.

A correlational matrix for the subsample of young white women with working mothers indicates that mothers' nontraditional careers are modestly correlated with daughters' non-traditional career goals \( r = .21, p < .001 \).

Family constellation, ethnic group membership, and mothers' employment status are unrelated to the major variables. Fathers' traditional/nontraditional career involvement is also unrelated to the major variables; however, it is important to note that the number of fathers with nontraditional careers is very small.

Black women, ages 18-25. As was the case for the young white women, black women's educational goals and AWS scores are significantly predicted by family background variables. However, for this sample, mothers' educational attainment and last born status predicts higher AWS scores, accounting for 30% of the variance, and mothers' educational attainment predicts higher educational goals, accounting for 26% of the variance.

Religious upbringing and ethnic affiliation were not analyzed for the black sample, since virtually all were Protestant and Afro-American. Only child status, mothers' part-time/full-time employment status, and mothers' and fathers' traditional/
### Family Background Variables Which Predict College Women's Educational Goals and Feminism

#### Educational Goals

Family background variables account for 7% of the variance for this measure for the sample of 421 white women, ages 18-25 ($F=14.79, p < .0001$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' Education</td>
<td>+</td>
<td>19.74</td>
<td>$p &lt; .001$</td>
</tr>
<tr>
<td>Protestant Upbringing</td>
<td>-</td>
<td>11.99</td>
<td>$p &lt; .001$</td>
</tr>
</tbody>
</table>

One family background variable accounts for 26% of the variance for this measure for the sample of 27 black women, ages 18-25.

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' Education</td>
<td>+</td>
<td>8.67</td>
<td>$p &lt; .01$</td>
</tr>
</tbody>
</table>

Family background variables account for 24% of the variance for this measure for the sample of 41 white women over 26 years old ($F=5.98, p < .01$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' Education</td>
<td>+</td>
<td>7.46</td>
<td>$p &lt; .01$</td>
</tr>
<tr>
<td>Protestant Upbringing</td>
<td>-</td>
<td>7.21</td>
<td>$p &lt; .025$</td>
</tr>
</tbody>
</table>

#### Feminism

Family background variables account for 4% of the variance for this measure for the sample of 420 white women, ages 18-25 ($F=8.26, p < .0005$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fathers' Education</td>
<td>+</td>
<td>7.99</td>
<td>$p &lt; .005$</td>
</tr>
<tr>
<td>Jewish Upbringing</td>
<td>+</td>
<td>7.49</td>
<td>$p &lt; .01$</td>
</tr>
</tbody>
</table>

Family background variables account for 30% of the variance for this measure for the sample of 27 black women, ages 18-25 ($F=5.26, p < .025$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' Education</td>
<td>+</td>
<td>5.44</td>
<td>$p &lt; .05$</td>
</tr>
<tr>
<td>Last born status</td>
<td>+</td>
<td>5.43</td>
<td>$p &lt; .05$</td>
</tr>
</tbody>
</table>
Nontraditional career involvement were not evaluated because of the narrow range of responses to these items. Number, sex and birth order of siblings, fathers' educational attainment, and mothers' employment/homemaker status are unrelated to the major variables.

White women, over 26. For the older white women, only educational goals are significantly predicted by family background. Mothers' educational attainment and non-Protestant upbringing predict higher educational goals, accounting for 24% of the variance. None of the women in this sample reported having no religious upbringing and only two reported Jewish upbringing.

Ethnic affiliation, only child status, mothers' part-time/full-time employment status, and mothers' and fathers' traditional/nontraditional career involvement were not included in the regression analyses because of the small range of responses to these items. Family constellation, mothers' employment/homemaker status, and fathers' educational attainment do not significantly predict any major variables.

Comparison of the three samples. In all three samples, mothers' educational attainment predicts daughters' educational goals, supporting Hypothesis #8 to a limited extent. Protestant upbringing is negatively correlated with educational goals for both white samples, which is inconsistent with Hypothesis #12. Fathers' educational attainment and Jewish upbringing predict higher AWS scores for the young white women, which supports Hypotheses #8 and #12 to some extent. Furthermore, mothers' nontraditional careers predict daughters' nontraditional careers for the young white women (which is the only sample large enough to analyze in terms of this relationship), supporting Hypothesis #10. Mothers' educational attainment
predicts AWS scores for the sample of black women, which lends further support to Hypothesis #8. Hypothesis #11 is not supported: family constellation measures do not predict educational goals or career goals; however, last born status predicts higher AWS scores for the black women, which was not included in Hypothesis #11. Hypothesis #9 is not supported for any of the samples: mothers' employment status is apparently unrelated to daughters' career commitment or feminism. Hypothesis #13, which predicts a relationship between ethnic background and the major variables, also receives no support.

Personal Characteristics

The personal characteristics assessed include height, weight, age, college class, major, marital status and parenthood, type of college, GPA, present religious affiliation, and religious conversion. The responses to these items are presented in Appendix F.

White women, ages 18-25. For the sample of younger white women, all of the major variables are significantly predicted by religious affiliation and/or college major. The statistics for the stepwise regressions are presented in Table 8 and Table 9.

Nonaffiliation with Catholic or Protestant religious groups and nontraditional majors predict higher educational goals, accounting for 13% of the variance. Nonaffiliation with any of the organized religions and nontraditional majors predict greater preferred career commitment, accounting for 9% of the variance, and nonaffiliation with the organized religions predicts greater expected career commitment, accounting for 8% of the variance. Nontraditional majors strongly predict
Table 8

Personal Characteristics Which Predict College Women’s
Educational Goals, Career Goals, and Feminism

<table>
<thead>
<tr>
<th>Educational Goals</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal characteristics account for 13% of the variance for this measure for the sample of 438 white women, ages 18-25 (F=20.34, \ p&lt;.0001).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>College major</td>
<td>+</td>
<td>34.17</td>
<td>(p&lt;.0001)</td>
</tr>
<tr>
<td>Protestant affiliation</td>
<td>-</td>
<td>18.95</td>
<td>(p&lt;.0001)</td>
</tr>
<tr>
<td>Catholic affiliation</td>
<td>-</td>
<td>4.40</td>
<td>(p&lt;.05)</td>
</tr>
<tr>
<td>One personal characteristic accounts for 26% of the variance for this measure for the sample of 38 black women, ages 18-25.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nontraditional major</td>
<td>+</td>
<td>12.71</td>
<td>(p&lt;.001)</td>
</tr>
<tr>
<td>One personal characteristic accounts for 18% of the variance for this measure for the sample of 45 white women over 26.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motherhood</td>
<td>-</td>
<td>9.37</td>
<td>(p&lt;.005)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Career Goals</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal characteristic accounts for 45% of the variance for this measure for the sample of 412 white women, ages 18-25.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nontraditional major</td>
<td>+</td>
<td>303.16</td>
<td>(p&lt;.0001)</td>
</tr>
<tr>
<td>One personal characteristic accounts for 21% of the variance for this measure for the sample of 36 black women, ages 18-25.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nontraditional major</td>
<td>+</td>
<td>9.00</td>
<td>(p&lt;.01)</td>
</tr>
<tr>
<td>One personal characteristic accounts for 36% of the variance for this measure for the sample of 43 white women over 26.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nontraditional major</td>
<td>+</td>
<td>22.93</td>
<td>(p&lt;.0001)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Feminism</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal characteristics account for 13% of the variance for this measure for the sample of 437 white women, ages 18-25 (F=21.77, \ p&lt;.0001).</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Protestant affiliation</td>
<td>-</td>
<td>41.30</td>
<td>(p&lt;.0001)</td>
</tr>
<tr>
<td>Catholic affiliation</td>
<td>-</td>
<td>21.67</td>
<td>(p&lt;.0001)</td>
</tr>
<tr>
<td>Nontraditional major</td>
<td>+</td>
<td>14.17</td>
<td>(p&lt;.0005)</td>
</tr>
</tbody>
</table>
Table 9

Personal Characteristics Which Predict College Women's Preferred and Expected Career Commitment and Full-time Employment

**Preferred Career Commitment**

Personal characteristics account for 9% of the variance for this measure for the sample of 440 white women, ages 18-25 ($F=10.61, p < .0001$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protestant affiliation</td>
<td>-</td>
<td>32.66</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Catholic affiliation</td>
<td>-</td>
<td>19.95</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Jewish affiliation</td>
<td>-</td>
<td>4.83</td>
<td>$p &lt; .05$</td>
</tr>
<tr>
<td>College major</td>
<td>+</td>
<td>4.84</td>
<td>$p &lt; .05$</td>
</tr>
</tbody>
</table>

**Expected Career Commitment**

Personal characteristics account for 8% of the variance for this measure for the sample of 440 white women, ages 18-25 ($F=10.12, p < .0001$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protestant affiliation</td>
<td>-</td>
<td>26.36</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Catholic affiliation</td>
<td>-</td>
<td>13.70</td>
<td>$p &lt; .0025$</td>
</tr>
<tr>
<td>Jewish affiliation</td>
<td>-</td>
<td>10.40</td>
<td>$p &lt; .0025$</td>
</tr>
</tbody>
</table>

**Preferred Full-time Employment**

Personal characteristics account for 11% of the variance for this measure for the subsample of 267 white women, ages 18-25, who prefer to pursue full-time careers ($F=10.40, p < .0001$).

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonaffiliation</td>
<td>+</td>
<td>16.76</td>
<td>$p &lt; .0001$</td>
</tr>
<tr>
<td>Protestant affiliation</td>
<td>+</td>
<td>3.94</td>
<td>$p &lt; .05$</td>
</tr>
<tr>
<td>College major</td>
<td>+</td>
<td>13.22</td>
<td>$p &lt; .0005$</td>
</tr>
</tbody>
</table>

**Expected Full-time Employment**

One personal characteristic accounts for 5% of the variance for this measure for the sample of 245 white women, ages 18-25, who expect full-time careers.

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nonaffiliation</td>
<td>+</td>
<td>12.90</td>
<td>$p &lt; .0005$</td>
</tr>
</tbody>
</table>
nontraditional career goals, accounting for 45% of the variance, and nontraditional majors and nonaffiliation with Catholic or Protestant sects predict higher AWS scores, accounting for 13% of the variance.

For the subsample of women who prefer or expect full-time employment, nontraditional majors and nonaffiliation or Protestant affiliation predict greater preferred full-time employment, accounting for 11% of the variance, and nonaffiliation predicts greater expected full-time employment, accounting for 5% of the variance.

In addition to the regression analyses, the students enrolled in the different types of colleges were compared in terms of their responses to the major variables. These comparisons included state university students vs. private university students, Massachusetts university students vs. Ohio university students, and technical college students vs. university students. Only the comparisons between the students in the technical colleges and universities yield significant results. The young white women enrolled in the technical colleges are less likely to aspire to graduate degrees, report more traditional career goals, and express less feminist attitudes on the AWS compared to the young white women enrolled in the universities. There are no significant differences in preferred or expected career commitment or full-time employment. These statistical comparisons are presented in Table 10.

Since the different schools use different grading criteria, students in each school were evaluated separately in terms of the correlations between GPA and the major variables. Of the seven major variables, educational goals is the only
### Table 10
Comparisons of Technical College and University Women

<table>
<thead>
<tr>
<th></th>
<th>Technical College Women</th>
<th>University Women</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Educational Goals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bachelor's Degree or Less</td>
<td>114 (89%)</td>
<td>86 (27%)</td>
</tr>
<tr>
<td>Graduate Degree</td>
<td>14 (11%)</td>
<td>236 (73%)</td>
</tr>
<tr>
<td>$x^2=141.70, p &lt; .0001$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Career Goals</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Traditional</td>
<td>74 (63%)</td>
<td>151 (50%)</td>
</tr>
<tr>
<td>Androgynous/Pioneer</td>
<td>34 (37%)</td>
<td>149 (50%)</td>
</tr>
<tr>
<td>$x^2=4.35, p &lt; .05$</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preferred Career Commitment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time employment or full-time career before marriage or childbearing</td>
<td>45 (33%)</td>
<td>85 (26%)</td>
</tr>
<tr>
<td>Full-time career</td>
<td>84 (67%)</td>
<td>237 (74%)</td>
</tr>
<tr>
<td>$x^2$: Not Significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Preferred Full-time Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career with children under age 3</td>
<td>28 (41%)</td>
<td>69 (33%)</td>
</tr>
<tr>
<td>Career with children over age 3</td>
<td>40 (59%)</td>
<td>140 (67%)</td>
</tr>
<tr>
<td>$x^2$: Not Significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expected Career Commitment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Part-time employment or full-time career before marriage or childbearing</td>
<td>85 (67%)</td>
<td>223 (70%)</td>
</tr>
<tr>
<td>Full-time career</td>
<td>42 (33%)</td>
<td>95 (30%)</td>
</tr>
<tr>
<td>$x^2$: Not Significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Expected Full-time Employment</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Career with children under age 3</td>
<td>21 (33%)</td>
<td>50 (27%)</td>
</tr>
<tr>
<td>Career with children over age 3</td>
<td>42 (67%)</td>
<td>136 (73%)</td>
</tr>
<tr>
<td>$x^2$: Not significant</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Attitude Toward Women Scale</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score$^a$</td>
<td>$\bar{m}=55.40$</td>
<td>$\bar{m}=63.14$</td>
</tr>
<tr>
<td>$t=6.59, p &lt; .01$</td>
<td>$\text{S.D.}=12.05$</td>
<td>$\text{S.D.}=9.05$</td>
</tr>
</tbody>
</table>

$^a$Possible scores range from 0-75.
item which is significantly correlated with GPA for at least half of the samples. Higher grades are positively correlated with educational goals at four of the schools: one technical college ($r_{(44)} = .43, p < .01$), the private college in Ohio ($r_{(92)} = .32, p < .01$), the state university in Ohio ($r_{(91)} = .33, p < .001$), and the state university in Massachusetts ($r_{(65)} = .26, p < .05$).

Height, weight, age, college class, religious conversion, and marital status or parenthood are not significant predictors of any of the major variables for this sample.

**Black women, ages 18-25.** For the sample of black women, nontraditional college major is the only significant predictor of any of the major variables. Nontraditional majors predict higher educational goals, accounting for 26% of the variance, and more nontraditional career goals, accounting for 21% of the variance. These statistics are presented in Table 8.

The black sample is too small to evaluate differences in college affiliation, or to evaluate separate correlations between GPA and the major variables for each school. Religious affiliation, marital status, and parenthood were not evaluated in the regression analyses, since virtually all of the black women are single and Protestant. Height, weight, age, and college class are not significant predictors of any of the major variables for this sample.

**White women, over 26.** For the sample of older white women, motherhood and nontraditional majors significantly predict educational goals and career goals. Motherhood inhibits educational goals, accounting for 18% of the variance, whereas nontraditional majors predict nontraditional career goals, accounting for 36% of
the variance. These statistics are presented in Table 8.

This sample is too small to evaluate according to college affiliation, or to evaluate GPA correlations. Age differences could not be determined because many of the women did not list their exact ages. Religious affiliation, marital status, height, weight, and college class are not significant predictors of any of the major variables for this sample.

Comparison of the three samples. In all three samples, college major is a strongly significant predictor of career goals. In both samples of women between 18-25, college major also predicts educational goals; the nonpredictive relationship between majors and educational goals for the older sample probably reflects the fact that career goals and educational goals are not correlated for this sample. In the sample of young white women, nontraditional majors also predict greater preferred career commitment and full-time employment and higher AWS scores. Overall, Hypothesis #19 is strongly supported for the young white sample, and receives less consistent support from the data for the other two samples.

Hypothesis #16, the predictive powers of Jewish affiliation and nonaffiliation with organized religious groups, is supported to a limited extent by the young white sample; the portion of the hypothesis concerning religious conversion is not supported. The aspect of Hypothesis #18 which concerns the differences between technical college and university women is also supported for the young white sample, although the other predicted differences related to choice of college are not supported. The aspect of Hypothesis #20 concerning the predictive power of GPA is supported to a limited extent by the significant relationship between
GPA and educational goals for the young white sample.

Hypotheses #14, 15, and 17, which included the predictive powers of marital status, age, college class, height, and weight, are not supported by the data from any of the samples.

Additional Analyses: Canonical Correlations

In addition to the stepwise regressions which were performed, canonical correlations were used to study the interrelationships between the five major variables and the self-concept variables, the family background variables, and the personal characteristics variables. Canonical correlations were performed only for the sample of white women between 18-25, since the other two samples are too small for this type of analysis. The canonical analyses are presented here as a supplement to the results presented above, which dealt directly with the hypotheses listed in the previous chapter.

The complete statistics are presented in Table 11.

Self-concept. The canonical correlational analysis for the major variables and the self-concept and self-esteem variables produce only one significant variable. The linear combination creates a variable characterized by a high degree of preferred career commitment, a low degree of expected career commitment, and a self-description characterized by unconventionality, intelligence and nonreligiousness. This profile suggests that the self-concept items which the multiple

\[3\]Preferred and expected full-time employment were not included, since only the subsample of women planning full-time careers responded to these items.
Table 11
Canonical Correlations for White College Women, Ages 18-25

<table>
<thead>
<tr>
<th>Sources of Variation</th>
<th>Canonical Correlations</th>
<th>$\chi^2$</th>
<th>df</th>
<th>p Value</th>
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<tr>
<td>Feminism:</td>
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<tr>
<td>Preferred Career Commitment:</td>
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</tr>
<tr>
<td>Expected Career Commitment:</td>
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<td>Personal characteristics and the major variables</td>
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*Indicates highest and lowest values.
regression demonstrated to be predictive of all the measures of nontraditional goals and attitudes are associated with weaker expected career commitment than preferred career commitment. This canonical variable lends further support to the previously reported results, which indicated that nontraditional preferences are more closely related to goals and attitudes than are nontraditional expectations.

**Family background.** The canonical correlational analysis for the family background variables and major variables also produces only one significant canonical variable. The profile is characterized by high educational goals, low expected career commitment, a highly educated nonemployed mother, and the presence of siblings. This profile clearly demonstrates the importance of the mother as a role model for the daughters' goals and career expectations. It is important to note that the mothers' employment status does not influence the daughters' preferred career commitment.

This profile is especially important because the mothers' employment status is not a significant predictor of career commitment in the regression analysis. It appears that the combination of the mothers' educational attainment and employment status is a significant predictor, whereas only the mothers' educational attainment is a significant predictor when the two variables are studied separately.

**Personal characteristics.** The canonical correlational analysis for the personal characteristics and the major variables produce two significant and meaningful canonical variables.

The first profile is characterized by nontraditional career goals, low expected career commitment, and nontraditional majors. In the regression analysis,
college major strongly predicts career goals, whereas expected career commitment is unrelated to college major. Therefore, this profile is consistent with the data provided by the regression analysis, although it also includes a negative relationship between expected career commitment and nontraditional career goals and college majors.

The second profile is characterized by high educational goals, high expected career commitment, traditional career goals, and nonaffiliation with either Catholicism or Protestant sects. This is a rather surprising combination, since educational goals are positively correlated with nontraditional career goals for this sample. However, the other relationships included in this profile are consistent with the data reported earlier in this chapter. The profile suggests that, unlike Catholic and Protestant women, Jewish women and women who are not affiliated with an organized religion aspire to high educational goals and expect a high degree of career commitment even when they aspire to traditional careers.

Retrospective Study

Retrospective data was available for 36 women at the state university in Ohio. The results of the regression analyses and correlations performed on the ACT and college questionnaire data demonstrate that goals, abilities, and interests in high school, as measured by the ACT achievement tests and interest inventory, are significantly related to goals and attitudes in college.\(^4\)

\(^4\)Preferred and expected full-time employment are not included, due to the small sample size.
Educational goals and career goals. All of the women reported their educational goals on the ACT and on the college questionnaire. In high school, 16 women (55%) planned to attain bachelor's degrees, 12 (33%) planned master's degrees, and eight (22%) planned doctorates or professional degrees. In college, 15 (42%) plan bachelor's degrees, 14 (39%) plan master's, and seven (19%) plan doctorates or professional degrees. Using a $x^2$ comparison, educational goals in high school and college do not differ significantly.

Expected college majors and career choices were classified as traditional, androgynous, or pioneer. Of the 30 women who listed their expected future vocations, 14 (47%) listed traditional careers, 12 (40%) listed androgynous careers, and four (13%) listed pioneer careers. For their alternate (second-choice) career, 11 (39%) listed traditional careers, ten (36%) listed androgynous careers, and seven (25%) listed pioneer careers. As college women, all 36 women listed career goals; nine (25%) are traditional, nine (25%) are androgynous, and 18 (50%) are pioneer. When a $x^2$ is used to compare college career choices with first or second career choices in high school, the differences are not significant.

When the predictive powers of high school educational goals, expected college majors, and first and second career choices are analyzed in stepwise regressions, it becomes clear that the strong similarities for high school and college goals for the group as a whole are not maintained when the students are analyzed as individuals. Despite the similar responses describing high school and college educational goals for the group as a whole, high school educational goals are only modestly predictive of college educational goals, accounting for 18% of the
variance ($F=5.61, p<.05$). Expected majors and high school career choices do not significantly predict college educational goals, although nontraditional second-choice career goals in high school are correlated with higher educational goals in high school ($r(27)=.35, p<.05$).

Similarly, despite the resemblance between high school and college career goals for the group as a whole, first choice careers do not significantly predict college career goals. First choice careers are also unrelated to the other major variables and to second choice careers. In contrast, nontraditional second choice career goals in high school significantly predict nontraditional career goals in college, accounting for 24% of the variance ($F=8.11, p<.01$). High school educational goals and expected college majors do not significantly predict college career goals; however, expected nontraditional majors are correlated with nontraditional first choice careers ($r(28)=.97, p<.0001$) and nontraditional second choice career goals ($r(26)=.37, p<.05$).

Preferred and expected career commitment and AWS scores are not significantly predicted by high school educational goals, expected college majors, or first or second choice career goals.

**Self-concept and self-esteem.** The self-concept and self-esteem variables on the college questionnaire are unrelated to educational or career goals in high school.

**Family background.** On the ACT interest inventory, SES is measured by family income, as reported by the students. Unfortunately, this item could not be analyzed, since almost half of the sample did not respond. However, the ACT
also asked students whether they planned to apply for financial aid for their first year of college, and all the students in this sample answered that question. Requesting financial aid does not significantly predict any of the major variables in college or educational or career goals in high school. Similarly, parents' educational attainment, which was assessed by the college questionnaire, was unrelated to high school goals.

In contrast, birth order and family size significantly predict high school educational and career goals, although neither significantly predicts educational and career goals when the women are enrolled in college. A larger number of siblings predicts lower educational goals in high school, accounting for 12% of the variance (F=4.52, p < .05). The presence of older brothers predicts traditional first choice careers, accounting for 15% of the variance (F=4.77, p < .05) and traditional second choice careers, accounting for 28% of the variance (F=10.74, p < .005).

None of the other background variables are significantly related to ACT educational or career goals.

**Personal characteristics.** Academic achievement, as assessed by ACT achievement scores, is not related to high school or college educational or career goals. However, AWS scores are positively correlated with higher English scores (r(35)=.42, p < .01), social science scores (r(35)=.44, p < .01), natural science scores (r(35)=.38, p < .05), and cumulative averages (r(35)=.39, p < .01).

Regression analyses could not be performed for these variables, because the five achievement scores are highly correlated with one another.
The only achievement score which is not significantly correlated with AWS scores is the math score.

Five questions on the ACT were concerned with whether the respondent was enrolled in advanced courses in high school, whether she wanted to be considered for advanced placement for English, math, or a foreign language, and whether she was interested in a freshman honors program in college. Affirmative responses regarding advanced courses in high school and an honors program in college are predictive of higher educational goals in high school, accounting for 35% of the variance. The statistics are presented in Table 12. High school advanced courses are also predictive of higher educational goals in college, accounting for 16% of the variance. A request for advanced placement in English is predictive of traditional expected majors, accounting for 22% of the variance ($F=8.33, p < .01$). These measures of academic achievement are not predictive of any other major variables or high school career goals.

The ACT inventory includes several items pertaining to participation in school government, a student political movement, a local political campaign, a summer science program or independent science project, or a science contest. When the influence of variables such as intelligence and religiousness are controlled, most of these variables are unrelated to high school goals or the major variables. The exception is participation in a science contest, which predicts higher educational goals in high school, accounting for 62% of the variance ($F=44.75, p < .0001$), and nontraditional second choice careers, accounting for 52% of the variance ($F=23.96, p < .0001$). Participation in a science contest
Table 12
Personal Characteristics Which Predict Educational Goals in High School and College

**High School Educational Goals**

Advanced courses in high school and plans for honors courses in college account for 35% of the variance for this measure for the sample of 36 women enrolled at the state university in Ohio ($F=9.08$, $p < .001$).

<table>
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<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced courses in high school</td>
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<td>7.51</td>
<td>$p &lt; .01$</td>
</tr>
<tr>
<td>Honors courses expected in college</td>
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<td>6.46</td>
<td>$p &lt; .025$</td>
</tr>
</tbody>
</table>

**College Educational Goals**

Advanced courses in high school account for 16% of the variance for this measure for the sample of 36 women enrolled at the state university in Ohio.

<table>
<thead>
<tr>
<th>Source</th>
<th>Beta Value</th>
<th>F Value</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced courses in high school</td>
<td>+</td>
<td>6.30</td>
<td>$p &lt; .025$</td>
</tr>
</tbody>
</table>
also predicts greater expected career commitment in college, accounting for 12% of the variance \( (F=4.54, \ p < .05) \).

The ACT inventory also includes items pertaining to expected college extra-curricular activities in music, journalism, student government, drama, art, campus religious groups, and sororities. Of these items, plans to join a sorority is the only one which predicts any of the major variables. Sorority plans predict lower AWS scores, accounting for 15% of the variance \( (F=5.79, \ p < .05) \).

The personal characteristics assessed in the college questionnaire do not significantly predict high school educational or career goals.

**Retrospective Summary.** The retrospective data provided by the ACT achievement scores and interest inventory suggest that high school goals, interests, and accomplishments are only modestly predictive of educational goals, career goals, expected career commitment, and feminism in college.

Hypothesis #21 is not supported: the women in the sample do not become increasingly traditional through their young adult years, as was the case in earlier studies of high school and college women. However, high school educational goals significantly predict educational goals in college, which supports Hypothesis #22. First choice career goals in high school are unrelated to career goals in college, but second choice career goals in high school are predictive of college career goals, which provides additional support for Hypothesis #22.

In terms of family background variables, the number and sex of siblings is significantly predictive of high school educational and career goals, although they do not predict college goals. In contrast, parents' educational attainment, which
significantly predict college women’s goals, are unrelated to their goals in high school. The same lack of consistency is present concerning the predictive powers of the self-concept and self-esteem variables vis-a-vis high school and college goals; the self-concept variables which predict college goals and attitudes are unrelated to high school goals. These results directly contradict Hypothesis #23.

The ACT achievement scores and the items regarding advanced courses in high school and college demonstrate that intelligence and academic achievement tend to predict nontraditional sex-role attitudes and higher educational goals, which supports Hypothesis #24. However, accomplishment in English, a traditional field, predicts traditional expected college majors (although it is unrelated to career goals). This data conflicts with Hypothesis #24.

Most high school activities and expected college activities are unrelated to educational goals, career goals, or feminism. The exceptions are participation in a high school science contest, which strongly predicts educational goals and second-choice career goals in high school and expected career commitment in college, and sorority plans, which predict lower AWS scores. Therefore, Hypothesis #25 receives limited support.
CHAPTER 5
DISCUSSION

Major Variables

The majority of the women in all three samples express attitudes and aspirations which have been considered nontraditional for women, and the samples are significantly less traditional in terms of commitment to careers, career choices, and attitudes toward the female role than were college women in recent studies which used comparable measures. The results also demonstrate that these nontraditional goals and attitudes are associated with one another, particularly for the young white women. However, with the exception of the positive relationships between preferred career commitment and AWS scores for all three samples, preferred and expected career commitment measures are less consistently correlated with the other major variables. Since career commitment was significantly related to the other major variables in earlier studies, it appears that the nonsignificant relationship between career commitment and the other major variables in the present study is caused by the dramatic increase in college women's reported career commitment. As a result of this increase, the present study tends to compare women with moderate career commitment to those with strong career commitment, whereas the earlier studies usually compared women with very little career interest to those with moderate or strong career commitment.
These results suggest that the criteria used to assess women's nontraditional goals and attitudes need to be modified in order to reflect the fact that goals and attitudes which were considered nontraditional in the past are now expressed by a large proportion of technical college and university women. These changing norms are especially crucial for the measures of career commitment and feminism; preferences and expectations of full-time careers are now the norm among undergraduate women, and the mean AWS score is approximately one standard deviation from the maximum score. Either these goals and attitudes should be assessed with more sensitive instruments, or lifestyles should be measured instead of goals and opinions.

The data for all three groups demonstrate a strong relationship between preferred and expected career commitment and full-time employment, especially for the white women between 18–25. Most of the women have identical responses for preferences and expectations, and those who do not usually prefer greater career commitment than they expect. The results fail to support the racial differences found in the Turner and McCaffrey study (1974); apparently, as women's careers have become more salient and popular among college women, racial differences have decreased.

Despite the similarities in the major variable responses for the three samples, the different patterns of correlations between the variables indicate that college women should be studied separately according to racial and age groups in research concerned with the relationships between goals and sex-role attitudes. Unfortunately, the racial comparisons are questionable due to two issues: (1) the sample of black women is relatively small and (2) 57% of the black women were enrolled
in technical colleges compared with 26% of the white women in the same age group. Despite these weaknesses, the black sample is apparently representative of the black women enrolled in these schools; the classes were randomly selected and the universities did have lower black enrollment than the technical colleges. Therefore, the black sample appears to represent the black women in post-high school education in the areas studied. Larger samples of black women could have been drawn from black colleges or Black Studies courses, but this would have limited the generalizability of the results.

The sample of white women over 25 years of age is also small; however, this does not seem problematic since one assumes that very few undergraduates are in this age group. The fact that career goals are unrelated to the other major variables for this sample is clearly related to the fact that these older women aspire to relatively traditional career goals. However, it is not possible to determine whether these differences are caused by differences in the socialization experiences of the women in the two age groups, or whether the older women are merely more realistic than their younger classmates. Longitudinal data would be necessary to answer this question.

Self-Concept and Self-Esteem

An unconventional, nonreligious, and/or intelligent self-concept predicts nontraditional educational and career goals and attitudes for the sample of young white women, whereas an unconventional and nonreligious self-concept predicts nontraditional sex-role attitudes among older white women, and a nonreligious self-concept predicts greater preferred career commitment among young black
women. Preferred career commitment and AWS scores are the most strongly predicted major variables for the young white sample, and these are the two variables which are also significantly predicted by self-concept in the other two samples. The one significant canonical variable generated from these items demonstrates that women who describe themselves as unconventional, nonreligious, and intelligent anticipate greater discrepancy between preferred and expected career commitment than other women, because their preferences are less traditional and their expectations are more traditional.

Self-described intelligence is the only positive self-concept measure which predicts nontraditional responses to the major variables, and this occurs only for the young white sample. Self-described intelligence is correlated with the other positive self-concept measures (self-described attractiveness and the Rosenberg self-esteem scale); however, the relationships between self-described intelligence and the major variables are more similar to the relationships between the major variables and the nontraditional measures (unconventionality and nonreligiousness) than to the relationships between the major variables and the other positive self-concept measures. Therefore, it appears that the significant predictive relationship is caused by the nontraditional quality of the self-described intelligence item rather than the positive self-image that it reflects. Since intelligence is considered

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1 Self-described intelligence and attractiveness are correlated for all three samples: young white \( r = .33, p < .001 \), black \( r = .36, p < .05 \), older white \( r = .43, p < .01 \). Intelligence is correlated with self-esteem for the young white sample \( r = .21, p < .001 \).
"masculine", a woman who describes herself as intelligent is expressing a nontraditional view of herself. It is important to note that, for this sample, the significant correlations between self-described intelligence and the other positive self-concept measures indicates that these women do not perceive the conflict between competency and "femininity" which was apparent in earlier studies. This is consistent with recent research (Tresemer, 1976). Moreover, the fact that a positive self-concept is not predictive of women's goals or sex-role attitudes in this study, whereas Birnbaum (1975) reported a relationship between nontraditional careers and self-esteem, indicates that a nontraditional life-style increases women's self-esteem, although the women who plan nontraditional life-styles or express nontraditional attitudes do not differ from more traditional women in terms of self-esteem.

In contrast to the white samples, self-described unconventionality is unrelated to the major variables for the black women. This suggests that the goals and attitudes measured by the major variables are not necessarily viewed as unconventional for the black women, who apparently have a less rigid definition of traditional behavior for women vis-a-vis educational goals, career goals, and sex-role attitudes. The significant relationship between nonreligiosity and preferred career commitment indicates that nontraditional belief systems are related to one another for this sample, even though normative behavior may be defined differently than it is for the white samples.

Overall, the results demonstrate that assumption-questioning in one sphere is associated with assumption-questioning in other spheres. However, whereas nontraditional belief systems are related to one another (e.g., unconventionality,
nonreligiousness, and sex-role attitudes), a nontraditional self-image in terms of physical attributes such as height and strength is not related to nontraditional goals or beliefs.

Family Background

The most important family background variable is the mothers' educational attainment, which significantly predicts daughters' educational goals for all three samples. Parents' education was initially considered to be a measure of SES; however, the data indicate that mothers' educational levels also function as role models for their daughters. In addition, mothers' education strongly predicts AWS scores for the black women, whereas fathers' education weakly (albeit significantly) predicts AWS scores for the young white women; in these two cases, it appears that parents' educational levels are functioning as measures of SES. The reason why mothers' educational level (rather than fathers' educational level) measures SES for the black women is probably that a substantial proportion of the black women did not report their fathers' educational attainment. Therefore, the results indicate that SES predicts AWS scores but is unrelated to the other major variables. This is surprising, since it was expected that the broader range of SES provided by a sample including technical college women would significantly contribute to the predictive power of SES.

Religious upbringing is also an important variable. Protestant upbringing predicts lower educational goals for both white samples (religious upbringing was not evaluated for the black sample), and Jewish upbringing predicts higher AWS scores for the sample of young white women. These results indicate that religious
upbringing may influence the responses to specific measures of goals or sex-role attitudes, rather than predicting nontraditional responses to all of the major variables. However, the predictive power of Jewish upbringing is very weak, and the number of Jewish women in both samples is very small. Therefore, the influence of Jewish upbringing would be more conclusively demonstrated in a sample with a larger number of Jewish women, although the relationship is consistent with the research literature concerning religious affiliation. In contrast, the inhibiting influences of Protestant upbringing on educational goals is not consistent with the research literature on religious affiliation; in the literature, Protestant affiliation is unrelated to women's goals and Catholic affiliation predicts traditional goals. However, in a sample of male and female college seniors, Protestant upbringing predicts lower educational goals (Baird et al., 1973).

The absence of a predictive relationship between mothers' employment status and daughters' goals and attitudes is also an important finding, since mothers' employment status has been one of the most consistent predictors of daughters' career commitment in the research literature. Since the majority of the mothers are employed in all three samples, it is possible that the present employment status of women with college age children is not a sufficiently sensitive measure; employment history may be a more effective predictor now that the proportion of employed mothers has increased. The correlation between mothers' and daughters' nontraditional career choices for the young white sample (which is the only sample large enough to assess in this manner) indicates that the mothers' employment is still an important influence on the daughters' goals. Moreover, the one significant canonical variable generated
for these items indicates that the combination of high educational attainment and nonemployed status among the mothers significantly predicts high educational goals and low career commitment among the young white women. This canonical profile demonstrates that mothers' employment has a positive impact on the daughters' career commitment expectations, although it does not influence preferred career commitment, or the other major variables. The women in this profile are also characterized as having siblings; this probably reflects the fact that mothers with only one child would be more likely to be employed than mothers with larger families.

The positive relationship between black women's educational goals and last born status suggests a racial difference in the predictive power of birth order. Neither this relationship, nor the absence of significant relationships between family constellation and the major variables for the white women, is consistent with the research literature. In the literature, women with graduate degrees reported having fewer siblings than women with bachelor's degrees, and women who were only children or who did not have brothers tended to attain graduate degrees and/or choose nontraditional careers more often than other women. The present results suggest that the number and sex of siblings are less important variables now that graduate degrees and nontraditional career goals are more popular. However, an alternative explanation is that birth order and number of siblings predict educational attainment and career choices, rather than educational and career goals. The relationship between last born status and educational goals for the black women may reflect the fact that later born black women are more aware of the benefits of
advanced degrees than are women with fewer older sibling role models, or that black parents are more willing or able to support the educational aspirations of last born children. In either case, the racial difference could be explained in terms of a lower SES of black families; black families would be less likely to include parents with college or graduate degrees who would serve as role models (as is shown in Appendix F) and would also be less likely to be able to afford college and/or graduate school education for all their children.

Ethnic group membership, fathers' traditional/nontraditional career involvement, and mothers' part-time/full-time employment are unrelated to any of the major variables. Since the relationships between ethnicity and women's goals and attitudes have not been studied previously, and since the number of women representing each ethnic group is small, more research is necessary in this area. Similarly, the number of fathers with nontraditional careers or mothers with part-time careers is small for all three samples; larger samples would provide more conclusive data.

Personal Characteristics

Of the personal traits assessed in this study, college major is the most strongly predictive; nontraditional majors predict nontraditional career goals for all three samples. Moreover, nontraditional majors account for a larger proportion of the variance for career goals than any other variable in this study. The strong relationship between college major and career goals demonstrates that, despite the popularity of questioning the vocational value of a college education in America today, college majors are strongly indicative of expected vocational choices among
the undergraduate women in these samples. However, these samples are somewhat atypical, in that many of the majors represented are vocationally-oriented (e.g., education, nursing, medical technology, and secretarial science).

In addition to the relationship between majors and career goals, nontraditional majors also predict higher educational goals for both black and white women between 18-25, and greater preferred career commitment and full-time employment and higher AWS scores for the sample of young white women. These results clearly suggest that the choice of a nontraditional college major is a first step toward a more nontraditional lifestyle for college and university women, particularly for the white women between 18-25. For the black women, nontraditional majors predict nontraditional careers which require advanced degrees, but are unrelated to career commitment or sex-role attitudes. For the older white women, nontraditional majors are related only to career goals.

Religious affiliation is an important predictor for the sample of white women between 18-25; however, it is not clear whether the absence of significant relationships between religious affiliation and the major variables for the older sample is caused by the small number of Jews and atheists in that sample, or by the cultural differences in the age groups. A larger sample of women over 25, including more Jewish women and women who are not affiliated with any organized religions, would need to be studied in order to make generalizations about the importance of religious affiliation for older undergraduate women. In the present study, nonaffiliation with an organized religion (which usually indicates atheism) predicts nontraditional responses to all of the major variables except career goals, for the
sample of young white women. Jewish affiliation predicts higher educational goals and AWS scores for this same sample; the latter relationship is comparable to the results for religious upbringing. However, Catholic affiliation predicts lower educational goals whereas Catholic upbringing predicts higher educational goals, and Protestant affiliation predicts greater preferred career commitment whereas Protestant upbringing is unrelated to career commitment. The comparisons demonstrate that although the overwhelming majority of the women report having religious upbringing, the women with nontraditional goals and attitudes tend to consider themselves currently unaffiliated with any organized religious groups; moreover, the data suggest that a substantial proportion of these nonaffiliated women were raised as Catholics. In contrast, both Protestant upbringing and affiliation are associated with traditional responses to the major variables (with the exception of preferred career commitment) and both Jewish upbringing and affiliation are associated with nontraditional responses in the regression data and the canonical correlations.

The research literature has not distinguished between religious upbringing and affiliation, and most studies have focused on present affiliation. The results of this study demonstrate that the predictive power of religious upbringing or affiliation differ significantly; therefore the age of the women studied would also influence results focusing on religious affiliation, since pre-college age women tend to consider themselves affiliated with the same religious group as their parents. The distinction between upbringing and affiliation was most important for the Catholic women in this sample; however, the data provided by the self-concept regression analyses suggest that religiousness may be a confounding variable.
The traditional responses of the Protestant women in the present study are not consistent with the research literature. This may reflect the fact that the black and white women were separated in this study, whereas they were usually combined in previous studies. In the research literature, black women tend to report more nontraditional goals; since most black women are Protestant, the relationship between race and religion would influence the predictive power of Protestant upbringing or affiliation. Similarly, the inclusion of very liberal Protestant sects, such as Unitarians, in Protestant samples, would result in a less traditional Protestant sample if the very liberal sects were strongly represented.

Differences in the type of college attended and GPA earned were evaluated for the young white sample only; the results show that technical college women are more traditional in terms of educational and career goals and AWS scores, and GPA tends to be modestly correlated with educational goals. The technical college/university differences are in the predicted direction, but it is interesting to note that career commitment is not related to college choice. These comparisons indicate that, although the women in technical colleges tend to be more traditional than the university women, they are not choosing vocational training as a stop-gap measure before marriage and family responsibilities become paramount. Instead, they appear to be women who prefer and expect a great deal of career involvement, despite relatively traditional views of appropriate sex-role behavior. The failure to find a significant difference between Ohio and Massachusetts women or state university and private university women is also important, and suggests that university populations do not differ substantially in terms of the goals and sex-role attitudes
of their women students. The marginal importance of GPA in this sample is surprising, since previous studies have indicated that intelligence and academic achievement are associated with nontraditional goals. However, GPA tends to be influenced by college major (Annual Statistical Report, 1975); therefore other measures of academic ability, such as standard aptitude tests, would be preferable to GPA.

Motherhood, which was evaluated for both white samples, significantly predicts lower educational goals for the older women and is unrelated to the major variables for the younger women. Since it is difficult to combine childrearing responsibilities with educational pursuits, the inhibiting effect of motherhood is not surprising; however, it is surprising that this influence was not present among the younger women. The number of mothers is relatively small in both samples, so further research is clearly indicated. Overall, the data for marital/motherhood status is most notable for the absence of significant relationships; the significant differences between married and single women which were reported in previous studies were not supported in this study. The results suggest that college women do not choose marriage and motherhood instead of careers or nontraditional lifestyles, but rather in addition to careers and nontraditional lifestyles.

It is also important to note that age and college class are unrelated to goals and attitudes in the present study, since the research literature demonstrated that women become more traditional as their high school and college educations progress. In the literature, the tendency toward more traditional goals was interpreted as an increasingly realistic choice of options and/or as an inevitable result
of the status quo-oriented advice of college professors and counselors. The data from the present study suggest that a college education neither encourages nor discourages the nontraditional goals and attitudes of technical college and university women.

As was the case for physical self-concept, actual height and weight are unrelated to the major variables for all three samples.

The canonical profiles generated by the personal characteristics and the major variables are consistent with the regression data, and are not particularly useful as a source of additional information.

**Retrospective Data**

Although the retrospective data is available for a small subsample of the university women, the results are interesting and indicative of potential areas for future research.

High school educational and career goals are modestly predictive of educational and career goals in college. Although the relationships are significant, the results strongly suggest that college influences women's goals. The absence of significant relationships between age or college class and the major variables in the college questionnaire was interpreted earlier as an indication that a college education does not influence women's nontraditional goals or attitudes; however, the high school data indicate that college can either encourage or discourage nontraditional educational and career goals. Therefore, although the traditional/nontraditional goals of the group as a whole do not significantly change during the college years, the goals of the individuals involved change dramatically. Moreover,
the fact that second choice career goals in high school significantly predict college career goals, whereas first choice career goals do not, suggests that alternate plans expressed by high school women may be important indicators of future goals.

Comparisons between ACT and college data suggest that the variables which significantly predict goals in high school are not necessarily the same variables which predict goals in college. This is an important finding, since literature reviews do not always distinguish between high school and college samples.

The ACT achievement scores provide a more accurate measure of intelligence and academic ability than GPA provides in the college questionnaire. The results suggest that intelligence and/or academic ability predict feminist responses to the AWS and higher educational goals, but are unrelated to career goals. However, aptitude in English predicts traditional expected college majors, although it is unrelated to educational or career goals.

Most of the extra-curricular activities and interests included in the ACT inventory are unrelated to goals in high school or college; this is surprising, since it was predicted that nontraditional interests and activities would be associated with nontraditional goals and attitudes. The exceptions are participation in a science contest, which predicts educational and career goals in high school and expected career commitment in college, and sorority plans, which predict lower AWS scores in college. These results suggest that goals and sex-role attitudes are not closely related to extra-curricular interests which are reported in high school, although specific interests are apparently predictive of particular goals or attitudes.
Overall, high school interests, goals, and abilities are only modestly related to sex-role related goals and attitudes in college. The weakness of the relationships are undoubtedly influenced by the confusion about these goals among high school women; for example, many of the high school students reported educational and career goals which were inconsistent, such as an M.D. degree to become a nurse. The ACT data suggests that the high school women have a limited understanding and knowledge regarding careers and college curricula. As a result, their responses to the ACT inventory may not accurately reflect strong interests or plans.

Limitations and Suggested Modifications

Several limitations of the present study should be noted. First, and most important, the women in the samples are not randomly selected representatives of the women enrolled in the schools studied, and are certainly not necessarily representative of technical college and university undergraduate women in the United States. Despite the limitations of the sampling procedure, the women in the samples are randomly selected students from a variety of majors at several different types of technical colleges and universities. Therefore, the sample is probably more representative of undergraduate women than most of the samples in the research literature, since most samples were drawn from a single major at one school. Secondly, the samples of black women and women over 25 are too small to be convincing when the results differ from the larger sample. Although these samples appear to be representative of the women from these classes and schools, the small sample size means that these results are easily influenced by a few
extreme responses. Therefore, larger total samples will be necessary in order to increase the size of the black and older samples in future studies. Until future research suggests otherwise, these groups should continue to be studied separately from the white women between 18-25.

The present study is also limited to the extent that it focuses on preferences and expectations rather than accomplishments. The retrospective data demonstrate that this may be a crucial issue; goals are subject to change, and may not accurately predict future behavior or even future goals. This distinction may have been less important in the 1950's and 1960's, when the majority of women were oriented toward home and family responsibilities, or careers in traditional fields. However, now that many women plan full-time careers, express nontraditional attitudes about the female role, and plan careers in androgynous and pioneer fields, measuring actual career choices and lifestyles would probably provide a more meaningful measure of career goals and career and feminist commitment. Although it is possible that their accomplishments will be as nontraditional as their goals and ideals, it is more likely that these women will not be as nontraditional in their future lifestyles as they are in their preferences and expectations.

Several measures which were used in this study warrant further comment. First, the distinction between preferences and expectations appears to be an important one, even though the two are closely related. Expectations are especially interesting because they are influenced by strength of commitment as well as the ability to be realistic about one's options. For this reason, it might be worthwhile to include a question regarding the reason for the discrepancy (or
lack of discrepancy) between preferences and expectations. The responses would be coded in terms of whether the woman bases her expectations on her knowledge of other women's lifestyles, her practical concerns such as financial expectations, the strength of her principles or interests, her expectations regarding men's attitudes, and other issues.

Secondly, the AWS appears to be a relatively insensitive measure of non-traditional attitudes toward the female role, since the mean score for college women is very high. The data suggest that the scale must be modified, by replacing several of the less controversial items with more radical statements or with questions regarding specific situations instead of hypothetical alternatives.

Several family background measures need to be re-evaluated. Parents' educational levels, although strongly related to SES, do not appear to be adequate measures of SES. The results suggest that parents' educational level is more important as a model for the same-sex children; as a result, mothers' educational levels are more important for women than fathers' educational levels. If the fathers' educational attainment functions as a measure of SES, then SES is only weakly related to AWS scores and is not predictive of the other major variables for the white women; however, family income might be a more appropriate measure of SES. Unfortunately, students are not always willing or able to report family income. In the past, fathers' job level has been a popular measure of SES; however, this measure ignores the potentially important income contributed by the mother, and may also be difficult to assess since children are often vague when they describe their parents' occupations. Mothers' employment should continue to be assessed
separately; although the results clearly indicate that mothers' employment status alone is not predictive of goals and attitudes, it is possible that her employment history is predictive of daughters' goals or attitudes. The question of employment status should therefore be replaced by employment history, coded in terms of whether the mother never worked, worked continuously from her children's early years, or entered the work force when her children were in high school or older.

The results also indicate that the distinction between religious upbringing and affiliation is an important one, and suggest that the differences may be related to the degree of religiousness. It may be necessary to control for the emphasis on religiousness in terms of both upbringing and affiliation in order to accurately assess the impact of specific religions. Similarly, ethnic group membership, which is not a significant predictor of any of the major variables in the present study, may be a significant variable when only those women whose upbringing was strongly influenced by ethnic traditions are studied.

Of the personal characteristics assessed, GPA seems the least useful, unless the sample is large enough to separately evaluate women in different majors. The data indicate that achievement scores, such as ACT or SAT scores, are superior measures of academic achievement or intelligence, and are therefore more effective measures for predicting the major variables. Unfortunately, the results suggest that many women are unwilling to permit access to this information, and recollection may be unreliable. It appears that the most practical route is to spend the additional effort necessary to persuade the respondents to permit access to their scores.
CHAPTER VI
SUMMARY

The results of this study demonstrate that today's technical college and university women are more nontraditional in terms of career goals, preferred and expected career commitment and full-time employment, and attitudes toward the female role than were college and university women in previous studies. The university women are as likely to aspire to graduate degrees as the college and university women in a recent national study, with 73% planning to attain master's, doctorates or professional degrees.

The intercorrelations between the major variables are significant for the majority of items for the black and white women between 18-25; the results are less consistent for the older white women. Overall, the AWS scores are the most predictive of greater career commitment, greater full-time employment, more nontraditional career goals, and higher educational goals. Preferred and expected career commitment and full-time employment are strongly correlated with one another and often correlated with AWS scores, but they tend to be unrelated to the other major variables. However, preferred career commitment is more strongly correlated with AWS scores for the white samples than for the black sample.

The three samples studied, white women between 18-25, black women between 18-25, and white women over 26, respond similarly to the major variables. However, black women are less feminist on the AWS than the white women in the
same age group, and the older white women prefer and expect greater full-time employment than the younger white women.

Self-Concept

Of the self-concept variables, the strongest and most consistent predictors of the major variables are unconventionality and nonreligiousness, which significantly predict higher AWS scores for both white samples. Nonreligiousness also predicts greater preferred career commitment for both black and white women between 18-25 and greater preferred and expected full-time employment for the young white women. Several other relationships are significant for the young white sample: unconventionality and intelligence significantly predict higher educational goals, nontraditional career goals, and greater preferred career commitment; and intelligence significantly predicts higher AWS scores. In addition, an intelligent, unconventional, and nonreligious self-concept is associated with greater discrepancy between preferred and expected career commitment, as a result of more traditional expectations and less traditional preferences.

Intelligence is the only positive self-concept variable which predicts nontraditional goals or attitudes. General self-esteem and self-described attractiveness are unrelated to the major variables. Nontraditional physical self-concepts, as measured by self-described height and strength, are also unrelated to the major variables.

Family Background

The impact of family background is not as strong as previous studies suggest. The most important family background variable is mothers' educational attainment,
which significantly predicts daughters' educational goals for all three samples, and higher AWS scores for the sample of black women. Fathers' educational attainment predicts higher AWS scores for the young white women, and is unrelated to the other major variables. Mothers' employment status, which was one of the most consistent predictors of daughters' career commitment and sex-role attitudes in the research literature, is unrelated to any of the major variables when evaluated alone; however, for the young white sample, highly educated homemaker mothers tend to have daughters with high educational goals and low expected career commitment. The specific type of career that the mother pursues also serves as a model for the daughter; mothers with nontraditional careers tend to have daughters with nontraditional career goals. In contrast, mothers' full-time/part-time employment status is unrelated to their daughters' goals or attitudes.

Religious upbringing is also an important variable. Protestant upbringing inhibits educational goals and Jewish upbringing predicts higher AWS scores. Although the results for the Jewish women are consistent with the research literature for religious affiliation, the small size of the Jewish sample in this study and the dearth of literature pertaining to religious upbringing detracts from these results.

Family constellation, including birth order and number and sex of siblings, is unrelated to the major variables for the samples of white women. However, last born status predicts higher educational goals for the sample of black women. The racial difference may be related to SES differences in the sample.
Ethnic group membership is not predictive of any of the major variables. Fathers' traditional/nontraditional career involvement also fails to predict any of the major variables; however, the number of fathers with nontraditional careers is very small for all three samples, so that these nonsignificant relationships can not be considered conclusive.

Personal Characteristics

Of the personal traits studied, college major is the most strongly predictive of the major variables; nontraditional major accounts for a large proportion of the variance for nontraditional career goals for all three samples. Nontraditional majors also predict higher educational goals for black and white women between 18-25, as well as greater preferred career commitment and full-time employment, and higher AWS scores for the sample of young white women.

Religious affiliation is also an important variable, but only for the young white sample. Nonaffiliation predicts nontraditional responses to all of the major variables except career goals, whereas Jewish affiliation predicts higher educational goals and AWS scores than Protestant or Catholic affiliation, and Protestant affiliation predicts greater preferred full-time employment than Jewish or Catholic affiliation. Comparisons with religious upbringing suggest that the predictive power of religious upbringing and affiliation differ significantly, particularly in terms of Catholicism.

Technical college women are more traditional than university women in terms of educational goals, career goals, and feminism, but do not differ significantly in terms of career commitment. In contrast, the comparisons between
Ohio and Massachusetts women and state university and private university women do not yield significant differences in terms of responses to the major variables.

GPA predicts higher educational goals for the young white women enrolled in most of the schools, but it is unrelated to the other major variables. However, academic ability on the ACT, as measured by achievement scores, predicts higher AWS scores in college, and advanced courses in high school predict higher educational goals in high school and college.

Marital status is unrelated to the major variables, but motherhood inhibits educational goals for the white women over 26 (which is the only group which includes a substantial number of mothers). These findings differ from the research literature, which tends to demonstrate that both marriage and motherhood predict traditional life goals.

Age and college class, height and weight, and religious conversion are unrelated to any of the major variables.

**Retrospective Data**

High school goals and interests are not closely related to the major variables and high school goals are not predicted by the same self-concept or family background variables as are the major variables.

High school educational goals modestly predict college educational goals. Nontraditional second choice career goals modestly predict nontraditional career goals in college, whereas first choice career goals are unrelated to college career goals or to any other major variables. Despite these modest relationships, the proportion of women aspiring to graduate degrees or nontraditional careers
does not change significantly from high school to college. These results indicate that college education influences women's goals in both traditional and nontraditional directions; this conflicts with the research literature, which demonstrated that women become more traditional during the college years.

One measure of science interest, participation in a science contest, predicts higher educational goals and nontraditional goals in high school and greater expected career commitment in college. The other high school interests and activities which were assessed are unrelated to goals or attitudes in high school or college.

Sorority plans is the only measure of expected extra-curricular activities in college which predict any of the major variables; plans to join a sorority predict lower AWS scores.
### Women Workers, 1962 and 1974\(^a\)

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<tr>
<th>Occupational Group</th>
<th>1962</th>
<th>1974</th>
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<tr>
<td>Professional and Technical</td>
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<tr>
<td>Accountants</td>
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<td>Lawyers and Judges</td>
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<td>25.3</td>
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<td>Craft and Kindred Workers</td>
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\(^a\)These statistics are from Garfinkle (1975)
Appendix B
Student Questionnaire

1. Age ________
2. Sex: Female Male
3. Race: ________________ Ethnic group or nationality: ________________
4. Height: ________________ Weight: ________________
5. Religion: Agnostic Atheist Catholic Jewish Protestant Unitarian Other ________________
6. Religious upbringing: ________________
7. Marital status: ________________ Children: ______
8. Class: Sophomore Junior Senior Graduate student
   When do you plan to graduate? ______/_______
   month year
9. Major: ________________
10. College grade point average (cume): ________________
11. Parents' Occupations: Mother__________________________ Full or Part-time?
    Father__________________________ Full or Part-time?
12. Parents' Educational Attainment: Mother_________ Father_________
13. Number of older brothers______ older sisters______
    Number of younger brothers______ younger sisters______
14. What is the highest degree that you plan to attain?
    A.A. Bachelors Masters Doctorate M.D. DDS LLD (law)
    If you plan to attain a graduate degree, when do you plan to enter graduate school? ______
    If you are a senior, have you applied to graduate school? ______ year
    Have you been accepted in a graduate program? ______
15. What career do you plan to pursue? _______________________
16. Which of the following best describes your preference?
    a. Full-time homemaker after marriage
    b. Employed only before children are born, then a full-time homemaker
    c. Combine marriage and childrearing with employment
Appendix B (continued)

d. Combine marriage and career, but have no children
e. Combine childrearing and career, but remain unmarried
f. Remain single and childless, pursue career only

17. If you chose c, d, or e, which of the following would you prefer?
a. Full-time career at all times
b. Part-time employment at all times
c. Full-time career before children, and after youngest child is ___ yrs. old
d. Part-time employment before children, and after youngest is ___ yrs. old
e. Other ________________________________

18. Which of the above situations (Questions #16-17) do you realistically expect?
#16 a b c d e f #17 a b c (___ yrs.) d (___ yrs.)

CIRCLE THE NUMBER WHICH BEST DESCRIBES YOU.

19. How tall are you compared with other male and female college students?

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<tr>
<td>shorter</td>
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<td>than almost all (90%)</td>
<td>75%</td>
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20. How physically strong are you compared with other male and female students?

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<td>weaker</td>
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21. How physically attractive are you compared with other students on this campus?

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Appendix B (continued)

23. How intelligent are you compared with other male and female students on this campus?

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24. How religious are you compared with other male and female students on this campus?

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<td>than 75%</td>
<td>than 90%</td>
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FOR EACH OF THE FOLLOWING STATEMENTS, CHOOSE BETWEEN THESE FOUR CHOICES:

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<tr>
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<td>Agree</td>
<td>Agree</td>
<td>Disagree</td>
<td>Disagree</td>
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<tr>
<td></td>
<td>Strongly</td>
<td>Mildly</td>
<td>Mildly</td>
<td>Strongly</td>
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</table>

25. I feel that I'm a person of worth, at least on an equal basis with others.


26. I feel that I have a number of good qualities.


27. All in all, I am inclined to feel that I am a failure.


28. I am able to do things as well as most other people.


29. I feel that I do not have much to be proud of.


30. I take a positive attitude toward myself.

31. On the whole, I am satisfied with myself.

32. I wish I could have more respect for myself.

33. I certainly feel useless at times.

34. At times I think I am no good at all.

35. Swearing and obscenity is more repulsive in the speech of a woman than a man.

36. Women should take increasing responsibility for leadership in solving the intellectual and social problems of the day.

37. Both husband and wife should be allowed the same grounds for divorce.

38. Telling dirty jokes should be mostly a masculine prerogative.

39. Intoxication among women is worse than intoxication among men.

40. Under modern economic conditions with women being active outside the home, men should share in household tasks such as washing dishes and doing the laundry.
Appendix B (continued)

41. It is insulting to women to have the "obey" clause remain in the marriage service.

42. There should be a strict merit system in job appointment and promotion without regard to sex.

43. A woman should be as free as a man to propose marriage.

44. Women should worry less about their rights and more about becoming good wives and mothers.

45. Women earning as much as their dates should bear equally the expense when they go out together.

46. Women should assume their rightful place in business and all the professions along with men.

47. A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.

48. Sons in the family should be given more encouragement to go to college than daughters.

49. It is ridiculous for a woman to run a locomotive and for a man to darn socks.
Appendix B (continued)

50. In general, the father should have greater authority than the mother in the bringing up of children.

51. Women should be encouraged not to become sexually intimate with anyone before marriage, even their fiances.

52. The husband should not be favored by law over the wife in the disposal of family property or income.

53. Women should be concerned with their duties of childrearing and housekeeping, rather than with desires for professional and business careers.

54. The intellectual leadership of a community should be largely in the hands of men.

55. Economic and social freedom is worth far more to women than acceptance of the ideal of femininity which has been set by men.

56. On the average, women should be regarded as less capable of contribution to economic production than are men.

57. There are many jobs in which men should be given preference over women in being hired or promoted.

58. Women should be given equal opportunity with men for apprenticeship in the various trades.
59. The modern girl is entitled to the same freedom from regulation and control that is given to the modern boy.

1. A.S.  
2. A.M.  
3. D.M.  
4. D.S.
APPENDIX C

Questionnaire Instructions

The purpose of the questionnaire is to evaluate the goals and attitudes of college students on several campuses. Please answer all questions as accurately as possible. Since your names do not appear on the questionnaires, all information will be confidential; however, if for some reason you do not want to answer a question, you do not have to do so. BE SURE TO COMPLETE BOTH SIDES OF EACH PAGE.

SPECIFIC DIRECTIONS

#3. Most of the students responding to this questionnaire are U.S. citizens. However, many will also consider themselves to be a member of an ethnic group or nationality in addition to being "American." If this is true for you, please list this group or nationality.

#5-6. For question #5, circle the group which you consider yourself presently a member of, whether or not you are currently affiliated with a specific congregation. For #6, list the religious group with which you were affiliated as a child. (If the same as #5, write "same").

#11. List parents' occupations, and circle whether full-time or part-time.

#12. List parents' degrees or last grade completed.

#14. Circle the highest degree you plan to attain, and write in the approximate year that you plan to begin graduate school. Seniors planning to attain graduate degrees should answer the last 2 questions.

#16-17. These questions may seem unusual for males; males should assume that they have these options, and choose the one they prefer. Males and females should answer #17 only if they chose c, d or e on #16; those choosing c or d for #17 should write in the appropriate age in the blank space.

#18. Circle the option from #16 or #17 which you realistically expect. (For #17 c or d write in the appropriate age in the blank space.)

#19-24. Circle the number which best describes you for each question. "Average" (3) includes 10% in either direction from the 50-50 point. Compare yourself to other students at your college or university. For #19, 20, & 22-24 compare yourself to other male and female college students (not to those of your own sex exclusively).
Appendix C - continued

#25-59. For each of these statements, choose between the four options:
Appendix D

Questionnaire Modifications

The questionnaires were identical for all students with the exception of the following modifications:

Question #8: Students at the technical colleges chose between first-year student and second-year student, instead of sophomore, junior, senior, and graduate student.

Question #14: Students at the technical colleges chose between certificate, Associates degree, Bachelor's, Master's, or other, instead of Associates degree, Bachelor's, Master's, Doctorate, M.D., D.D.S., or Law degree.

Students enrolled in the state university in Ohio answered an additional question at the end of the questionnaire, regarding permission for access to ACT scores, which the other students were not asked.
Appendix E

American College Testing Interest Inventory
Questions Evaluated for the Present Study

1. The college you plan to attend is interested in finding out which program of study you plan to enter. Examine the list of programs...and grid on your answer sheet the code number of the program you plan to enter.

2. In the same list, find the best description of your future vocation and mark that code number on your answer sheet.

3. Many individuals have more than one choice of vocation. Please find your second choice of vocation in this same list.

4. What is the highest level of education you expect to complete?
   1) Vocational, technical, or certificate program
   2) Two-year college degree
   3) Bachelor's degree or equivalent
   4) One or two years of graduate study (M.A., M.B.A., etc.)
   5) Doctor of philosophy or doctor of education (Ph.D. or Ed.D.)
   6) Doctor of medicine or dental surgery (M.D. or D.D.S.)
   7) Law degree (LL.B. or J.D.)

5. To plan financial aid programs for entering students, colleges need to know the financial background of their students. Please estimate as accurately as possible your family's income.
   1) Less than $3000
   2) $3000 to $5999
   3) $6000 to $7499
   4) $7500 to $8999
   5) $9000 to $11,999
   6) $12,000 to $14,999
   7) $15,000 to $19,999
   8) $20,000 and over

6. Do you expect to apply for financial aid to help meet college expenses during your first year and thereafter?

Items 28-37 list extracurricular activities that you may or may not wish to participate in at college. Use the response below to answer all questions in this group:

---

*Only those questions used in the study are reproduced here.*
Yes, I do plan to participate
No, I do not plan to participate

28. Music, instrumental
29. Music, vocal
30. Writing for campus newspaper, yearbook, and so on
31. Student government
32. Debate
33. Acting
34. Fraternity or sorority
35. Campus religious group
36. Art
37. Campus political organizations

Items 59-100 deal with accomplishments that might apply to your high school years. The responses below are to be used for all the questions in this group.

Yes, applies to me
No, does not apply to me

59. Appointed to a student office
60. Actively campaigned to elect myself or another student to a school office
61. Organized a school political group or campaign
62. Participated in a nonschool political campaign
63. Participated in a student movement to change institutional rules, procedures, or policies
64. Was elected to one or more student offices
65. Received an award or special recognition for leadership (of any kind)
94. Wrote an independent paper on a scientific topic which received the highest possible mark in my school
95. Did an independent scientific experiment (not as part of a course)
96. Participated in a National Science Foundation summer program for high school students
97. Won a prize or award (of any kind) for scientific work or study
98. Placed first, second, or third in a school science contest
99. Placed first, second, or third in a regional or state science contest
100. Participated in a scientific contest or talent search

The following items concern college educational needs you may or may not have.

102. I am interested in participating in a freshman honors program
103. I want to be considered for advanced placement in English
104. I want to be considered for advanced placement in mathematics
105. I want to be considered for advanced placement in a foreign language
114. While in high school I was enrolled in honors, advanced placement, or accelerated course(s)
Appendix F
Family Background of Respondents

Ethnic Background
White women, ages 18-25 (N=455): 35 (7.7%) Italian, 24 (5.3%) German, 22 (4.8%) Anglo Saxon, 20 (4.4%) Eastern European, 17 (3.7%) Irish

Religious Upbringing
White women, ages 18-25 (N=447): 151 (33.8%) Catholics, 31 (6.9%) Jews, 254 (56.8%) Protestants, 7 (1.6%) None
White women, over 26 (N=46): 13 (28.3%) Catholics, 2 (4.3%) Jews, 31 (64.7%) Protestants

Full-time Homemaker Mothers
White women, ages 18-25 (N=439): 201 (45.8%)
Black women, ages 18-25 (N=30): 9 (30%)
White women, over 26 (N=35): 16 (45.7%)

Proportion of Employed Mothers who Worked Full-time
White women, ages 18-25 (N=231): 168 (72.7%)
Black women, ages 18-25 (N=22): 20 (90.9%)
White women, over 26 (N=18): 17 (94.4%)

Careers of Employed Mothers
White women, ages 18-25 (N=235): 170 (72.3%) Traditional, 46 (19.6%) Androgynous, 19 (8.1%) Pioneer
Black women, ages 18-25 (N=23): 15 (65.2%) Traditional, 6 (26.1%) Androgynous, 2 (8.7%) Pioneer
White women, over 26 (N=17): 12 (70.6%) Traditional, 4 (23.6%) Androgynous, 1 (5.9%) Pioneer

Careers of Employed Fathers
White women, ages 18-25 (N=407): 384 (94.3%) Traditional, 20 (4.9%) Androgynous, 3 (.7%) Pioneer
Black women, ages 18-25 (N=23): 20 (87.0%) Traditional, 3 (13%) Androgynous, 0 Pioneer
White women, over 26 (N=27): 27 (100%) Traditional

Mothers’ Educational Attainment
White women, ages 18-25 (N=438): 25 (5.7%) less than high school, 219 (50.0%) h.s. diploma, 79 (18.0%) some college or vocational training, 90 (20.5%) bachelor’s, 25 (5.7%) graduate degree
Black women, ages 18-25 (N=35): 4 (11.4%) less than high school, 21 (60%) h.s. diploma, 8 (22.9%) some college or vocational training, 2 (5.7%) bachelor’s, 0 graduate degree
Appendix F  (continued)  100

White women, over 26 (N = 41): 9 (22.0%) less than high school, 20 (48.8%) h.s. diploma, 3 (7.3%) some college or vocational training, 8 (19.5%) bachelor's, 1 (2.4%) graduate degree

Fathers' Educational Attainment
White women, ages 18-25 (N = 437): 42 (9.6%) less than high school, 150 (34.3%) h.s. diploma, 74 (16.9%) some college or vocational training, 104 (23.8%) bachelor's, 66 (15.1%) graduate degree
Black women, ages 18-25 (N = 28): 6 (21.4%) less than high school, 17 (60.7%) h.s. diploma, 2 (7.1%) some college or vocational training, 1 (3.6%) bachelor's, 2 (7.1%) graduate degree
White women, over 26 (N = 41): 11 (26.8%) less than high school, 19 (46.3%) h.s. diploma, 5 (12.2%) some college or vocational training, 3 (7.3%) bachelor's, 3 (7.3%) graduate degree

Birth Order
White women, ages 18-25 (N = 455): 19 (4.2%) only children, 114 (25.1%) first born, 128 (28.1%) last born
Black women, ages 18-25 (N = 38): 3 (7.7%) only children, 11 (28.9%) first born, 8 (21.1%) last born
White women, over 26 (N = 46): 1 (2.2%) only children, 13 (28.3%) first born, 10 (21.7%) last born
Appendix G

Personal Characteristics of Respondents

Age
White women, ages 18-25 (N=455): $\bar{m}=21.0$ years old
Black women, ages 18-25 (N=40): $\bar{m}=20.9$ years old

Height
White women, ages 18-25 (N=455): $\bar{m}=5'5"$
Black women, ages 18-25 (N=40): $\bar{m}=5'4"$
White women, over 26 (N=46): $\bar{m}=5'4"$

Weight
White women, ages 18-25 (N=455): $\bar{m}=125$ lbs.
Black women, ages 18-25 (N=40): $\bar{m}=126$ lbs.
White women, over 26 (N=46): $\bar{m}=124$ lbs.

Religious Affiliation
White women, ages 18-25 (N=444): 124 (30.0%) Catholics, 29 (6.5%) Jews, 233 (52.6%) Protestants, 46 (10.4%) Nonaffiliated
White women, over 26 (N=46): 8 (17.4%) Catholics, 2 (4.3%) Jews, 27 (58.7%) Protestants, 8 (17.4%) Nonaffiliated

Religious Conversion
White women, ages 18-25 (N=444): 24 (5.4%) are converts
White women, over 26 (N=45): 1 (2.2%) is a convert

Marital Status
White women, ages 18-25 (N=454): 401 (88.3%) are single, 47 (10.4%) are married, 4 (1.0%) are divorced/separated/widowed
Black women, ages 18-25 (N=40): 40 (100%) are single
White women, over 26 (N=45): 12 (26.7%) are single, 26 (57.7%) are married, 6 (13.3%) are divorced/separated/widowed

Motherhood
White women, ages 18-25 (N=454): 15 (3.4%) have children
Black women, ages 18-25 (N=40): 3 (7.5%) have children
White women, over 26 (N=45): 23 (51.1%) have children
Appendix G (continued)

College Class

White women, ages 18-25 (N=453): 59 (13.0%) are freshmen, 94 (20.8%) are sophomores, 129 (28%) are juniors, 171 (37.7%) are seniors

Black women, ages 18-25 (N= 40): 10 (25%) are freshmen, 10 (25.0%) are sophomores, 9 (22.5%) are juniors, 11 (27.5%) are seniors

White women, over 26 (N=45): 7 (15.6%) are freshmen, 13 (28.9%) are sophomores, 7 (15.6%) are juniors, 18 (40%) are seniors

Grade Point Average

White women, ages 18-25 (N=429): $\bar{m}=3.2$

Black women, ages 18-25 (N=36): $\bar{m}=2.8$

White women, over 26 (N=41): $\bar{m}=3.3$
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