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ABSTRACT

The purpose of this paper was to restructure, review, and clarify the research that has been conducted in the areas of women's career commitment, educational aspirations, nontraditional career goals and choices, and feminism. The review indicates that, despite a large number of studies, particularly in the area of women's career commitment and goals, very few conclusions can be reached. The research literature has been plagued by the lack of control of potentially influential variables, and a lack of studies using national samples. Some of the original measures of career commitment are now outdated. With career commitment increasingly widespread among college women, there is evidence that women's goals have become increasingly unrealistic and that many women are still ambivalent about homemaking and careers. A study of 85 Ohio State University women students using a questionnaire, the Rosenberg Sex-Esteem Scale, and the Spence and Helmreich Attitudes toward Women Scale (AWS) is reported in detail. This study examines the relationship of various dimensions, such as career commitment, higher education aspirations, pioneer career goals and feminist attitudes, to challenging the traditional female role. A number of future research foci are suggested. (Author/KS)

CHALLENGING THE TRADITIONAL FEMALE ROLE:

AN EXPLORATION OF WOMEN'S ATTITUDES AND CAREER ASPIRATIONS

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CHAPTER 1

INTRODUCTION

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 influences of several major wars. Attitudes towards the female role have fluctuated, but the traditional view has largely been maintained. Recent studies have shown that male and female stereotypes have persisted and are shared by the majority of men and women in this country (Broverman, Broverman, Clarkson, Rosenkrantz & Vogel, 1970; Burhenne, 1972).

One area of concern which has become increasingly popular in the last two decades is women's career goals. Although the vocational theorists have gained prominence only since the 1940's, they have been concerned almost exclusively with male career patterns. The field has expanded to include women's issues, but it continues to be male-oriented. Despite the current use of identical vocational interest inventories for males and females, the results are still compared to the norms set by the respondent's own sex. Campbell (1974) explains that this is necessary since the differences between male and female vocational interests "diminish with age but never become trivial."

The research has tended to reflect and perpetuate these divisions; males and females have been studied separately, and studies that are concerned with male career patterns are still

regarded as normative. For example, in the 1975 issues of the Journal of Vocational Behavior, only 11% of the articles dealing with men specified this in the title, whereas 67% of the articles on women specified the population in the title. The attitude that women's career goals are less important than men's has become increasingly outdated, especially now that women comprise approximately 40% of the labor force. The separation of male and female career aspirations helps perpetuate the status quo, but it also reflects the realities of the employment patterns of women in American society. Male and female occupations have changed somewhat during the past century, but the segregation of men and women in occupations has remained stable. For example, primary school teaching was a male field prior to the civil war, and secretaries and typists were usually men in the twentieth century; these fields are now considered traditional female ones (Epstein, 1970). Similarly, during World War II many previously male occupations in factories and construction became dominated by female workers, who were encouraged to replace the men who had joined the armed services. Despite these shifts, however, the percentage of men and women who would have to change their occupations in order to distribute men and women equally in the labor force has remained constant, between 65-69%, for each year between 1900-1960 (Almquist, 1974).

Women's Employment

Since 1960, women have made a relatively dramatic 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 a dramatic increase of women in the labor force, from 37.4% of all women in 1960 to 44.2% in 1973 (Schiffler, 1975). The changes occuring between 1960 and 1970 were considered impressive, 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 number of women in skilled trades increased from 277,000 in 1960 to 495,000 in 1970 (Flanders, 1974). In one trade, carpentry, the proportion of women tripled--but only from .4% to 1.3%. 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 less dramatic gains in terms of percentages, but because the number of women in these fields was higher than in the crafts, the number of women involved in these shifts is greater and their gains are more visable. The increases for women between 1960 and 1970 were from 6.9% to 9.3% of American doctors, from 3.5% to 4.9% of lawyers and judges, from 2.1% to 3.4% of dentists, and from 7.5% to 12% of pharmacists (Carnegie Commission, 1973). These and related statistics are presented in Table 1.

Education

A woman's educational level has been found to be consistently correlated with the probability of her working outside the home (Schiffler, 1975), so it is not surprising that women's educational attainments showed a similar stability from 1900 to 1960, and a similar spurt of growth since 1960.

Table 1

Women in the Labor Force[1]

Occupational Groups	Women as a percentage of all persons in the occupation		
	1950	1960	1970
Professional and technical			
Accountants	14.9	16.5	26.2
Architects	3.8	2.1	3.6
Authors	36.5	25.5	29.1
Engineers	1.3	.8	1.6
Lawyers and Judges	4.1	3.5	4.9
Librarians	88.8	85.4	82.0
Life & Physical Scientists	11.0	9.2	13.7
Pharmacists	8.7	7.5	12.0
Physicians	6.7	6.9	9.3
Registered Nurses	97.6	97.5	97.3
Social Scientists	32.9	25.4	23.2
Social Workers	69.3	62.8	62.8
Primary School Teachers	*	85.8	83.7
Secondary School Teachers	*	49.3	49.3
College & University Teachers	22.4	23.9	28.6
Radio Operators	10.2	16.7	25.9
Reporters & Editors	32.1	36.6	40.6
Managers & Administrators, except farm	13.7	14.8	16.6
Sales Workers	34.2	36.2	38.6
Craftspersons	3.1	3.1	5.0

[1]These statistics were compiled by the Carnegie Commission (1973).

*Those statistics

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 proportion 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 (increasing to 14.4% in 1971). The proportion of advanced degrees awarded to women in various fields remained fairly constant between 1920-1971. The increase in the number of women professionals between 1960-70 is partly due to the fact that in the years immediately preceeding 1960, women's representation in graduate schools were at their lowest levels since 1920.

The Female Role

Although the number of women employed outside the home has increased, and 90% of all women in the United States are employed at some point in their lives (Blai, 1970), careers are still considered a male domain. Women are sometimes expected to work, especially in order to enable their husbands to attend college or graduate school, or to help with family expenses (Hewer & Gerhard, 1964). However, the woman who thinks of a career as an im-

portant aspects of her life or her identity, similar to a man's attitude toward his career, has been viewed as a rare, and not particularly attractive, 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 positions, and most women do so; approximately 70% of the working women in this country are employed in four fields: teaching, nursing, secretarial, and social work (Tangri, 1972).

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 have changed that situation. The increased use and effectiveness of birth control methods have resulted in smaller families and greater choice for women wanting both a career and marriage. A growing concern with "overpopulation" in this country and the world has also contributed to new attitudes about the "ideal" family size, particularly in the last decade. The United States birthrate has dropped steadily from 25.3 per thousand in 1957 to 15.6 in 1972, and from 1967-72 it was at a new low, dropping even lower than during the Depression (Carnegie Commission, 1973). The median age of couples getting married for the first time also rose slowly after 1960. As a result of changing attitudes, women are having smaller families, and the average American woman has completed her childrearing by the age of 27 (Useem, 1960). By the age of 32 her children are in school, and she has the choice of returning to the world of work if she desires.

Improved labor-saving devices in the home, and the increased availablity of prepared meals have also given women more time for outside employment. The homemaking responsibilities of women have not changed, however; employed women spend as much time in childcare and with their husbands as other women, and almost as much time cooking and cleaning (Harmon, 1970; Katz, 1969). In a study conducted in the early 1960's, Ginzberg and Yohalim (1966) reported that employed women with doctorates spoke of their husbands as supportive if they were accepting of their careers; there was no mention of husbands actually sharing most household tasks or childrearing responsibilities. Although several studies have shown that employed women receive more help with household chores and childrearing from their husbands (Hoffman, 1963; Weil, 1966) homemaking is still primarily the woman's responsibility.

Careers open to women have reflected the assumption that a woman's career will be secondary to her family. The implication is that as long as they stay in traditional female fields, women can feel relatively comfortable with both family and employment responsibilities, and can even take time off from work for important family crises. As a result of these attitudes towards women's careers, women's jobs pay less, women are paid less than men even when they have the same job, and careers which were dominated by men in the 1950's and 1960's have remained so. Women who succeed in entering male-dominated fields are often seen as "masculine" by other women (Tucker, 1971) as well as by men. In fact, even women who are committed to traditional female careers

are seen as masculine by fulltime homemakers.

The taboo against careers for women has been persistent, and the conflict between the behavior considered appropriate for women and the behavior necessary for success in a career has continued to be an insurmountable obstacle for many women. However, 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, so that women are usually expected to share the status of their husband's, or father's occupation, some women also feel the need to establish their own personal identity and position through their own career. And although women are strongly socialized to choose traditional female occupations, it is obvious that it is the male-dominated professions that confer the most status, in addition to the higher salary. Plost (1974) found that eighth graders assumed that an unfamiliar occupation had higher educational requirements and greater salary potential when they were told a man held the position than when they were told a women held it. The differences in status for acknowledged careers is even greater; when college students rated occupations according to social status, "physical therapist" was the most highly rated traditional female occupation, and it was only raked twenty-fourth. "Registered Nurse" was rated twenty-five, and high school and elementary school teaching were ranked sixty and sixty-nine respectively, both below the mean rating of all occupations listed (Clark &

Seals, 1975). Clearly, traditional female occupations do not provide a women with high status, and Bardwick and Douvan (1971) point out that if a woman pursues a traditional course of development in a society which devalues the female role, this is bound to result in ambivalence and conflict. The resulting effect on her self-esteem and general mental health are two of the many aspects of women's career choices with important implications regarding the female role in this society.

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 work outside the home and to consider that activity a career; and in the last fifteen years the number of these women has grown substantially. How have these working women differed from thos who were content to devote the majority of their energies to homemaking activities, and are the differences between employed women and fulltime homemakers the same today as they were in the 1950's and early 1960's, when career women were even more rare? The increase in the number of working women is most dramatic among younger married women; do these women differ from the typical career women of the 1940's, 1950's and 1960's on other dimensions as well?

The historical differences and technological advances mentioned earlier do not adequately explain the increased career interest, particularly in male-dominated fields, of the last few years.

There have also been forces which were working in the opposite direction, such as the increased popularity and availability of leisure time activities, and the greater difficulty in finding and affording servants and household help. Ginzberg (1966) points out that suburbanization has made transportation more difficult for wives and children, and the culture has become increasingly concerned with the quality of the mother-child relationship.

One obvious potential source of influence has been the rebirth of the feminist movement in the late 1960's and early 1970's. The reasons for this rebirth are not clear, although its relationship to the civil rights activism of the 1960's has been compared to the relationship between the Abolition Movement and the first Women's Movement in the ninteenth century (Mitchell, 1971). Furthermore, the increasing popularity of questioning religious assumptions and the growing Antiwar Movement in the 1960's may have also 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, this may have fostered a rebirth of interest in egalatarian male-female relationships.

If assumption-questioning in one sphere tends to foster assumption-questioning in other spheres for such diverse areas as religion, politics, and civil rights, then it also seems reasonable to hypothesize that questioning assumptions about one aspect of the traditional female role (i.e. the role of woman as fulltime homemaker) would foster assumptions-questioning in

other areas such as traditional vs. male-dominated professions, and "masculine" vs. "feminine" interests. Therefore, the relationship between career commitment and the more specific choice of male-dominated or female-dominated professions, and the relationship between either or both of these choices and other assumption-questioning about the traditional female role provides an interesting framework from which to study the differences between women who choose traditional roles for themselves, and those who challenge these traditions.

The purpose of this paper is to integrate results from research involving the changing role of women, and particularly how this changing role is related to career commitment and to less traditional career goals or choices. In this paper, women who are homemakers and do not have paid employment outside the home will be referred to as homemakers or nonworking women. Women who have paid employment outside the home will be called career women, employed women, or working women, regardless of whether they are also homemakers. Women choosing male-dominated fields, in which women comprise less than one-third of the employed persons, are referred to as Pioneers or Role Innovators; those choosing fields in which at least two-thirds of the workers are women are called Traditionals. Fields in which women comprise between one-third and two-thirds of the total workers are called androgynous careers.

Taking relevant historical factors into account, I will focus on the relationships between women's nontraditional goals and attitudes and their demographic and family background, person-

ality, personal characteristics, and interests and beliefs. I will separately evaluate the research and results pertinent to each area, thus restructuring the available information in order to provide a clearer understanding of the processes and relationships involved, the strengths and weaknesses of the present theories and data now available, and the research which needs to be conducted in the future.

CHAPTER 2
ASSUMPTION-QUESTIONING: THE FEMALE ROLE

The first crucial issue which needs to be explored is the relationship between career commitment, the choice of a pioneer or traditional career, and other attitudes which challenge the traditional assumptions regarding the appropriate role for women in this society. I have hypothesized that questioning the assumptions concerning one aspect of the traditional female role will tend to coexist with assumption-questioning in related spheres. The research which has examined these issues overwhelmingly supports this hypothesis.

Career Commitment and Role Innovation

Many studies have shown that women who are career-oriented (either planning to pursue a career or planning to continue in their present career) tend to choose pioneer fields, and that women who choose traditional occupations are more likely to consider homemaking more important than outside employment. When the Strong Vocational Interest Bank (SVIB) is used to measure interest, women scoring high on the "housewife" scale, or who are homemaking-oriented according to another measure, tend to score high on SVIB scales for traditional occupations such as nurse, buyer, home economics teacher, dietician, dental assistant, and stenographer-secretary. Those who score low on the housewife scale, or are evaluated as career-oriented on another measure, tend to score high on pioneer occupations such as physician, lawyer, psychologist, dentist, mathematician, engineer and chemist. In addition, these women sometimes scored higher on

several androgynous scales such as artist, physical education teacher, and computer programmer. These results have been fairly consistent for a variety of populations including freshwomen from a California junior college in the 1950's (White, 1959); Purdue freshwomen in 1959 (Zissis, 1964); another group of freshwomen studied in the 1950's (Hoyt & Kennedy, 1958); University of Illinois psychology students in 1962 (Wagman, 1966); seniors majoring in home economics at Iowa State (Vetter & Lewis, 1964); and more recent groups of college women (Munley, 1974); and working women (Schissel, 1968).

When other measures were used to evaluate career aspirations, the same results occured. In her study of women who attended a professional and technical-oriented university between 1964-68, Almquist (1974) found that only 10% were homemaking-oriented with pioneer aspirations, and only 16% were career-oriented with traditional aspirations. In her study of two-year alumnae from the University of Michigan class of 1967, Tangri (1972) found that the women who were working in pioneer fields were more committed to their careers than those working in traditional fields. Wolkon (1972) studied 1962-63 alumnae of Brandeis and St. Regis College in 1969-70 and found that the pioneers were more committed to their careers than the traditionals. In her study of white college-educated working mothers, ($\bar{m}$ age = 35), Nagely (1971) found that the women who were most committed to careers tended to be working in pioneer fields.

Four studies had conflicting results. Mintz and Patterson (1969) found that occupational therapy students were as career-

oriented as undergraduate science majors who were planning to attain a doctorate. In this study, science majors who were not aspiring to a graduate degree were less career-oriented than the women majoring in occupational therapy, science education, or science majors aspiring to advanced degrees. In general, however, the science majors were more career-oriented than the other women studied. Cowan and Moore (1971) found that college women aspiring to traditional careers were as career-oriented as those aspiring to pioneer careers; however, many of the career-oriented women with pioneers goals planned to work part-time. Green (1971) found no relationship between career commitment and any vocational scales of Holland's Vocational Preference Inventory (VPI). Mednick (1973) found no relationship between career commitment and pioneer goals for black women in five colleges in 1971; women with pioneer and traditional goals were equally career-oriented.

Although these studies indicate that career commitment and pioneer goals are not always related, they do not seriously challenge the fact that the relationship is often a strong one. For example, it could easily be argued that women who major in science but do not aspire to graduate degrees are probably not aspiring to pioneer careers, despite their "pioneer" major, and that women planning to work part-time are not as career-oriented as those planning to work full-time. Generally, the literature consistently shows that the relationship between career commitment and pioneer aspirations or choices is an important one. The

weaknesses in the literature are that most of the studies conducted were with women who were enrolled in college in the 1950's or early 1960's, and most of the women were probably white. Research is needed with more contemporary samples in order to determine if this relationship has been maintained in the last decade, and racial comparisons need to be considered.

Career Goals and Attitudes Toward the Female Role

The literature indicates that women who are career-oriented or who aspire to or choose pioneer goals have less traditional, more feminist attitudes towards themselves or towards the female role. These attitudes have been measured in a variety of ways, but the results have been generally consistent.

In their study of women from four campuses, Goldschmidt et.al. (1974) found that career-oriented women were more likely to be committed to a feminist ideology, but there were no differences in their likelihood of participation in the campus Women's Liberation groups. Angrist (1970) reported that career-oriented college women were more likely to favor a "modern concept of family life", and Rand (1968) studied freshwomen from twenty-eight campuses and found that those who were career-oriented were more likely to describe themselves with androgynous (both "masculine" and "feminine") adjectives, whereas homemaking-oriented women described themselves in more traditional terms. Rand defined career commitment in an unusual way, in terms of the attitude that the purpose of college is vocational preparation rather than

to find a husband, and aspirations to a professional or doctoral degree. Farley (1970) found that career-oriented graduate students were more likely to express feminist views of marriage and homemaking; 52% wanted a husband who would share the housework (compared to 31% of the homemaking-oriented women), and 94% planned to use child-care facilities (compared to 76% of the homemaking-oriented women). In her study of wives of Boston area graduate students, Lipman-Blumen (1972) found that the 73% who expressed relatively feminist attitudes were more career-oriented, more likely to have completed college before marriage, and more likely to aspire to doctoral degrees. Although feminists and nonfeminists expressed equal satisfaction with the roles of wife and mother, feminists were significantly less satisfied with the role of homemaker, and disliked cleaning tasks more.

When Goldschmidt et al. (1974) evaluated educational goals, they found that college women aspiring to doctorates or professional degrees were more likely to be members of campus Women's Liberation groups than were women aspiring to bachelor's or master's degrees. They found no differences related to feminist ideology. Since women with advanced degrees are more likely to be career-oriented and/or to enter pioneer fields, this study again shows the consistency of these relationships despite the specific measure used.

Studies concerned with the relationship between pioneer aspirations or choices and feminism are similarly consistent. Karman (1973) studied college upperclasswomen from thirty-eight

campuses in 1968-69, and found that those with pioneer goals were more concerned with women's rights as policy makers in business and government, as competitors with men, and as homemakers and mothers with occupational interests than were women with traditional goals. Hawley (1972) studied women at San Diego State, and found that education majors were more likely to view behavior as an outgrowth of biological differences between men and women (a traditional view) whereas math, science, and counseling majors tended to see them as cultural differences. Since Tavris (1973) found that men and women who believe that sex differences are due to biological differences are less likely to support the Women's Liberation Movement, Hawley's results can probably be interpreted as another indication that women with less traditional career goals are more feminist.

Several other studies are also supportive of this relationship. Goldschmidt et al. (1974) found that education majors were the least likely to be committed to feminist ideology or to be active members of feminist groups, whereas social science majors were most likely to be ideologically or actively committed. Mintz and Patterson (1969) found that occupational therapy and science education majors expressed more traditional views of the women's role while science majors were more feminist. Finally, Nagely (1971) found that among white, college-educated married working mothers, those in pioneer occupations were more likely to express more feminist attitudes. Although nontraditional attitudes were measured in a variety of ways, the questions in-

volved were similar in their emphasis on women's rights and duties as a wife, mother and homemaker, and as a citizen and person, whether in the labor force or in other activities outside the home. Although the radicalism of these questions varied, the trends of the responses were consistent for career oriented women and for women aspiring to or employed in pioneer careers. I have labeled these nontraditional attitudes "feminist" although they were not necessarily defined that way by the authors involved; this term seems to most appropriate, and distinctions between various measures will be made when necessary.

Summary

The three major variables which I am using to measure assumption-questioning of the female role: career commitment, pioneer career choice, and a feminist attitude toward the rights and duities of women, have been shown to correlate in studies using a variety of measurements and sample populations. Most of the research has focused on college women or college-educated women, who are often primarily white and middle-class, and the research dealing with the relationship between career commitment and pioneer career goals usually pertained to women who were college students in the 1950's and early 1960's. The research evaluating the relationship between feminist attitudes and career goals focused on college women in the late 1960's and early 1970's. Clearly, the focus on college students and graduates limits the generalizability of the results, and since most research in this area does deal with white college-educated women this limitation cannot be

avoided, and must be taken into consideration when analyzing the literature.

CHAPTER 3

CAREER GOALS: A DEVELOPMENTAL VIEW

Many vocational theorists view vocational choice as a developmental process, and school systems are responding to the growing interest in career education by establishing programs at the primary school and secondary school levels. A crucial issue is the extent to which actual career information and education, as part of the early socialization and education process, influence the later career decisions of women. If females' career aspirations are stable from early childhood through adolescence and young adulthood, then it would be reasonable to focus on these goals and how they develop. If, on the other hand, they are not particularly stable, it would be necessary to examine other variables which might be related to the career decisions, which are most relevant to final career choice. The major questions are: 1) are there discernable differences in the goals of young girls which correlate with career-related decisions that they make as they mature and 2) if there are differences, will they directly or indirectly influence the actual career choice these women eventually make.

The literature shows a surprising consistency in the career goals of young children during the last twenty years. Young children have remained very rigid in their expectations for sex role behavior; they have strong opinions of what men and women can and should do, and their occupational choices reflect those expectations.

Kohlberg (1966) found that four-year-olds believe that a girl can become a boy by changing her clothes or hairstyle, but by the time children are school-aged they have learned that male and female roles are different and permanent. Pre-school and kindergarten children express very stereotyped career choices: girls overwhelmingly choose nurse or teacher, while boys choose traditional male occupations and express much greater diversity of interests and choices (Beuf, 1974; Vondracek & Kirchner, 1974). Are the girls' traditional choices based on their interests or on their understanding of their realistic options and/or their parents' and teachers' expectations? When asked what occupation they would choose if they were boys, Beuf found that the girls cited traditional male occupations, often embellished with fantasies of the wonderful possibilities open to boys, such as flying like a bird. In contrast, the boys were very reluctant to even imagine what they would choose if they were girls, and one boy sadly concluded "if I were a girl I'd have to grow up to be nothing". Beuf's study indicates that boys and girls make these early occupational choices on the basis of their learned role expectations, not on the basis of interests. They were clearly aware of the fact that, if they could change their sex, their career goals would also change, although their perceptions of career options were sometimes distorted.

Siegel (1973) found similarly exaggerated stereotypes for second graders. Boys chose twice as many occupations as girls, and only teaching was chosen as desirable by both boys and girls. Again, over two-thirds of the girls chose teacher or nurse.

Police officer was the most popular boy's choice, but it was chosen by less than 20% of the boys, giving further evidence of the greater diversity of boys' career interests. Looft (1971) found a similarly narrow range for second grade girls in a Catholic school, and Clark (1967) and O'Hara (1962) found similar results with children in grades 3-6.

Schlossberg and Goodman (1972) and Shepard and Hess (1975) found that kindergarten children also have very conservative ideas about what women can do, and although Schlossberg and Goodman's sixth graders tended to qualify their statements about women's occupational choices by saying "she could do it, but she wouldn't want to, " their choices of appropriate occupations for women were not significantly different from those made by kindergarteners. During junior high, however, Matthews and Tiedeman (1964) found that girls became more interested in having careers. This period coincides with the transition of many girls from the "fantasy" stage of career choice to the "tentative" stage, a transition which boys make at a slightly older age (Davis, Hagan & Strouf, 1962; O'Hara, 1962). It is not surprising, therefore, that eighth graders' views of male and female occupations differ significantly from those of younger children. They are much more liberal in their expectations of what men and women can do; and the girls are more liberal than the boys, particularly when male participation in housekeeping and childrearing is involved (Shepard & Hess, 1975).

Despite their relatively strong career interest, Mathews and Tiedeman found that the junior high girls they studied in

the 1940's and 1950's were still very limited in their choice of occupations. They became increasingly traditional in high school when the percentage of girls planning to be single career women decreased from 13% to 3% and the percentage of girls planning homemaking increased from 60% to 75%. Similarly, Harmon (1971) reported that the preadolescent career choices which University of Wisconsin college freshwomen recalled were more varied and sophisticated than their current choices. This shift to more traditional choices may have been due to increased awareness of the conflicts between homemaking and careers, or the conflicts between being accepted as a woman and being accepted as a person with an interesting and demanding career. Shepard and Hess (1975) found that the liberalness of children's expectations for males and females stabilized around the preteen period; high school and college students tested during the same year as the junior high school students showed very similar responses, although adults ($\bar{m}$ age = 50) were more conservative. Since this was not a longitudinal study, the results are not clearly indicative of a stabilizing of career interests, but it appears as if females begin to seriously consider career alternatives and sex role options in early adolescence. As a result, their career choices seem to change, although their stereotypes remain farily stable. In the Mathews and Tiedeman study, which was conducted at least a decade earlier, even the girls who planned to be single career women did not choose pioneer occupations, and the majority of girls in both junior high and high school considered marriage and careers mutually exclusive. Although

the dynamics of career choice appear similar for the two samples, Shepard and Hess' recent group were apparently more open to considering pioneer occupations as an option, and less likely to see marriage and career as incompatible.

The occupational choices of elementary school-age and teenage girls are very limited, and do not appear to be strongly predictive of their later career decisions; however, several characteristics of young girls have been shown to predict career commitment and pioneer career goals and choices in later years. Astin (1968a) studied a national sample of ninth graders in 1960, and found that higher SES, greater math ability, stronger interest in physical science, college preparatory course curriculum, and more college counseling predicted career choices in science and teaching as twelfth graders. The greatest difference in personality profiles were between ninth graders who, as twelfth graders, aspired to science careers and those who, as twelfth graders, aspired to jobs not requiring a college degree or to fulltime homemaking. When she evaluated the career plans of ninth graders and their plans one year after high school graduation, Astin (1968b) found that girls who aspired to careers in natural science , teaching and the professions as ninth graders and had changed their plans four years later tended to have lower ability than those who maintained their plans. Those who aspired to homemaking and office work as ninth graders and who had changed their career plans four years later tended to have higher ability than those who maintained their goals. Those who had shifted their goals from natural science, teaching and the professions to homemaking or office work had higher

ability than those who had consistently aspired to homemaking or office work; whereas those who shifted from homemaking or office work to the higher level fields were less able than those who had consistently aspired to those professions. As a result, the average ability levels of females aspiring to teaching, natural science, and the professions increases and the average ability level of those aspiring to be full-time homemakers or office workers decreases. Of the over 11,000 females in this Project TALENT sample, only 22% maintained stable career goals for four years.

When asked to recall earlier career choices, young women often claim to have had fairly stable career goals. In her study of University of Wisconsin freshwomen in 1968, Harmon (1971) found that career choices at 15 years of age had some validity, and that earlier choices were less valid. In a study of juniors and seniors at a Midwestern Catholic high school, Rezler (1967) found that 10 of the 33 girls aspiring to pioneer careers reported that they had had the same goal as ninth graders; nine of these 10 planned to become physicians. Similarly, 14 of the 33 aspiring to traditional careers reported that they had had the same career goal as ninth graders, and their most popular career choice was nursing. It may be that certain career choices, such as nursing and medicine, tend to be made early, perhaps because they are very popular and visable occupations, or because they require early commitment to a particular school or college courses. Another possiblity is that since these careers are so popular among young children, even the small proportion who maintain these goals is relatively large compared

to those choosing other goals. Studying a national sample of graduating college students in the class of 1971, Baird (1973) found that men and women who were planning to be physicians had the most stable career goals from their entering college year to their graduating year. In a more recent study, Schuck et al. (1974) found that almost half the women medical students at the University of Pittsburgh medical school in the classes 1974-77 had decided to study medicine before or during high school. In contrast, only 25% of the women who received doctorates in 1957-58 said that they made their final career decision before graduating from high school (Astin, 1969). Among women receiving their doctorates in economics in 1973-74, only 3% reported that they had made this career decision before entering college, while 73% decided while undergraduates (Strober, 1975).

The limitations of research based on college and career women's recollections is obvious and the few longitudinal studies which evaluate the relationship between early career choices and later aspirations indicate that the goals of elementary and high school girls are not directly relevant to the career choices that they make in college or later. Harmon (1970) found no significant differences between eighteen-year-old girls who had entered the University of Minnesota between 1953-55 who were classified as career-oriented ten years later, and those who were homemaking-oriented ten years later. Similarly, McLaughlin and Tiedeman (1974) found that career goal stability was weaker during the five years following high school graduation than it was from five to

eleven years after graduation. However, this situation may be changing somewhat. Dodge (1974) found that over 40% of Macalaster College women studied in 1972-73 reported that their career choice had been fairly stable throughout their college years, and 62% of the women she studied from other colleges reported similar consistency. Most of the women she studied were career-oriented, which may be partially responsible for these unusual results.

Overall, these studies suggest that career goals and interests of elementary and high school girls have not predicted later decisions, in terms of career commitment or pioneer or traditional choices. Of course, the decision of whether or not to go to college, and the type of college or vocational school chosen, is usually made during this period, and this decision will crucially influence career opportunities. In addition, college curricula limit the types of fields that graduates can enter; Ginzberg (1966) found that 56% of the female graduate students he studied had the same major in college and graduate school. Research is needed which will determine the kinds of early experiences which influence women's decisions regarding the type of higher education to pursue. Another important issue which needs to be studied is a possible trend indicated by the Dodge study. It is possible that, as career commitment becomes more widespread, women's early career choices will be more predictive of later career decisions.

Most studies have been concerned with college students and white-collar positions, and until very recently very few women

were employed in nontraditional blue-collar jobs. Since the majority of career-oriented and pioneer women are college-educated, and since high school career goals are apparently not predictive of later behavior, it is reasonable to focus on the college experience. Studies at several colleges and universities have indicated that the career goals of entering women were fairly traditional, and became increasingly traditional during college. Angrist (1970) studied students enrolled in the women's college of a technically-oriented coeducational university between 1964-68, and found that although sophomores chose rather atypical career goals, by senior year more than half chose traditional career goals. Similarly, entering women students at Radcliffe expressed strong career commitment and interest in pioneer occupations, but their goals became less ambitious and more traditional by their senior year (Horner, 1972). Tangri (1971) found that two years after graduating from the University of Michigan in 1967, 30% of the women who had expressed pioneer aspirations as seniors had become Role Innovators. Katz (1969) found that Stanford men from the class of 1965 became increasingly sure of their occupational choices while in college, whereas their female classmates became increasingly unsure. Similarly, Astin and Myent (1971) found that half of the over 5,000 women from their Project TALENT sample changed their career goals between twelfth grade and five years later. This study indicates that these years are crucial ones, whether or not a woman enters college.

All of the above studies demonstrate that women's career goals shift significantly in the 4-6 year period following

high school graduation. Several studies indicate that their aspirations become increasingly traditional and homemaking-oriented; however, a more recent study suggests that this trend may be changing somewhat. Dodge (1974) studied women at Macalaster College in Minnesota from 1972-74 and smaller samples from several other colleges. She found that the number of women with career aspirations increased from 72% in 1972-73 to 86% in 1973-74, and that, for these women, there was no decrease in career commitment during their college years. Although specific career goals changed during college for almost 60% of the women involved, they many not have been the same kinds of shifts from pioneer to traditional choices that were reported in the earlier studies.

Summary

Although the interests and goals during the pre-college years may have important influences on the career goals which develop during and after college, they have had little value as predictors of career commitment or career choices. Early scholastic interests and ability, particularly in math and science, may predict nontraditional career aspirations for high school seniors or college freshwomen, but there are no studies which prove whether or not they predict pioneer career aspirations as college seniors or new alumnae. Since so many changes occur during the four to six years after high school graduation, it appears unlikely that these characteristics have much value as predictors for long range planning.

However, most of these studies were conducted in the 1950's

and 1960's, and since there is some evidence that career commitment is increasing and that pioneer career choices have become more acceptable among college women, this situation may be changing. There is clearly a need for longitudinal studies which will evaluate career goal patterns of both college preparatory and "vocational track" high school students in the 1970's.

Overall, the studies indicate that the actual career goals of girls in elementary school and high school are not predictive of later goals. Therefore, rather than concerning myself further with the development of career goals as an isolated characteristic, I will focus on other possible influences and potentially related characteristics in the areas of family background, personality and other personal characteristics, and attitudes and values.

CHAPTER 4
FAMILY BACKGROUND

The importance of family background and related factors has long been recognized as a crucial issue in the career decisions of men and women. Although men's career aspirations were attributed to economically and emotionally stable homes, women's career commitment and role innovative career goals or general attitudes were attributed to an inferior homelife, broken by divorce or death (Seward, 1945; White, 1959). These early studies were conducted during a period in this century when women's careers were most maligned and were, in fact, in a striking decline. The authors appeared to find the results they were looking for, and sometimes manipulated their data toward that end. For example, in her summary, White (1959) confused the findings for "feminine" women (those with interests defined as feminine on the feminine-masculine scale of the SVIB) with those for homemaking-oriented women (as defined by a different SVIB scale). More recent studies contradict these earlier results, and are more extensive in their scope.

Socio-Economic Status

Socio-economic status (SES) has been defined in several ways. Sometimes it is based solely on the father's occupational level or salary, sometimes on the family income, and sometimes the father's or parents' educational attainment are also considered. These differences make comparisons across studies difficult, and so specific measures, when given, are stated here and taken into account when the literature as a whole is evaluated.

Using a large sample of high school seniors, Straus, Sewell, and Haller (1970) found that when intelligence was controlled, males and females with higher SES had higher educational and occupational aspirations. However, other studies have shown that boys are more likely to enter college than girls, especially when the father is not highly educated (Astin, 1969). The daughters of very educated fathers are as likely as the sons to enter college. In 1957, among women with the highest ability in the highest SES quartile, the proportion of high school graduates going to college was 76% for females, compared to 91% for males (Carnegie Commission, 1973). By 1967, these statistics had changed to 92% for males, 93% for females. However, for the highest ability students in the lowest SES quartile, women entering college were 24 percentage points below males in 1957, and were still 15% lower in 1967, when 60% entered college.

Career Commitment. SES, as measured by the father's occupational status or income, was found to be unrelated to daughter's career commitment in several studies conducted in the 1950's and early 1960's. These include Riley, Johnson and Boocock's study (1963) of juniors and seniors in seven New Jersey high schools in 1961; a Goldsen et al. study (1960) of 420 Cornell women in 19 : Simpson and Simpson's study (1961) of 111 sociology students in 1959, and Siegel and Curtis' study (1963) of 43 Pennsylvania State University sophomore women. Kosa, Rachiele, and Schommer (1962) found no significant differences based on SES for 118 Catholic college freshwomen, but higher SES women who had very high aptitude scores were more career-oriented than the low SES women with very high aptitude

scores. In a more recent study comparing college freshwomen at a state university, Turner and McCaffrey (1974) found no relationship between SES and preferred or expected career commitment for black or white women. Using a SES measure which included father's occupation and mother's education and work experience, Eyde (1962) found no differences for Jackson college seniors in the 1958 and 1960 classes, but 5-year alumnae from the class of 1953 who were from lower-middle class backgrounds tended to be more career-oriented than their classmates. White (1967) found that among young elementary school teachers (ages 21-24) those with working-class backgrounds were more career-oriented than those with middle-class backgrounds. Women who graduated with distinction from the University of Michigan between 1945-55 who were fulltime homemakers in the late 1960's tended to be from middle-class homes, and single women professors were from lower-class backgrounds (Birnbaum, 1971). Although these groups are not exactly comparable, it was assumed that these gifted alumnae had similar ages, intelligence, and educational opportunities as the women who went there to teach.

The three studies concerned with high school students showed conflicting results. Smith (1969) studied tenth and eleventh graders in New York suburban public schools in 1966, and found that SES did not influence career commitment for nonwhite girls and was much less important than the mother's employment status for white girls. Lee (1971) studied 365 seniors in six high schools and vocational schools, and found that SES was negatively related to career commitment. In contrast, Astin (1968a) studying

817 girls from the national Project TALENT sample, found that those aspiring to careers in science or teaching had higher SES than those aspiring to be fulltime homemakers or office workers. Although this is not exactly a career-oriented/homemaking-oriented comparison, women who plan to be office workers do tend to be homemaking-oriented (Hoyt & Kennedy, 1958).

When parent's educational attainment was considered, Simpson and Simpson and Siegel and Curtis again found no significant differences related to career commitment. Almquist and Angrist (1971) also found no differences for college women in the mid-1960's on this dimension. Conaway and Niple (1966) studied freshwomen and transfer students at the Ohio State University and found no relationship between the mother's educational level and the daughter's career commitment; however, career-oriented women tended to have mothers who had attended continuing education classes. Zissis (1964) found that homemaking-oriented Purdue freshwomen in 1959 were more likely to have college-educated fathers than their career-oriented classmates. Gysbers, Johnson and Gust (1968) studied women who attended the University of Missouri between 1958-64 in a follow-up in 1967, and found that those who were consistently career-oriented in college and in the follow-up had more educated parents than their consistently homemaking-oriented classmates. Women who were teaching at the University of Michigan in the late 1960's tended to have very educated parents, whereas the University of Michigan alumnae who had graduated with distinction between 1945-55 and became full-time homemakers had middle-class fathers who were slightly less well educated and not intellectual (Birnbaum,

1971). Parnes and Nestel (1975) found no differences related to the father's educational level in his study of a national sample of black and white married career women and full-time homemakers.

Although the results are inconsistent, most of the studies either show no differences related to SES, or show differences based on more sensitively measured comparisons. For example, when the groups were heterogeneous enough to differentiate between upper-middle, middle, and lower-middle classes, the middle-class women were least career-oriented. Similarly, when the study differentiated between students with college-educated parents and parents with graduate or professional degrees (similar to the upper-middle and middle-class divisions), differences were again significant. It appears possible that several of the samples were not sufficiently heterogeneous groups to differentiate according to SES; the Cornell women would have been high ability middle-class or upper-middle-class women. Purdue women would tend to be middle class women interested in science and technical fields since that was what Purdue offered, and the Pennsylvania State University sample was small and homogeneous according to Zissis. Conaway and Niple's study suggests that the mother's attitude toward education may be influential; in their study, mothers who had attended continuing education classes apparently served as role models for their daughters.

Another possibility is that the differences which were found that were attribued to SES were actually related to other issues, such as the mother's work experience or career commitment. This is likely in cases where SES was based partly on the mother's income, education, or work experience, or in samples where low SES

was associated with the mother working. Since the mother is a potentially important role model, her career interest and status will be evaluated separately, later in this chapter.

Education. Since educational attainment often correlates with career commitment (Lozoff, 1968; Riley, Johnson, & Boocock, 1963; Zissis, 1964) and with more role innovative career goals and choices (Moore & Veres, 1975) and feminism (Lipman-Blumen, 1972; Pawlicki & Almquist, 1973) this variable will be discussed separately.

In a study of high school seniors, Straus, Sewell and Haller (1970) found a positive relationship between educational aspirations and SES for males and females when measured intelligence was controlled. Astin (1969) found that women who received doctorates in 1957 or 1958 had better educated parents than males with doctorates. However, for this sample, although the father's educational and occupational levels had a positive influence on the daughter's educational level, mothers who had dropped out of college tend to have more highly educated daughters than mothers with an undergraduate degree.

These studies indicate that higher SES predicts higher educational aspirations and attainment although the results are not clear for the mother's educational level. It may be that mothers who dropped out of college provide an exception to the generally positive influence of the mother's educational level, perhaps because the mother regrets the fact that she did not finish her education and encourages her daughter not to make the same mistake. Another possibility is that women who did not finish

college differed from those who either did not enter college or who entered and completed college in a crucially important way; perhaps because they quit school for financial reasons and had to work to support their families or themselves. If this were the case, again it might be a matter of the mother's work history which was actually the relevant issue, rather than her education. Research is needed which will examine these more specific issues.

Role Innovation. The relationship between SES and the choice of a traditional or pioneer career is more clear. In a review of the literature, Schiffler (1975) reports that the level of career aspirations is positively correlated with SES for males and females. Studying a large national sample of college freshwomen in 1961-62, Werts (1965) found that women in the highest SES group chose the most role innovative career goals. These women were more likely to choose physician, lawyer, psychologist, foreign service, and social worker; middle-class women were more likely to choose journalist and speech therapist; and the lowest SES group women were more likely to choose teacher, nurse, and lab technician. Karman (1973) studied juniors and seniors in 38 colleges and universities in 1968, and found that women aspiring to pioneer occupations tended to have parents with high income, and 11% had mothers with a doctorate or professional degree, compared to 4% of the mothers of the women aspiring to traditional careers. Almquist (1974) also found that college seniors aspiring to pioneer careers had more highly educated mothers; 63% had mothers with some college, compared to

40% for those with traditional goals. In their study of junior college women, Veres and Moore (1975) found that 52% of the parents of aspiring Role Innovators had more than a high school education compared to 42% of parents of aspiring Traditionals. This difference was not significant, however. Klemmack and Edwards (1973) studied college women at an Eastern university, and found that their ideal marriage age and their educational aspirations correlated with their father's occupational level. As a result, pioneer aspirations were also correlated with the fathers occupational level. Although significant, these correlations were all below .20, and therefore accounted for less than 4% of the variance. Cartwright (1972) studied women students at the University of California School of Medicine in 1967-8, and found that over two-thirds of the fathers had at least bachelor's degrees, and 40% had attended graduate school. The mothers were also well educated; 43% had at least bachelor's degrees, and 17% had graduate degrees.

There were three exceptions to these consistent findings. In her study of 112 juniors and seniors at Temple University, Sundheim (1963) found no differences between the SES of those majoring in elementary education, languages, or mathematics or science fields. However, although elementary education majors were obviously planning a traditional career, it is possible that language and science majors were also planning to enter traditional fields. One might expect that science majors would be more likely to aspire to pioneer occupations, however, the number actually planning such careers may have been very small. Under these circumstances, this study cannot be considered a comparison of career

goals. Tangri (1972) found no relationship between pioneer goals and the father's educational attainment for Univeristy of Michigan women in the class of 1967. Similarly, Mednick (1973) found no relationship between pioneer goals and parents' education or income for black women from five Eastern campuses in 1971.

When actual working women were studied, a strong relationship between SES and career choice was again apparent. Standley and Soule (1974) found that white women ($\bar{m}$ age = 40) working in four pioneer fields (architecture, law, medicine and psychology) had well educated parents with high income. Nagely (1971) studied 40 white college-educated married women with at least one child at home ($\bar{m}$ age = 35) and found that those working in pioneer fields had better educated fathers than those in traditional fields. In a study of 25 women who were presidents and vice-presidents of nationally recognized business firms, Hennig (1974) found that these very successful executives were more likely to have grown up in upward aspiring middle-class homes with mothers who were equally or more educated than their fathers, compared to women in middle management positions. This is a somewhat different comparison, since even middle management positions are male-dominated; so it may not measure career aspirations as much as ambition, ability or perseverance.

In general, these studies indicate that, when SES is measured by the father's educational or occupational level, a higher SES tends to predict more pioneer career aspirations and choices for the daughters. The importance of the mother's educational level

is less clear, but it appears that mothers with at least some college tend to have daughters with pioneer goals or careers more than mothers with less education, and possibly more than mothers with college degrees. Mothers with graduate degrees, however, apparently have a more positive effect on their daughters' pioneer choices. As was the case in the relationships between career commitment and SES and educational aspirations and SES, it is not clear whether the mother's educational level has influenced her own employment. If this is the case, it may be that the mother's employment (which is not generally considered separately as a component of SES) is the important factor involved, rather than her education. Mednick's study suggests that the relationship between SES and pioneer aspirations may only be significant for white women.

Feminist Attitudes. Five studies were concerned with the relationship between feminist attitudes (feminism) and SES. Goldschmidt et al. (1974) studied women at four different types of colleges and universities, and found no relationship between SES groups on a Women's Liberation ideology scale or their participation in campus Women's Liberation groups. However, women who were active members of the campus Women's Liberation groups tended to have mothers with graduate degrees or with less than a college education; there was no relationship between feminist ideology and mother's education. In her study of wives of graduate students in the Boston area, Lipman-Blumen (1972) found no relationship between feminist attitudes and parents' income, educational level, or occupation. Seventy-three percent of these women expressed feminist

attitudes. Stoloff (1973) studied University of Michigan doctoral students, and found that those who were active in the Women's Movement tended to be upper-middle-class or middle-class, and to have better educated fathers. There were no differences related to the mother's education or type of ocupation. Both activist and nonactivist graduate women were ideologically committed to feminism. Dempewolff (1974) found that University of Cincinnati men who scored high on a feminism scale were more likely to have college-educated mothers, whereas anti-feminists tended to have mothers with only high school educations. She found no differences related to parents' education or fathers' occupation for women students. Pawlicki and Almquist (1973) found no SES differences in their comparison of National Orgainization for Women (NOW) members and college women. This comparison was not well controlled, since the NOW members were older and better educated.

Summary. In the majority of studies, there was no relationship between career commitment and parents' SES, although there is some indication that differences would be apparent if the samples studied were more heterogeneous. White women with higher educational attainment or pioneer goals or careers have tended to have more highly educated fathers or fathers with higher level occupations, and there was some evidence that this relationship was not present for black women. The relationship between feminism and SES could not be determined from the conflicting results.

The importance of the mother's educational attainment was also unclear. There was some evidence that mothers with graduate degrees or less than college degrees tend to raise daughters with a less traditional view of the female role, in terms of career goals and other issues. Perhaps those mothers who graduated from college felt more satisfied with their lives than women who did not have that opportunity, especially since their husbands' appear to have been better educated and quite successful. Mothers with graduate degrees might have felt more successful in their own right, and would have been likely to be employed, so one would expect them to encourage their daughters to pursue less traditional aspirations. The mother's attitudes may have been indirectly or directly taught to the daughter; however, it is also possible that the mother's education influenced her employment status, and that this was the crucial issue rather than her education per se. The effect of a working mother on a daughter's career commitment and aspirations is an important factor which needs to be considered before hypotheses are made regarding the relationahip between SES and challenging the traditional female role.

Working Mothers

The relationship between the mother's work history and the daughter's career goals has been consistently demonstrated in the research results. This relationship is usually attributed to the importance of the role model of a women who successfully combines a career and marriage, a model which is rare in our culture, especially in the popular media.

Career Commitment. In the one study of white elementary school children (ages five, eight, and eleven), Hartley (1960) found that daughters of working mothers were less likely to aspire to full-time homemaking, and more likely to want to work when they are mothers. The children in this sample were all from intact homes. Similarly, in her study of high school students, Smith (1969) found that among white tenth and eleventh grade girls from a suburban New York high school in 1966, those whose mothers were employed expressed more favorable attitudes towards combining marriage, motherhood, and a career. This difference occurred regardless of SES, but was not present for nonwhites. In a study of New Jersey eleventh and twelfth graders of above average ability who were enrolled in 1961, Riley et al. (1963) also found that the daughters of working mothers were more career oriented, regardless of the mother's educational attainment or the daughter's educational aspirations.

In the only study of students at two-year community colleges, Veres and Moore (1975) found a positive relationship between the career commitment of the daughter and the number of years that the mother had been employed, and whether or not she was currently working. All of the mothers in this sample worked in traditional occupations.

The results for women at four-year colleges are also consistent for a variety of populations over the last 20 years. Almquist and Angrist (1970) studied students who attended a women's college of a coeducational university between 1964-68 and found that only 22% of the career-oriented women had mothers who had never worked,

compared to 50% of the mothers of homemaking-oriented women. Sixty-six percent of the career-oriented women's mothers worked while the student was in college, compared to 22% for the homemaking-oriented women. Among Purdue freshwomen in 1959, career-oriented women were again more likely to have working mothers (Zissis, 1964). Erikson and Norden (1974) found that 1973 Kansas State freshwomen who were career-oriented were more likely to have had working mothers while they were growing up, particularly in their junior high and high school years. In addition, career-oriented women whose mothers worked, tended to state that their mothers had positive feelings about their employment more often than the homemaking-oriented women whose mothers worked. Among Stanford women from the class of 1965, 44% of the career-oriented women had working mothers, compared to 29% of the homemaking-oriented women (Katz, 1969). In their study of Pennsylvania State University sophomores, Siegel and Curtis (1963) found that it was the mother's attitude toward employment that was crucial; mothers who were positive about their employment had daughters who were career-oriented. Cook (1968) found that career-oriented Purdue seniors in the class of 1966 were more likely to have mothers in managerial or professional positions than homemaking-oriented women. It is possible that mothers with these higher level occupations had relatively consistent employment histories, and presumably their work was more satisfying than that of women in lower level occupations, as was the case in a study by Hoffman (1961).

Career women are also more likely to have had working mothers. Parnes and Nestel (1975) found that both black and white career women were more likely to have had working mothers while they were teenagers, although the relationship was stronger for black women. Birnbaum's study (1971) of University of Michigan women professors and alumnae showed that married women professors were more likely to have had working mothers than were single professors or the homemaker alumnae who had graduated with distinction between 1945-55. White (1967) found that among elementary school teachers (ages 21-24) in their first teaching position, those who were career-oriented were more likely to have had a working mother.

There are three exceptions to this consistent pattern. Tyler (1964) found no differences in the employment histories of the mothers of career-oriented and homemaking-oriented high school girls that she studied in the 1950's. In two more recent studies, Katz (1969) found that 39% of both career-oriented and homemaking oriented women attending San Jose City College in the mid-1960's had working mothers, and Almquist (1974) found no differences in the proportion of employed mothers for career-oriented and homemaking-oriented women at a Southeastern state university. Tyler's sample was exceptionally small: a total of 45 women, only 15 of whom were career-oriented, and for Katz's sample, only 18 of 120 San Jose women were homemaking-oriented. These small samples may account for the unusual results. In Almquist's study, only 30% of the university women were homemaking-oriented, and 70% of their

mothers were employed. It is possible that both the Katz and Almquist samples were too homogeneous to be sensitive to differences between career-oriented and homemaking-oriented women's mothers' employment. It is also possible that, although the mother's employment or career commitment has been a valuable predictor of daughter's career commitment in the past, as career commitment becomes more common among students, the influence of a working mother will become less important. Another possibility is that, as working mothers become more common, particularly in certain populations, the differences between working and non-working mothers will change and therefore the influence of this variable will change.

Education. The relationship between a woman's educational goals and attainment and her mother's work history is less clear. In her study of college students in three traditionally "feminine" fields of nursing, medical technology, and social work, Harmon (1972) found that the mother's work history was irrelevant and her attitudes towards work did not significantly influence the daughter's persistence in her educational plans during her first three years. In contrast, Astin (1969) found that 25% of the over 1000 women who obtained doctorates in 1957 or 1958 had mothers who had worked while they were growing up, 70% of them in professional or managerial occupations (including teaching or nursing). Ginzberg (1966) found similar results for women who were graduate students at Columbia between 1945-51. In his sample, a total of 41% of the mothers had worked before and during marriage, 14% had

worked continuously, and only 26% had never held a job. In their study of Ohio State University freshwomen and transfer students in 1965, Conaway and Niple (1966) found that those aspiring to graduate degrees who were also career-oriented were more likely to have working mothers than women who did not fulfill these two criteria.

Although these samples were drawn from three decades of students, it may be that their fields are more important than the years of the studies. Undergraduates in three traditional fields may not be influenced by working mothers as much or in the same way as graduate students. Moreover, women graduate students were very rare during the decade following World War II, and the fact that the women in the Astin and Ginzberg studies made that unusual choice, and that a significant minority of them had working mothers, seems to indicate that this variable was a potentially important influence in their career choices and view of the female role. The Conaway and Niple results suggest that the mother's employment status was still influencing the daughter's graduate school aspirations in the 1960's.

Role Innovators. In several studies, Role Innovators were also more likely to have had mothers employed outside the home than were women with traditional career goals. Hartley (1960) found that among white elementary school girls (ages, 5, 8, & 11) from intact homes, those with working mothers were more likely to aspire to pioneer goals. However, since so few expressed non-traditional career goals, this difference was not significant. Douvan (1963) studied girls between the ages of 11-18 from intact

families, and found that those whose mothers worked part-time were more likely to choose pioneer career goals than daughters of homemakers or full-time working mothers. Tangri (1972) found that University of Michigan seniors from the class of 1967 who had pioneer career goals were more likely to have currently employed mothers, and their mothers had been employed for longer periods of time. In a follow-up study two years later, the relationship between the mother's employment and the daughter's actual pioneer career or graduate field choice was still significant. Although Tangri's comparisons were all significant, the correlations were all below .20, and in the follow-up study, the mother's employment ranked only ninth in importance of the variables under consideration. Katz (1969) found a significant relationship between the mother's attitudes and the daughter's career goals. Among Stanford women in the class of 1965, those who planned to become college professors (one of the few pioneer choices cited) reported that their mothers were less satisfied with being a housewife than were mothers of women aspiring to other (usually more traditional) career goals. In a study of male and female first year students in four professional and graduate programs at the University of Texas, Valentine, Ellinger and Williams (1975) found that women and men in fields dominated by the opposite sex were more likely to have working mothers than the students in traditional fields.

In contrast, Klemmack and Edwards (1973) studying 300 women at a large Eastern university, found that women who had working mothers anticipated having larger families and therefore had

more traditional career choices. This relationship was significant, but again the correlation was below .20. Lovett (1969) found no differences in the work histories of mothers of women who were graduate students in science or social work; both groups tended to have working mothers and Veres and Moore (1975) found no differences for junior college women who were aspiring to traditional or pioneer careers.

The results for career women were also conflicting. The 25 successful women executives that Hennig (1974) studied had mothers who had been primarily homemakers, despite their high educational level. However, 41% of the white women ($\bar{m}$ age = 40) who were employed in four pioneer fields (architecture, law, medicine, and psychology) had mothers who had worked after marriage, although 37% of those who worked were dissatisfied with their jobs (Standley & Soule, 1974).

The conflicting results for these studies indicate that, although the mother's employment may sometimes be predictive of the daughter's pioneer aspirations or choice, this relationship is not very strong, and apparently disappears in some samples. The mothers specific career may be important. In Tangri's study, mothers with more role innovative careers (defined by the proportion of women in the field) tended to have daughters who were also role innovative. In most of these studies, however, the working mothers were in traditional fields, so that the relationship between the mother's nontraditional career choice and the daughter's nontraditional aspirations could not be determined. It is likely that the relationship between the mother's employment and the

daughter's pioneer aspirations is stronger in samples in which some of the mothers are themselves Role Innovators, as was the case in Tangri's study. The importance of the mother's attitudes toward outside employment and nontraditional career choices may also be crucial, and this factor has not been studied sufficiently.

Feminism. Several studies indicate that the daughters of working mothers have different views of women than the daughters of full-time homemakers. King et al.(1968) found that among ninth graders in a metropolitan Florida school, the daughters of working women considered a wife's employment to be less of a threat to the marital relationship than did the daughters of full-time homemakers. Douvan (1963) found that 11-18 year old daughters of part-time and full-time working women scored lower on an index of traditional femininity than the daughters of full-time homemakers. Similarly, Hoffman (1974) reported that the children of working mothers approved of women and mothers working more than did women whose mothers were not employed outside the home. Broverman et al. (1968) and Vogel et al. (1970) found that the sons and daughters of working women described men and women more similarly than did other college students, and the daughters tended to describe women as significantly more competent than other women did. They also believed that men were less competent than other women did, although this difference was not significant. Regan (1973) studied entering University of Pennsylvania women and their mothers, and found that mothers who were career-oriented had daughters who rated the Women's Liberation Movement as more

pleasant than the daughters of homemaking-oriented women. In contrast, Lipman-Blumen (1972) found that the wives of Boston area graduate students who expressed feminist attitudes did not differ from more traditional wives in terms of mothers' employment status. However, the feminists were more likely to report that their mothers were dissatisfied with homemaking and with their lives in general. In her study of doctoral students at the University of Michigan, Stoloff (1973) found no significant relationship between feminist activism and mother's attitude toward employment or number of years employed, although the trends were in the expected direction. Stoloff used a sample of 44 women, and both activists and nonactivists expressed feminist attitudes.

Related Issues. If the mother's employment history does effect her daughter's attitudes, goals and accomplishments, as many of these studies suggest, it is still unclear how or why this occurs. Is the employed mother most important as a role model, or, as several studies suggest, are the attitudes toward employment which a mother teaches her daughter more important than her employment status? Another possibility is that women who work, or who enjoy working, share other characteristics or attitudes, such as autbnomy or unconventionality, which influence their daughters.

Social scientists have attempted to take a closer look at the relationship between working mothers and their children in order to determine what effects the mother's employment has on their children's development. Several studies focused on the mother's attitudes towards their children. Hoffman (1963) matched

white children in third and sixth grades in Detroit in terms of father's occupation, sex of the child, and birth order. She found that when the mother liked working outside the home her children reported more positive affect from their mother than did the children of homemakers. Working mothers also reported using less severe discipline than nonworking mothers and expressed more sympathy and less hostility in their relationships with their children. Mothers who were employed but disliked employment were less coercive than homemaking mothers and also less power assertive. Frankel (1972) studied eighth grade children of working and nonworking mothers in 1970, and found that both groups described their mothers similarly, but the children of working mothers were more likely to report physical punishment (including denial of rewards and allowance). Powell (1963) found that the working mothers of white middle-class adolescents did not differ from the full-time homemakers in terms of their positive attitudes towards childrearing. Nye (1963) studied over 2000 high school students in Washington, and found that the children of employed and homemaker mothers did not differ in their perceptions of their mother's acceptance or rejection of them.

Several studies evaluated the children themselves. In a study conducted in the 1950's, Nolan (1963) found that rural Pennsylvania children with working mothers had higher academic achievement and higher peer acceptance than the children of full-time homemakers. Nelson (1971) studied white ninth graders in a large suburban school near Minneapolis in 1965-66, and found that

the mother's employment status did not significantly influence the children's social relationships, emotional stability, conformity, adjustment to reality, mood, or leadership behavior. However, on the majority of scales, the daughters of full-time and part-time working mothers were less well adjusted than the daughters of full-time homemakers, whereas the sons of full-time working mothers were better adjusted than the sons of part-time working mothers or of full-time homemakers in terms of family relationships and general adjustment. The boys with full-time working mothers had better family relationships than the girls with full-time working mothers. Bloom (1972) found that at a predominantly Jewish private high school, girls with high achievement motivation (n Ach) as measured by a Thematic Apperception Test (TAT) tended to approve of their working mothers more than girls with low n Ach who had working mothers, and they also tended to want careers. Studying the primarily white Protestant students at a suburban public high school, Bloom found that girls with high n Ach who had homemaker mothers did not want to follow their mother's example, but the girls with low n Ach who had homemaker mothers did want to become full-time homemakers. Douvan (1963) studied a large national sample of 11-18 year old girls in the early 1950's, and found that the daughters of full-time or part-time working mothers were more likely to choose her as a model than daughters of full-time homemakers.

Several studies have examined the relationship between mothers employment and their college-age daughter's personality and attitudes. Baruch (1973) studied 71 women at the University of Massachusettes and Wesleyan, and found that the daughters of em-

ployed women had lower self-rated competence than the daughters of full-time homemakers. However, the daughters who reported that their mothers would prefer a career to homemaking, whether or not they were currently employed, were higher on self-rated competence, and on self-esteem (as measured by Coopersmith's Inventory). This reversal was primarily due to the fact that one-third of the working mothers were perceived by their daughters as preferring homemaking to a career. In her study of 130 psychology students at the University of Massachusettes in Boston (which is primarily a commuters' college), Baruch (1974) found that the daughters of women who had worked for at least one year for 10 hour/week or more preferred their mothers' "life patterns" to their fathers'. Their tendency to also perceive themselves as more similar to their mothers was marginally significant at the .10 level. If they perceived their mothers as preferring a career to homemaking, regardless of whether she had worked during the daughter's lifetime, she was even more likely to be perceived as more similar than the father. Bruce's study (1973) of 200 white middle-class working mothers in the upper Midwest examined another potentially important variable. In this study, working mothers were more likely to view employment as an option for their single daughters of marriageable age, and placed less emphasis on their marriage plans. There was no difference between mothers who worked part-time and those who worked full-time, and SES was not an influential variable. The conflicting results and the wide range of measures and variety of populations make this data difficult to analyze. In general, the research seems to indicate that employed women do not differ from full-time homemakers in terms of

discipline techniques. Working mothers who enjoy their employment appear to enjoy their children more as well. The effect of the mother's employment status on the elementary school-age and adolescent children appears to vary in different populations, and other variables including the sex of the child, may be confounding these results. Among college women, career-oriented employed mothers apparently are more admired by their college student daughters than are full-time homemakers. In addition, there is some evidence that working mothers are less concerned with their daughter's marriage plans because they consider employment a satisfactory option.

Summary. Despite the inconsistency in the results, most of these studies indicate that a mother who is employed outside the home and is career-oriented is more likely to have a daughter who is career-oriented and who has a somewhat feminist view of the female role. The relationship between pioneer career goals and a working mother is not clear; however, mothers who are Role Innovators tend to have daughters who want to be Role Innovators. The relationship between the mother's employment and the daughter's career goals appears to occur because working mothers have different attitudes towards the "proper" female role (at least in terms of the mother working outside the home), and because working mothers serve as a role model for their daughters, showing them that a woman can work outside the home and still be a happy and successful homemaker and family member. Although the mother's absence from the home may influence her children's social development in either positive or negative ways, the actual relation-

ship between mother and daughter does not appear to be crucially affected by the mother's employment status. There is some evidence that daughters admire their working mothers more than full-time homemaker mothers, and that the daughters of working mothers may be more likely to want to follow her traditional values; for example the daughter may decide to combine her career aspirations with her desire for a large family if she feels that her mother did so successfully. Since most mothers who are employed are in traditional female fields, the role modeling factor also would tend to steer their daughters to traditional careers.

Another factor which must be considered is the way that working mothers may differ from full-time homemakers on various personality dimensions such as independence, achievement motivation, and intelligence. These differences may also be responsible for differences between their daughters, and therefore must be taken into consideration. As I review the literature on the differences between career-oriented and homemaking-oriented women, it is important to keep in mind that these comparisons may also be relevant to the mothers of career-oriented and homemaking-oriented women, since the daughters tend to have the same preferences as their mothers.

The literature on working mothers also suggests the need for greater control of several variables when measuring SES. If the SES measure takes into account the mother's income, then the mother's employment status will confound the results. Similarly, when the mother's education, or even the father's education or occupational level is used to measure SES, the variable of the

mother's employment status should be controlled. This is necessary, because women with higher education are more likely to work or to have positive attitudes toward their jobs, and because husbands with higher education or with higher status occupations tend to have wives with relatively high educational attainment. Other variables, such as the relationship with the parents, and the number of siblings may also be related to SES or to the mother's employment status. Unfortunately, SES is rarely controlled when these other variables are examined, making it difficult to differentiate between variables. These related variables will be discussed individually later in this chapter.

A final consideration is the impact of shifting cultural values on the relationship between the mother's employment and the daughter's career goals and attitudes towards the traditional female role. As the proportion of women who plan careers increases, their mothers' employment histories may become irrelevant. Similarly, as the number of working mothers increases, such outside employment may have a less noticeable effect on the daughters' goals and attitudes. The relationship between the variables may change or disappear, either because the proportion of homemaking oriented women or homemaking mothers becomes too small to evaluate, or because career commitment or employment will no longer indicate the same kinds of differences from homemaking-oriented women or homemakers which were revealed in the studies of the 1950's and 1960's. For example, if working mothers are the norm in 1976, then the variable will no longer discriminate between nonconforming, ambitious, or otherwise unusual women and traditional women.

An alternative may be that more sensitive measures of career commitment will be necessary for both mothers and daughters, to discriminate between those women who plan to work or would like to have a career, and those who will pursue careers and/or consider their careers essential. These shifting values and the need for new measures of career commitment will be apparent in several sections of this paper.

Relationship with Parents

The woman's relationship with her parents may be important, regardless of her mother's employment history. Although many of the 1940's and 1950's studies concluded that career-oriented women were from broken or unstable homes, better controlled studies have shown that this is not the case (Hoffman, 1963). Recent studies have also shown that the parents' marital status is also unrelated to the daughters' feminist attitudes or activism (Goldschmidt et al., 1974; Lipman-Blumen, 1972).

Career Commitment. There is evidence in recent studies that career commitment is sometimes related to a relatively negative home environment. Nagely (1971) found that white, college-educated working mothers who felt that their careers were of primary importance reported that they were not as close to their mothers as those who viewed homemaking as more important and/or enjoyed homemaking tasks. In his study of above-average first and second year college women, Nuzum (1970) found that women scoring highest and lowest on the housewife scale of the SVIB did not differ in their relationships with their mothers, but homemaking-oriented

women saw their relationships with their fathers as freer, more sensitive, smoother, and more pleasurable. Oliver (1975) studied Introductory Psychology students at the University of Maryland in 1973, and found that career-oriented women felt that their fathers were less accepting than did homemaking-oriented women. There were no differences in feelings of being "concentrated on" by either parent. In her study of middle-class mothers (ages 28-48), Kriger (1972) found that homemaking-oriented women saw their parents as more restrictive than career-oriented women did. Turner and McCaffrey (1974) found that black and white first year college women who expected to work relatively consistently during their adult lives tended to have parents who were divorced or separated. When she looked at white women exclusively, she found that those who expected to be employed more consistently reported less emphasis on obeying their parents, and on having self-control and good manners. However, these relationships were not present for women who reported a preference for more consistent employment as adults. Since career commitment measures do not always discriminate between women who want to pursue careers and those who think that careers are important (possibly because they expect that they will have to work outside the home, for financial or other reasons), conflicting results may reflect differences in the wording of the career-commitment measures, or the expectations of the women being studied. For example, women who had stable, financially comfortable homes may interpret a question on career commitment in terms of their preferences, whereas women from less fortunate backgrounds may interpret the same question in terms of their

expected needs as well as their preferences.

The expectations of the women being studied may account for some of the inconsistencies in this data, and this factor deserves further study. However, there are no clearly apparent differences between the measures or samples used by Nagely, who found that career-oriented college-educated women were less close to their mothers than homemaking -oriented women and equally close to their fathers, and the samples of college women studied by Nuzum and Oliver, who found that career-oriented women felt less close or less accepted by their fathers, and equally close to their mothers. Turner found no differences in the relationship to fathers or mothers, for women who preferred to be more career-oriented, but those expecting to be career-oriented appeared to describe their relationship with their parents as rather restrictive, similar to Kriger's results for middle-class working mothers.

The small number of studies and the differences in measurement makes this data difficult to analyze. In addition to the expectations of the women, it appears possible that the difference between career-oriented college women and career-oriented wives and mothers may also be a crucial issue, and one that deserves further study. Larger, more heterogeneous samples would also contribute to the generalizability of the research in this area.

Educational Goals. In the one study which evaluates the relationship between educational level and the parental relationship, Carlson (1970) studied women who were in a master's degree psychology program with those in a doctoral psychology program. She found no differences in their descriptions of parental treatment,

as measured by the Crites Family Relations Inventory. She did find however, that most of the women reported that their parents had concentrated on them or ignored them rather than accepted them. Unfortunately, no comparisons with undergraduate women were available in this study. This study indicates that women in graduate school, many of whom are probably career oriented or future Role Innovators, may have less affectionate relationships with their parents, although there are differences between measuring parental attitudes in terms of accepting, ignoring, and concentration and measuring closeness and smoothness of a relationship. For example, a parent who is perceived as largely ignoring the child may also be perceived as "easy to get along with." Clearly, this one study can only be interpreted in terms of its similarity to other research in related areas.

Role Innovation. Almquist and Angrist (1971) found no differences between college women with pioneer and traditional goals in terms of their descriptions of their relationships with their parents. However, several other studies have indicated that women with pioneer and traditional goals do differ on this dimension.

Tangri (1972) found that among University of Michigan seniors in 1967, those who aspired to pioneer occupations were more autonomous in their relationships with their parents than those aspiring to traditional careers. The women aspiring to traditional careers felt closer to their fathers than their mothers, and those aspiring to pioneer careers generally agreed more with their mothers, although not on the subject of career goals. In the one study of

black college women, Mednick (1973) found no relationship between types of career goals and closeness to parents; women with pioneer goals and those with traditional goals tended to be closer to their mothers.

Three studies were concerned with working women. In Hennig's study of 25 successful women executives and 25 middle-management women, the more successful executives reported that their parents liked and respected one another (1974). In their study of women with careers in architecture, law, medicine, and psychology Standley and Soule (1974) found that 92% of their parents had stable marriages; 60% said that they were their father's favorite, and 34% reported that they were their mother's favorite. These women respected their fathers more than their mothers, but they confided more in their mothers and reported that, at the time of the study, they needed their mothers' more. In Birnbaum's study (1971) of University of Michigan faculty women and homemaker alumnae who had graduated with distinction between 1945-55, the only difference between the two groups in terms of parental relationships was that the faculty women were more likely to report having dominant mothers.

Once again, the results of these studies are inconsistent, and the measures used vary from study to study. The Standley and Soule study does not offer a comparison group, which makes it impossible to meaningfully analyze the results. The Birnbaum study is also difficult to analyze because the comparison groups are not perfectly matched, and differ from other studies in that one group is a pioneer group and the other is a high ability home-

maker group, rather than the usual career-oriented/homemaking oriented or Role Innovator/Traditional comparison.

Feminism. There are few studies which compare feminists and other women in terms of familial relationships. Lipmen-Blumen found that feminist wives of Boston area graduate students were less likely to report a "dominant father" than were more traditional wives, and were more likely to report more autonomy from their parents as adolescents. Feminists also expressed less admiration for their parents, more criticism from their parents, and more frustration from their mothers. There was a slight tendency for feminists to have admired their fathers more than their mothers, while the opposite was true for women with more traditional attitudes. Feminists also reported having been less concerned with pleasing their parents, and more likely to report critical mothers, whereas Traditionals reported more critical fathers. In this sample the feminists were in the majority, representing 73% of the women studied. In Nagely's study of white college-educated working women (ages 28-48), those with more feminist attitudes reported that they had less comfortable relationships with their fathers than did other women in the sample (1971). Stoloff (1973) studied University of Michigan doctoral students, and found that those who were active in the Women's Movement described their mothers as more assertive and competitive and their fathers as less competitive, than did nonactivist women. Women in both groups felt close to their mothers, and they also expressed similar feminist attitudes. In another study of activist feminists, Cherniss (1972) found that Women's Liberation members described

their mothers as stronger than did other women.

As in the previous studies, the samples and the measures used differ from each other and from those used in other studies. However, the Nagely study is interesting in that the relationship she found between feminism and parental relationships differs from the one she found between career commitment and parental relationships, even though the women with feminist attitudes tended to be career-oriented. Nagley's study suggests that career commitment is less threatening to the father-daughter relationship than feminism is, or that feminism is more likely to develop when a woman has a less comfortable relationship with her father, and career commitment is more likely to develop when the daughter has a less comfortable relationship with the mother. In Lipman-Blumen's study the feminists were more uncomfortable with their mothers, who they described as more critical and frustrating. Since Lipman-Blumen did not analyze the parental relationships for career-oriented and homemaking-oriented women, a comparison for career-oriented women and feminists is not possible. However, in the Stoloff study, doctoral students with feminist attitudes felt close to their mothers.

The different results for the three studies may reflect the differences in the samples: Nagely studied white working married women (ages 28-48) with at least one child at home, whereas Lipman-Blumen studied younger married women (median age = 23.4), and Stoloff studied graduate students with a mean age of 26, approximately half of whom were married. Lipman-Blumen's sample size of over 1,000 is also more impressive than Nagely's sample of 40 and Stoloff's sample of 44. There is some evidence that feminist

activists consider their mothers strong, assertive and competitive, and their fathers less competitive; these characteristics would certainly influence parent-child relationships. However, with only four studies in this area, conclusions cannot be drawn.

Summary. Although there are many contradictions in the studies cited, several trends are apparent. Studies by Carlson, Kriger, Tangri and Lipman-Blumen suggest that women with less traditional attitudes and career and education goals differ in their relationships with their parents on several measures. Whether this relationship is defined as more "remote" or "autonomous" appears to depend on the viewpoint of the author. The woman's relationship with individual parents also seems to be affected, but the differences vary from study to study. Oliver, Tangri, and Nuzum found that women with less traditional career goals (in terms of career-oriented or Role Innovators) were less close to their fathers, and Nagely found them to be less close to their mothers. On the other hand, Nagely found that feminists were less comfortable with their fathers, whereas Lipman-Bluemen found them to have more problems in their relationships with their mothers. Turner, Almquist and Angrist, Hennig and Birnbaum found no differences for career-oriented or Role Innovator women's relationships to their parents, and Stoloff found that feminist graduate students felt close to their mothers.

It appears that, for some populations using certain measures, women with nontraditional goals and views of the female role are less close to their parents or more autonomous, whereas for other

samples and other measures these differences are not apparent. Several factors may be involved in these conflicting results. One possibility is that the parent-daughter relationship is influenced by the daughter's career goals and attitudes during certain stages in her life, causing friction which may dissipate at other times. Tangri's college women with pioneer goals felt closer to their mothers than their fathers, but did not agree with their mothers on their career goals; if these women decided to pursue these goals they would have had to become relatively autonomous to do so.

Perhaps parental encouragement of the daughters' goals is an important factor which needs to be considered. However, an evaluation of studies concerned with parental encouragement again shows conflicting results. Ginzberg (1966) did a study in the early 1960's of women who were graduate students at Columbia between 1945-52, and found that 84% reported that their parents had encouraged their graduate studies. In his study of Stanford women from the class of 1965, Katz (1969) found that 87% of the women aspiring to be college professors reported that they had been encouraged to pursue a professional career by their fathers, and 58% had been encouraged by their mothers. The women who aspired to be full-time homemakers had not received such encouragement. In her study of the wives of Boston area graduate students, Lipman-Blumen found that those who were feminists (who also tended to have higher educational aspirations and were more career-oriented) reported that both parents had encouraged them to go to graduate school. However, parental discouragement does not necessarily deter their daughters' goals. Horner (1972) reported that Radcliffe

students often reacted to parental discouragement of career goals by becoming increasingly committed to pioneer fields. In Standley and Soule's study of women employed in four pioneer fields, only half of the women felt that their parents would have disapproved if they had dropped out of school, and even fewer would have disapproved if they dropped out of their professions (1974). However, they also found that 66% of these career women felt that their parents had emphasized achievement more than social adjustment, compared with only 17% who felt that their parents had encouraged social adjustment more. Vetter and Lewis (1964) studied Iowa State seniors majoring in home economics, and found that career-oriented women described their parents as neutral or disapproving of their career goals, whereas homemaking-oriented women described their parents' attitude as positive. However, they also found that the career-oriented women reported that their parents had given them material rewards for good school grades more often than their homemaking-oriented classmates.

These studies suggest that the parental attitudes towards achievement may be crucial. Whether or not parents encourage their daughters to pursue careers, graduate degrees, or specific kinds of careers may be less important than the fact that they encourage their daughters to succeed in school as they are growing up. Horner (1972) found that Radcliffe women became confused about their parents' attitudes while in college; they felt that suddenly their parents were no longer stressing academic success as they had in previous years, and instead were encouraging them to become interested in more traditional pursuits. After develop-

ing high expectations for themselves throughout their school years, these women sometimes find that their aspirations are strong enough to overcome their parents' opposition or indifference to their career goals. Clearly, the development of such personality characteristics as autonomy and achievement motivation may be closely related to these issues, and these traits will be discussed in depth in the next chapter. At this point it is sufficient to say that parental attitudes and upbringing may be influential in a variety of ways, as well as directly influential on specific attitudes.

The impact of conflicting goals of parents and daughters on their relationship to one another cannot be determined until the sequence of events is clarified. Is the parent-daughter relationship initially more remote or autonomous, thereby influencing the daughter to choose more nontraditional goals, or do her nontraditional goals significantly influence her relationship with her parents? The studies presented here indicate that by the time a career-oriented or role innovative woman enters college, she already describes her relationship with her parents differently than her classmates, and in the Lipman-Blumen study, where the median age was 23.4, feminist women reported that they had experienced a more autonomous, difficult adolescence. Research which evaluates the relationship between these variables for junior high and high school students is necessary, because retrospective reports from college-age women may be biased by their current familial relationships.

Identification

One important aspect of the parent-daughter relationship is the degree to which the daughter identifies with her mother or father.

Identification is measured by the degree of reported similarity to a parent, or as the desire to follow the same "life pattern" as one parent. Females usually identify more with their mothers (Beier & Ratzburg, 1953), and this identification is considered to be responsible for her devloping "feminine" behavior and characteristics. Since women who are career-oriented or have pioneer goals have been considered "masculine", it was often assumed that they identified with their fathers mother than other females did. The research has not always supported this assumption.

Career Commitment. In general, college women identified more with their mothers than their fathers, according to White's study of junior college freshwomen (1959) and Mednick's study of black college women enrolled in 1971 (1973). As expected, Baruch (1974) found that Swarthmore women who favored careers for women wanted to have a "life pattern" like their fathers rather than their mothers, and Oliver (1975) found that University of Maryland Introductory Psychology students who were career-oriented tended to identify with their fathers more often than homemaking-oriented women. Oliver's definition of career commitment included a stronger achievement motivation score than affiliation score on the EPPS, in addition to a more typical measure of career interest. Nuzum (1970) studied above-average first and second year college women, and found that the career-oriented women tended to identify with their fathers; however, the differences were not signficant. Heilbrun (1969) found that for male and female vocational counseling clients at Emory University, the "feminine" or "masculine" characteristics of the parents were also important. Students who identified with

a "masculine" mother or "feminine" father had more primary pattern scores and more positive vocational interests than those identifying with "feminine" mothers and "masculine" fathers. SES was also influential; among juniors and seniors in two liberal arts colleges, lower SES women tended to identify with their mothers and have stronger intrinsic and extrinsic work value orientations (Kinnane & Bannon, 1964). Extrinsic work values, such as concern with financial security, would be expected for lower SES students, but intrinsic work values have usually been associated with higher SES. These issues will be discussed more fully in Chapter 6.

The results are conflicting. Although women tend to identify with their mothers, Baruch and Oliver found that career-oriented women were more likely to identify with their fathers. However, in an earlier study, Kinnane and Bannon found that lower SES college women had stronger work values and identified more with their mothers; unfortunately, their career commitment was not measured in a manner comparable to the Baruch and Oliver studies, where the women were asked their aspirations in terms of career and homemaking alternatives. Heilbrun's study was also not directly comparable, because the sample consisted of students who had sought help with vocational decisions, presumably due to uncertainty or goal conflicts which were stronger than those felt by the other students studied.

The small number of studies makes evaluation difficult, but the Kinnane and Bannon study does suggest that other factors, such as SES, may need to be controlled in order to evaluate the effect of identification. A study by Regan (1973) of University of Pennsylvania freshwomen and their mothers also indicated a need to

control for the possible influence of the mother's employment status on these results. Regan found that daughters of career oriented mothers identified more with their mothers, whereas daughters of homemaking-oriented mothers identified more with their fathers. Similarly, Baruch (1974) found a marginally significant tendency for the daughters of working mothers to perceive themselves as more similar to their mothers than the daughters of full-time homemakers, and a significant tendency to prefer their mothers' life pattern more than their fathers'.

Role Innovation. The results of studies comparing women aspiring to pioneer or traditional career goals has been more consistent. Johnson (1970) found that among North Texas State University women taking the Introductory Psychology course, those who had high SVIB scores in science fields (which are primarily male-dominated, except for nursing) identified more with thier fathers whereas there was no relationship between parental identification and degree of interest in traditional career such as business educat[illegible]acher, stenographer-secretary, office worker, elementary school or home economics teacher, dietician, artist, author, librarian, or English teacher. He concluded that identification with the mother was not a major consideration in the formation of sex-typical occupational interests, but that identification with the father was important in the formation of pioneer goals.

Tangri (1972) found that for University of Michigan seniors in the class of 1967, having pioneer aspirations was slightly

correlated with perceiving themselves as more like their fathers, although their relationships with their fathers were not close. In her study of female graduate students, Lovett (1969) found that science graduate students identified more with their fathers than did social work graduate students. In contrast, Mednick (1973) found no relationship between identification and pioneer aspirations for black women enrolled in five Eastern colleges in 1971; most of these women identified with their mothers.

Although there are few studies in this area, the majority agree that women with pioneer career goals tend to identify with their fathers rather than their mothers. The women involved in these studies were primarily white, and the Mednick study suggests that this relationship may not be maintained for black women. The results of the Tangri study indicate that identification with a parent is sometimes unrelated to the quality of the relationship between the parent and the child.

Feminism. In the one study of the relationship between feminism and identification, Stoloff (1973) found that activist feminists who were in doctoral programs at the University of Michigan were more likely to perceive themselves to be like their mothers than were their nonactivist classmates. The two groups, matched for age, field of study, and year of graduate school were similar in terms of feminist attitudes.

Summary. There is little research pertaining to identification, and the results are conflicting. The relationship between career

commitment and identification cannot be determined from the studies available; however, white college women aspiring to pioneer careers tended to identify with their fathers. More research is needed, particularly comparing black and white women, evaluating career women rather than college students and comparing ideological and activist feminists.

The studies cited indicate the potential importance of related factors, such as the mother's employment history. Research on career commitment indicated that career-oriented college women tend to identify with their fathers, but that working mothers were more likely to have daughters who identified with them than were full-time homemakers. Since working mothers tend to have career-oriented daughters, these two forces conflict with one another, and may explain the differences in research results. In future research, the mothers' employment status should be controlled when identification is evaluated.

Personality characteristics which are related to parental identification may also be interrelated with career commitment, role innovation, and feminism. For example, Lozoff (1974) studied gifted Stanford alumnae in the early 1960's and found that the autonomous women tended to describe themselves as emotionally similar to their fathers, although they frequently disagreed with him: they perceived their mothers as inadequate, less forceful, and therefore irritating. Williams (1973) found that among senior women at a Catholic high school, identification with ascendant-dominant fathers was correlated with greater confidence, self-reliance, competiveness, assertiveness, and self-acceptance; qualities which may be related to career choice or feminist attitudes.

These studies demonstrate that identification is closely related to personality characteristics, and this may be the reason why identification is an influential factor in the career goals of women. Personality characteristics will be discussed in the next chapter.

The daughter's choice of one parent as a role model may also be an important aspect of the relationship between identification and career choice. If a daughter perceived herself as similar to her father, she would be expected to choose a life style similar to his, therefore choosing a career, possibly in a field similar to his. In fact, research has indicated that sons are more likely to choose their father's occupation than are other males (Werts, 1965). Certainly, a daughter who identified with her father would be likely to behave similarly.

Although identification with the father clearly correlates with pioneer aspirations and possibly career commitment in college women, it may not correlate with actual career choices made by college alumnae, particularly if they are married or have children. Research is needed which will examine this relationship.

Birth Order and Family Size

Rossi (1965a) predicted that although first born males are over-represented among eminent scholars and scientists, first born females would direct their achievement motivation to appropriately "feminine" outlets. Her predictions have not been confirmed.

Career Commitment. Edwards and Klemmack (1973) found no relationship between career commitment and birth order for college women, although later borns with a younger brother, no younger sisters, and no older brothers were more career-oriented than their first born counterparts. Later borns with a younger sister were more homemaking-oriented than their first born counterparts, and the first borns who planned to marry later were more homemaking-oriented than their later born counterparts. Levitt (1971) studied librarians in seven metropolitan areas, and found that those with stable careers tended to be only children, and those who had delayed their careers due to homemaking responsibilities all had siblings.

Education. Kammeyer (1966) studied single college women at a state university in 1961. He found that when asked if they would leave college to marry, first borns were more likely to report that they would. The difference between first borns and later borns was especially striking for first year students. First borns were also more traditional in terms of religious beliefs and having attitudes towards the female role more similar to their mothers' attitudes. Studying a national sample of women receiving doctorates in 1957 or 58, Astin (1969) found that 47% were first born or only children, 26% were second born, 12% were third born, and only 15% were in the fourth or later position. These statistics were similar to those for male graduate students. In her study of psychology graduate students in the late 1960's, Carlson (1970) found no differences in family size or birth order compared to women in the general population, or when those in a

master's program were compared to doctoral students. However, these graduate students were more likely to be first borns than later borns, and there was a greater proportion of first borns in this sample than in the sample of male psychology graduate students.

Since women with graduate degrees tend to be more career oriented and are more likely to choose pioneer occupations, Astin's statistics support the hypothesis that career-oriented and Role Innovator women tend to be first borns or only children, and tend to come from small families. Kammeyer's study suggests that first born females will tend to be less educated and therefore less career-oriented; however, he evaluated responses to a hypothetical situation, which is less persuasive than Astin's statistics.

Role Innovation. The relationship between birth order and pioneer career goals is consistent in the majority of studies. Using a pioneer-traditional continuum, Edwards and Klemmack (1973) found that college women aspiring to less traditional careers tended to be first borns, although the correlation was only .15. In this study, the first born career-oriented women were more role innovative than the later born career-oriented women even when siblings were controlled. However, a first born with a less educated mother or father, and whose father had a high occupational level tended to be more traditional than her later born counterparts, and first born women with highly educated mothers were more traditional than their later born counterparts. When the father

had high education or a low level occupation, the relationship between birth order and role innovation disappeared. In their study of family size, Klemmack and Edwards (1973) found that college women who came from larger families anticipated having larger families themselves, and this was related to choosing more traditional careers. Although significant, this correlation was below .20.

In a study of women medical students at the University of California, Cartwright (1972) found that 13.6% were only children, 32.6% were first borns, and 48.3% were second borns. Only 17% came from families with more than three children. Although first borns and only children were a minority, these statistics indicate that these women medical students came from unusually small families.

In contrast to these findings, Sundheim (1963) found no birth order differences between Temple University women who were majoring in education, languages, or science.

Two studies were concerned with the birth order of career women. Hennig (1974) found that women who were presidents and vice-presidents of nationally recognized business firms were all either only children or the first born child with only sisters. Of the women in architecture, law, medicine, and psychology ($\bar{m}$ age = 40) which Standley studied, 57% were only or oldest children, and 75% were the only or oldest daughter.

These results are somewhat confusing because first borns and only children are sometimes combined, and sometimes evaluated separately, and because detailed evaluations are sometimes given

of the sex of older and younger siblings, and sometimes this information is not available. Another weakness of the data is the lack of comparison groups in some studies. However, as a whole, these studies indicate that first born and only children are more likely to aspire to pioneer career goals and to actually pursue such careers.

Feminism. In the four studies concerned with feminism, there were no significant relationships between ideological or activist feminism and birth order, family size, or sex of siblings (Dempewolff, 1974; Goldschmidt et al., 1974; Lipman-Blumen, 1972; Stoloff, 1973). However, Stoloff (1973) found that graduate students who were activist feminists tended to be only daughters more often than their nonactive classmates who were ideologically committed to feminism.

Summary. Despite the confusion resulting from different measures of birth order, and the lack of comparison groups in several of the studies, the literature on birth order and family size suggests that career commitment, high educational aspirations and pioneer career goals and choices tend to correlate with first born or only child status, and that women with these career goals are more likely to come from small families. However, results relating to family size may have been confounded by related variables, such as religion, which were not controlled. The results of one study suggest that women who do not have older brothers, are more likely to have less traditional career goals, perhaps because the parents encouraged the daughter to "take the place" of

a son by pursuing a prestigious career.

Since first borns often receive the most intensive attention from the parents, it is not surprising that first borns, both male and female, tend to have the most ambitious career goals. Apparently this special treatment and encouragement influences career motivation so strongly that the women are less influenced by the factors which caused first born daughters to be more traditional in Kammayer's study. The results suggest that Rossi's hypothesis that first born women would direct their motivation to traditional pursuits was erroneous.

There is little research on the relationship between feminism and birth order or number of siblings, but the four studies which evaluated feminist ideology, feminist activism and number of siblings found no differences among college women, graduate students, or the wives of graduate students. Since first born women tend to have more ambitious career goals, one would expect that they would also tend to have more feminist attitudes; however, the research results suggest that the relationship between career goals and feminism is balanced by the relationship between birth order and traditional attitudes. More research is needed in this area.

Race

Most career research has focused on white college students, probably because they were the subjects most readily available to researchers. However, several studies have compared white students with nonwhite students (usually blacks).

Career Attitudes. Black high school males and females differed from whites in three studies. Studying Maryland ninth graders, Entwisle and Greenberger (1970) found that black males held more liberal attitudes towards women holding jobs than white males, but both groups were equally conservative about the types of occupations which they considered appropriate for women. In a study of black eleventh and twelfth graders, Shapiro (1973) found that girls considered "low status jobs" (those requiring two years of training or less) equally acceptable whether they were considered traditionally masculine or feminine, and these jobs were just as acceptable as male-dominated professions which required a bachelor's degree or more. However, the female-dominated occupations which required at least a bachelor's degree were considered significantly less acceptable than the occupations in the other three categories. In a study of twelfth grade inner-city girls, Berman (1972) found that race significantly affected career goals. Teaching was the only career mentioned by white, black, Puerto Rican and Chinese girls, and only nursing, secretorial work, academic sciences, and accounting were mentioned by members of three of the groups. Blacks mentioned nursing most often, and whites and Puerto Ricans cited secretary most often. Chinese girls listed teaching and bookkeeping most often.

Although black males and females express more acceptance of women working outside the home, than do whites, it is not clear whether this difference reflects a more liberal view of the female role, a different attitude towards homemaking or employment, or different expectations regarding financial need or other factors.

Black females also appear to have different occupational preferences and less positive attitudes toward high status traditional female occupations.

Career Commitment. Black women were more career-oriented than white women in most studies. In her study of tenth and eleventh graders in a suburban New York public high school in 1966, Smith (1969) found that nonwhite girls were more favorable toward combining marriage, motherhood, and a career than white girls. In a study of black women in predominantly black colleges in the class of 1964, Fichter (1963) found that 40% planned careers in addition to marriage, compared to 16% of Southern white women and 19% of a national sample of women. These black women also had more confidence in themselves. Similarly, black freshwomen in four very selective women's colleges in 1965-67 were more likely to aspire to careers in addition to marriage than their white freshwomen classmates in 1967 (Wilson, 1969). In a sample of college women that was stratified according to SES, Turner and McCaffrey (1974) found that 54% of the black college women expected to work full-time, whereas only 16% of the white women shared this expectation, regardless of SES. Moreover, 11% of the black women preferred to be single career women, an option that was not chosen by any of the white women. Fifty percent of the black women, compared to 13% of their white classmates, preferred less career involvement than they expected, whereas 40% of the whites and 29% of the blacks preferred more career involvement than they expected. In her study of black women enrolled in five colleges in 1971, Mednick (1973) found that most women planned to return to work

by the time their youngest child was in first grade.

Not only do black women report that they are planning to pursue a career, they actually do so. Nonwhite women and mothers are more likely to work than white women, despite the fact that they earn lower salaries and have higher unemployment (Hoffman, 1963; Keyserling, 1967; Parnes and Nestel, 1975). Despite their tendency to be employed, Ash (1970) found that blacks and Chicanas expressed greater dissatisfaction with their jobs than did white women in the same production or clerical positions. However, the proportion of black women that pursue careers may be decreasing. In their 1972 study of a national sample of married women with children, Parnes and Nestel (1975) found that black women in their late fourties were three times as likely to have a career as those in their late thirties. Parnes and Nestel defined career as employment for six months or more in at least three-fourths of the years elapsing between leaving school and the time of the study, with all employment in the same or similar occupational category. They found no differences related to age for white women in this sample.

These results suggest that black women sometimes view careers as a responsibility rather than a means of personal fulfillment. Although they do not necessarily base these attitudes on their own experiences with financial need, they may, nevertheless, feel that a women should contribute financially to her family. It is also possible that because black women, especially mothers, have traditionally been more likely to work outside the home, their employment is considered acceptable, and these working mothers

serve as a role model for their daughters. However, it appears that black women are becoming less career-oriented, and this suggests that career commitment may not have been a preference in the past.

Education. Although black women have been more likely to attend college than black men (Werts, 1968), they have been less likely to attend college than white women (Gordon, 1974). However, in a national sample of college students from the class of 1971, Baird (1973) found that black women were proportionally more likely to go to college than white women. Black male and female first year students in black colleges also had higher degree aspirations; in 1966 only 28% planned to stop at the bachelor's degree, and in 1970 only 29% planned to stop with the bachelor's. This is significantly lower than the 39% of all male and female first year students who planned to stop at the bachelor's degree in 1966 and 1970. Black freshwomen in four very selective women's colleges from 1965-67 were also more likely to plan on graduate or professional degrees than their white freshwomen classmates in 1967 (Wilson, 1969).

Black women are not the only group which are more likely to pursue a graduate education. Astin (1969) found that women with a foreign born parent or parents were approximately twice as likely to have received doctorates in 1957 and 1958 than their representation in the population would predict. The specific national affiliations were not available.

The higher proportion of black and immigrant women entering college and planning to pursue graduate degrees is somewhat surprising, considering the fact that these groups tend to have lower SES backgrounds. Whether or not black women actually do receive proportionally more graduate degrees than whites is not reported in these studies. It appears, however, that women with foreign born parents were more likely to receive doctorates in 1957 and 1958, although more recent statistics are not reported. These studies do indicate, however, that members of minority groups may have different attitudes towards higher education for women, and these attitudes may motivate them to pursue more education, even when education poses a financial burden for them or their families.

Role Innovation. Black women also expressed more interest in pioneer occupations and are more likely to enter some of these professions than white women. On the SVIB, black college women enrolled at the University of Colorado scored higher than their white classmates on two pioneer scales, military manager and business, whereas they were lower on the science, art, and verbal-linguistic scales (Grosz & Joseph, 1973). Black women are also more likely to actually pursue several pioneer occupations, particularly medicine and law. Eight percent of black women are lawyers and 7% are physicians (Epstein, 1973). However, black women are less likely to teach at the college or university level than white women, although they outnumber black faculty men (Carnegie Commission, 1973).

These studies show that black women expressed different career interests than white women including stronger interests in items related to several pioneer careers, and lower interest on the science scale. Despite the lower SES usually associated with black persons in this country, black women are proportionally more likely to pursue two of the most prestigious pioneer careers, law and medicine. Whether or not these fields are considered more appropriate for women in black culture than white culture has not been investigated. However, Mednick (1973) found that black women expressed weaker motive to avoid success than white women, regardless of SES, which suggests that they don't consider professional success threatening to the female role.

Feminism. The Women's Movement has been considered a white and middle-class movement. Although black women have been visable in the Movement, it has been assumed that black women were less likely to express feminist attitudes or become active in feminist groups. There has not been any research done in this area; however, Turner and Turner (1971) found that among freshwomen at a state university, the black women were more aware of discrimination against women than the white women.

Summary. The literature on racial differences consistently shows that black college women are more career-oriented than white women, and that black women, especially mothers, are more likely to be employed than white women and mothers. Recent statistics show that a higher proportion of black women now go to college than

white women, and those in black colleges and selective women's colleges are more likely to aspire to graduate and professional degrees than white college women. Black women are also more likely to enter several pioneer fields, most notably the prestigious fields of medicine and law. However, black college women do not score higher than white women on the majority of SVIB scales.

There are several related factors which may influence black women's career goals. Since black mothers are more likely to work, black women are more likely to have working mothers, who may have directly or indirectly encouraged their daughters to pursue a career. College educated black females also have the lowest fertility rates, which makes career commitment more possible (Moynihan, 1965). Financial necessity or feelings of financial responsibility may also be important. Black women have often found it necessary to work to supplement the family income, or because they were more likely to be widowed, divorced or separated (Cain, 1966). Moreover, Parnes and Nestel (1975) found no relationship between black women working and their having favorable attitudes towards mothers working outside the home, although there was such a relationship for white married mothers. This lends more support to the hypothesis that black women work because they have to or feel that they should, not necessarily because they find outside employment fulfilling. In fact, there is some evidence that black women prefer work less, and are more unhappy in their [illegible] than are white women who hold the same positions.

However, it still may be the case that black college women, who are qualified for more interesting and prestigious jobs than

their mothers, continue in their careers because they enjoy them, whether or not they need the money or feel responsible for contributing to the family income. Certainly, both male and female black students are more accepting of the role of "working mother", whether or not they find the role attractive. Epstein (1974) suggests that financial need is used as an excuse consciously or subconsciously by black women and the daughters of immigrants. However, there is little data on black women's attitudes towards careers or toward other nontraditional behavior or attitudes towards the female role.

The limited data on other minority group women suggests that they share black women's employment patterns, and therefore may also have similar aspirations and career goals. Further research is needed in this area.

Religion

Religious upbringing has been studied in terms of its relationships to career commitment, role innovation, feminism, and radical protest. Religious convictions have also been studied, but they will be discussed in Chapter 6.

Religious Affiliation and Career Commitment. The results of studies concerned with specific religious affiliation are sometimes contradictory. In her study of women who had graduated from Providence high schools between 1931-38 and were interviewed in the 1950's, Mulvey (1963) found that Jewish women were the most likely to be stable homemakers who had never worked, whereas

Catholic women tended to work only before marriage or children, and Protestants tended to combine homemaking and careers. The Jewish women were the most likely to marry, which would tend to decrease their career commitment, however, the Jews and Catholics were most educated, which usually correlates with greater career commitment. For these reasons, the Mulvey results are surprising, and they also directly conflict with Watley and Kaplan's study (1971) of National Merit Scholars from 1956-60 who were interviewed in 1965. They found that the Jewish women rarely preferred a "marriage only" choice, and that two-thirds of the Jewish women wanted to combine marriage and a career, compared to less than half of the Catholic and Protestant women. In contrast, Katz (1969) found no differences in the religious affiliations of two-year alumnae of Stanford and Santa Rosa Junior Collge (classes of 1965) related to employment status.

The differences in these results may reflect the differences in the populations involved. The Mulvey sample consisted of women who were not necessarily college-educated and who were between the ages of 37-47 when they were interviewed in the 1950's. Furthermore, such important variables as SES and foreign born parents were not controlled, and not discussed. It could be that in Providence, religious affiliation was strongly related to one or more of these variables, which could have influenced the results significantly. The Watley and Kaplan study used a national sample of very high ability women who graduated from high school in the late 1950's or 1960 and were interviewed soon after their graduation from college. Although this sample is probably repre-

sentative of high ability college-educated women during that era, it is not necessarily generalizable to more average college educated women, or to high ability college women of the late 1960's or 1970's. Finally, the Katz samples included primarily middle-class, fairly high ability women from Stanford and working class relatively average ability women from Santa Rosa. He found no differences in this diverse group of students, and this group was probably the most generalizable to college students in general. More research is needed before conclusions can be drawn in this area, however.

Religious Affiliation and Role Innovation. In a study of female college juniors in 38 colleges and universities in 1968-9, Karman (1973) reported that 64% of the Jews had pioneer career goals, compared to 21% of the Protestants, 16% of the Catholics and 34% of those who called themselves "other". Since "other" included athiests and agnostics, religiousness was a factor in that category. In a national study of women medical students, Drabick (1967) reported that 60% were Protestant, 19% Catholic, and 14% Jewish. Although these statistics are not directly comparable to the previous study, it is obvious that Jewish women are over-represented compared to their representation in the general population, and Catholic women are slightly underrepresented. In contrast, in her comparison of Temple University women in the early 1960's, Sundheim (1963) found no differences in the religious affiliations of women majoring in education, science or languages.

These three studies suggest that Jewish women are more likely to aspire to pioneer occupations, and in the case of physicians, they are also more likely to pursue a pioneer career. Catholic women appear to be the least likely to aspire to or pursue pioneer careers. The fact that the Karman and Drabick studies used national samples makes them more persuasive than the Sundheim study, although it is possible that the differences in religious affiliation for women aspiring to pioneer careers does not apply to "pioneer" college majors as well. Furthermore, these studies do not investigate whether or not religious affiliation is strongly predictive of actual pioneer choices in fields other than medicine. Again, such factors as SES, ethnic identity, and race were not controlled and not discussed.

Feminism and Religious Affiliation. The results are not consistent when the relationship between religious affiliation and feminism is examined. Among male and female Psychology Today readers, Tavris (1973) found that Unitarians were the most likely to support the Women's Liberation Movement, followed by Jews, Protestants and Catholics. For female readers, however, there was more support among Catholics than Protestants, and Catholic women were significantly more favorable toward the Women's Liberation Movement than Catholic men. In Dempewolff's study of University of Cincinnati men and women (1974), feminists tended to have been raised Jewish, atheist or agnostic, whereas those with more traditional beliefs were usually Protestant or Catholic.

Feminists also tended to consider themselves Unitarians, although they had not necessarily been raised as such. In her study of University of Michigan doctoral students, Stoloff (1973) found that 50% of the activist feminists were Jewish, compared to 9% of their nonactivist classmates; 36% were Protestant as were 60% of the nonactivists; and none were Catholic, although 14% of the nonactivist women were. The activists also tended to come from less religious homes than the other women. The nonactivist women expressed similarly feminist attitudes as the activists so that this study differentiated between activist and nonactivist feminists.

In contrast, Goldschmidt et al. (1974) found no differences between religious groups in terms of feminist ideology, but Protestants were more likely to be members of the campus Women's Liberation group, followed by Catholics and Jews. Among the wives of graduate students, Lipman-Blumen (1972) found no differences for religious upbringing or present religious choice among feminists and women with more traditional attitudes.

In terms of feminist ideology, two studies indicated that Jewish women were more likely to be feminists and one study showed no differences. In three of the four studies, Protestant and Catholic women were less likely to be feminists. In two studies, Unitarians were more feminist than Catholics or Protestants but this group was not singled out in the other two studies, and were probably included in the Protestant group. Clearly, this would have the effect of increasing the feminist rating of the Protestant group if Unitarians are consistently more feminist; the two

studies are insufficient to establish this.

There were two studies which evaluated feminist activism; in one, Protestants were the most active and Jews were the least active, and in the other Jews were most likely to be active. The Goldschmidt et al. study suggests that activism and ideology may differ in their relationships to religious affiliation, although they were related to one another, and similarly related to religiousness. However, this study only evaluated one kind of feminist activism, and since membership in campus Women's Liberation groups may attract a particular kind of feminist, this finding may not be generalizable to other forms of feminist activism. The Stoloff study is interesting because all the women expressed feminist attitudes, but the activists were much more likely to be Jewish than the nonactivists. It is possible that the fact that this study involved only doctoral students influenced the results.

Since SES and other potentially important factors which could possibly explain the different results were not controlled, these studies do not clearly establish the influence of religious upbringing or feminism.

Summary. Two studies support the hypothesis made in Chapter 1 that questioning assumptions about the traditional female role tends to be correlated with questioning assumptions about religion. In both studies, feminists tended to have been brought up in less religious homes.

The relationship between specific religious affiliations and

a nontraditional view of the female role is not clear, partly because potentially important variables such as SES, ethnic membership, and race were not controlled in most of the studies. For example, in one study many of the Protestants may be black, while in another study they may all be white. Catholics may be a mixture of working-class ethnic groups in one study or middle class women representing one ethnic group in another study. The national samples are probably most reliable for this reason, and they show that Jewish women are most likely to have pioneer aspirations, and that high ability Jewish women are more career-oriented than high ability women in other religious groups. Catholic and Protestant women had similar goals, with Protestants usually slightly more oriented toward pioneer careers. There were no national studies concerned with feminist ideology or activism, but those conducted on various campuses showed that Jews and Unitarians were more likely to express feminist attitudes, whereas the results for activist feminists varied. The relationship between feminism and different kinds of feminist activism was not explored, however.

Political Affiliation

Parents' political beliefs have rarely been considered in terms of their relationship to women's career goals or related attitudes towards the traditional female role. However, the results of two studies show that there is a relationship between a parent's political beliefs and the daughter's assumption-

questioning of the female role. Goldschmidt et al. (1974) found that conservative mothers had daughters who were least committed to feminist ideology and least active in a feminist group; moderate mothers had moderately feminist daughters; liberal mothers had daughters who were most committed to feminist ideology and the most likely to be active in the campus group. Stoloff (1973) studied feminist students in a doctoral program at the University of Michigan, and found that activist feminists had parents who were more liberal or radical, and mothers who were more expressive of political beliefs than the other feminists. The activists were more likely to report that they were more radical than their parents, but they also reported that their parents approved of their activities, which included other political concerns in addition to Women's Liberation.

These two studies suggest that parents with more liberal or radical political views may tend to raise daughters with more liberal views toward the female role and more activist. More research is needed to evaluate the influence of the parents' political beliefs on the daughter's attitudes, as well as her career commitment, educational aspirations, and pioneer aspirations or choices.

Chapter Summary

Despite many contradictions and lack of data in some areas, several variables related to family background have consistently demonstrated their impact on career commitment, pioneer career

choices, educational aspirations, and feminist ideology or activism.

Career Commitment. The most consistent results regarding career commitment were related to mother's employment status and race. Working mothers tended to have career-oriented daughters, in studies conducted with daughters in high school, college, or career women. The only exceptions appeared to be among very homogeneous samples, but the data suggests that this variable may become less important as the proportion of working mothers and career-oriented daughters increases. Black women were also more career-oriented and more likely to work. Whether they find work more attractive or feel that it is their responsibility to contribute to the family income is not clear. This variable may also be related to the mother's employment status, since black women are more likely to have working mothers' in the studies cited the mother's employment status was not controlled.

Several other variables have been examined, although the results are not conclusive. The majority of studies on SES found no differences between career-oriented and homemaking-oriented women, although several indicated that working class college women were more career-oriented. When SES was measured by the parents' educational levels, the results were also unclear. When the relationship with the parents was examined, the results suggested that career-oriented women are less close to one or both parents, and that their parents are less restrictive than the parents of homemaking-oriented women. Career-oriented women also are more

likely to report that their parents encouraged them to succeed in school, and sometimes also encouraged their career goals. The parent-daughter relationship may also be affected by other factors, such as the parents' SES, educational attainment, or political beliefs, since these factors may influence the parents' attitudes towards childrearing.

The four variables which have the least conclusive data are birth order and family size, religious affiliation, parents' political beliefs, and parental identification. Research on identification does, however, indicate that results may have been confounded by the mothers' employment status, which should have been controlled. There is obviously a need for more research in these areas.

Education. The relationship between educational aspirations and race were clearly demonstrated. Black women are now more likely to attend college than white women and those in black colleges or selective women's colleges are more likely to aspire to graduate degrees than white women. The actual proportion of graduate degrees awarded to black women has not been reported, however.

The results were less conclusive for birth order and family size, SES, and the mother's employment status. Women who received doctorates have tended to be first born or only children, or to be from small families. Each parent's education and the father's occupational level also appear to independently influence the daughter's educational attainment. Studies concerned with edu-

cational attainment were often not comparable, however, because of differences in measurement; in some cases women with a high school degree or less were compared to those with more education, whereas in other cases those with less than a college degree were grouped together and compared to women with at least an undergraduate degree. The mother's employment status also appears to be influential; three studies indicated that women with graduate degrees or who aspire to graduate degrees tend to have working mothers. The relationships between the mother's education or employment status and the father's education or occupational level may be crucial, and these variables were not controlled in the research cited.

Other variables such as the relationship with parents identification, religious affiliations, and parents' political beliefs have not been studied sufficiently to analyze in depth.

Role Innovation. SES and race were the most clearly influential variables related to role innovation. Whether SES was measured by the father's educational or occupational level, the parents' income, or by the mother's education, higher SES was associated with pioneer aspirations and career choice although there is some evidence that this relationship pertains to white women only. Black women were more likely to become doctors or lawyers than white women, although their participation in other pioneer fields has not been evaluated.

The relationships between pioneer aspirations and the mother's employment, the parent-daughter relationship, identification, birth

order and family size, and religious affiliation are less clear. In some studies the mother's employment was positively correlated with the daughter's pioneer aspirations; however, this relationship may be primarily due to those few mothers who are themselves in androgynous or pioneer careers. Women with pioneer aspirations may also have more autonomous relationships with their parents, similar to those described by career-oriented women, but more research is needed in this area. The few studies concerned with identification consistently indicated that white women aspiring to pioneer careers were more likely to identify with their fathers than were women with traditional career goals. This relationship was not apparent in the one study of black college women. Women aspiring to or choosing pioneer careers also tended to be the first born or the only or oldest daughter, and they tended to have fewer siblings than women with traditional career choices. Religion also seems to be relevant to pioneer aspirations, with Jewish women being most likely to aspire to pioneer careers and Catholic women being least likely; however, this variable has probably been confounded by the effects of related variables such as SES, mother's employment status, family size, and the women's educational attainment. These variables will have to be controlled before accurate interpretation is possible.

There is no data at all in the areas of parents' political beliefs.

Feminism. The relationships between family background variables and feminism have not been studied as thoroughly as career commit-

ment, educational aspirations, and pioneer aspirations or choices. There are approximately a dozen articles cited in this chapter, most of which were conducted in the early 1970's. None of them use national samples.

Mother's employment status is the only variable which has been evaluated thoroughly enough to analyze with some degree of confidence. Studies consistently demonstrated that daughters of working mothers or career-oriented women have different attitudes towards the female role than do the daughters of full-time homemakers. Although these attitudes cannot always be described as feminist, they are less traditional than those of other women. At the very least, daughters of working mothers have more positive attitudes towards women and mothers being employed outside the home. There is also some evidence that they express less extreme stereotypic views of men and women, that they perceive women as more competent and that they are more in favor of the Women's Liberation Movement. Mothers who are very dissatisfied with the role of homemaker also tend to have daughters with more feminist attitudes.

Several other variables have been studied, making some predictions possible. Religious affiliation has sometimes been an influential variable, with Jewish women tending to have the most feminist attitudes; the relationship between religious affiliation and feminist activism is not clear. Feminists also tend to describe their parents as less religious than other women. The association between parents' religious affiliation and relgiousness was not evaluated. The impact of the parent-daughter relationship on the

daughter's attitudes towards the female role were not clear, although in two studies the feminists were less close to their parents, and in two other studies the feminists tended to report that their mothers were strong, assertive women. The results for SES were also conflicting, with four studies indicating no relationship between the father's educational or occupational level and the daughter's feminism; one suggesting that mothers with graduate degrees or less than college degrees have more feminist daughters; and one which found that among feminist graduate students, the activists tended to come from middle-class or upper-middle-class homes more than the nonactivists. The four studies of birth order and family size found no relationship to feminism, and the two studies of the parents' political beliefs showed a positive relationship between the parents' liberal or radical political ideologies and the daughters' feminist attitudes or activism.

There were no studies evaluating the relationship between feminism and race and only one study of parental identification.

Conclusions. Overall, the strongest predictors of nontraditional attitudes toward the female role and careers appear to be the mother's employment (for career commitment and feminism) and race (for career commitment, educational aspirations, and role innovation). Higher SES appears to be strongly related to pioneer aspirations and choices but not to the other variables.

A major limitation of the research on family background has been the lack of control of various related variables, particularly

SES, religion and the mother's employment status. Researchers rarely matched subjects in their comparison groups on these or other dimensions, and their potential impact was not considered. As a result, it was often difficult to determine the extent to which other variables were influencing the relationships being studied.

As career commitment and pioneer careers are becoming more acceptable among college women, the relationships between these dimensions and background variables may be modified somewhat. The recent research on mothers' employment status suggests that this variable may no longer be predictive of daughters' career commitment. Current research will have to be compared to earlier studies in order to determine how the relationships between variables are affected by changing cultural expectations.

CHAPTER 5

PERSONALITY

Women who challenge the traditional female stereotype by pursuing careers, particularly pioneer careers, or through ideological or active commitment to changing the sex-roles of our culture, have been perceived as fundamentally different from other women. Social scientists have searched for reasons in the women's family backgrounds, but they have also assumed that these less traditional women have somehow developed differently and have different characteristics than other women.

Masculinity and Femininity

Traditionally, many personality traits have been considered either "masculine" or "feminine", and these two terms have been viewed as opposite poles of a continuum. Most of the characteristics discussed in this chapter are considered either "masculine" or "feminine"; however, these traits are sometimes grouped together rather than evaluated separately, and it has been assumed that the more "masculine" women would be more likely to be career-oriented, to be career women, to aspire to male-dominated occupations, and to express nontraditional attitudes toward the female role.

The American College Survey list of masculine traits is similar to those used by other scales. It included: leadership, achievement motivation, aggressiveness, independence, intellectuality, self-confidence, perseverence, and ability in athletics, mathematics, science and research. The traits that were considered feminine were: understanding others, sociability, self-control,

conservativeness, social self-confidence, sensitivity to the needs of others, and artistic and writing ability.

Career Commitment. As expected, the career-oriented women tend to have more "masculine" interests and characteristics than homemaking-oriented women. Zissis (1964) found this to be the case for Purdue freshwomen in 1959 and Rand (1968) found similar results for freshwomen from 28 campuses in the American College Survey. Rand also reported that the career-oriented women (who aspired to doctorates or professional degrees and felt that the purpose of college is to prepare for a career rather than to find a spouse) were more "masculine" than the men in the sample. However, these women scored high on several "feminine" characteristics as well.

Tyler (1964) found no differences on the femininity scale of the California Psychological Inventory (CPI) for homemaking-oriented and career-oriented high school girls. Munley (1974) found no differences on the Masculinity-Femininity (M-F) scale of the SVIB for career-oriented and homemaking-oriented undergraduates enrolled in a psychology course and Masih (1967) found no differences on this scale for career-oriented and homemaking-oriented juniors and seniors at Syracuse. However, Block (1973) found that "highly socialized" mothers (ages 30-40) were less likely to be employed outside the home, and among the women who did work, upward occupational mobility was inversely related to "femininity"; socialization and femininity were both measured by the CPI. In a study of women (ages 30-40) from 20 states, Schissel (1968) found that career women (defined as women who were employed for five consecutive years) were more "masculine" on the M-F scale of the SVIB

than the homemaking-oriented women, who had worked less than two years after completing their education.

Although the results were uneven, the majority of the studies agree that career-oriented women are more "masculine" than homemaking oriented women, and two studies suggest that the same may be true of career women compared to full-time homemakers.

Education. In Korn's study of students at Berkeley and Stanford, he found no differences between women who entered graduate school and those who did not, in terms of "femininity" on the SVIB M-F scale (1969).

Role Innovation. The patterns for pioneers and traditionals were similar to those for career-oriented and homemaking-oriented women. Bezler (1967) studied juniors and seniors in a middle-class Midwestern Catholic high school, and found that those planning careers in medicine, mathematics, or natural science were more "masculine" (on the Kuder Vocational Preference Record) than those aspiring to be teachers or nurses. In a study conducted in 1965, Elton and Rose (1967) found that University of Kentucky freshwomen who preferred majors in business-finance, medicine, mathematics or science were more "masculine" on the Omnibus Personality Inventory (OPI) than those preferring majors in social sciences, religion, education, occupational therapy, and science education. In her study of University of Michigan seniors from the class of 1967, Tangri (1972) found that those who were aspiring to pioneer careers tended to see themselves as moderately "feminine" rather than extremely feminine; however, they still considered themselves

more "feminine" than "masculine." Cowan and Moore (1971) studied women at Wayne State, and found those who aspired to pioneer careers perceived themselves as less "feminine" than the women aspiring to traditional careers perceived themselves, and those aspiring to pioneer careers also wanted to be less "feminine". Similarly, Astin and Myent (1971) found that high school girls planning careers in natural science and the professions had more "masculine" interests than those planning careers in teaching and health.

Two studies of graduate students showed similar results. McKenzie (1972) studied doctoral students in education, medical students, juniors majoring in elementary education, and full-time homemakers with undergraduate degrees. She found that when age and race were matched, the two groups of graduate students were less "feminine" than the more traditional groups, as measured by the CPI. Cartwright (1972) studied medical students at the University of California, and found that they were less "feminine" than other women.

These studies show that, for high school girls and college and graduate school women, androgynous and pioneer interests and aspirations were consistently associated with less "feminine" scores.

Summary. As expected, the literature consistently showed that career-oriented women and women who aspired to pioneer or androgynous careers were less "feminine" on a variety of measures. However, there is very little data for career women, and no data for feminists.

The usefulness of masculine-feminine labels has been questioned

in recent years; Diamond (1972) calls them "an idea whose time has definitely passed." The assumption that these terms represent opposite poles or extremes is being re-evaluated, and Bem (1975) argues that "masculinity and feminity represent complementary domains of positive traits and behavior" and that it is therefore possible for an individual to be both "masculine" and "feminine", "depending upon the situational appropriateness of these various modalities." Bem constructed as Sex Role Inventory which distinquishes between androgynous individuals and those with more sex-typed self concepts. Meanwhile, the M-F scale of SVIB has been removed, and the concept is losing popularity. Clearly, it is not a useful distinction for career-oriented/homemaking-oriented or Pioneer/Traditional comparisons since it combines many variables which should be evaluated separately.

Achievement Motivation

Achievement motivation (n Ach) is one characteristic that intuitively seems relevant to career goals and other attitudes towards the female role. Traditionally, the full-time homemaker is perceived as a person who lives for and through the accomplishments of others, and is satisfied with the unvalued homemaking tasks for herself. Similarly, a woman with strong career aspirations is perceived as very ambitious and achievement-oriented.

In her review of the literature, Crandall (1969) concluded that females generally have lower expectations of success and lower aspirations when compared to males with equal or lower ability or performance. Turner (1964) found that the same traits which dis-

tinguished between ambitious and nonambitious boys also distinguished between males and females. Similarly, Horner (1972) found that the Motive to Avoid Success (M-s) was stronger among females than males, although recent replications and re-evaluation of the original data suggest that this may not be the case (Hoffman, 1975). However, in a recent study of University of Massachusettes seniors, Sedney and Turner (1975) found no differences between the achievement motivation scores of men and women on the Edwards Personal Preference Schedule (EPPS).

Career Commitment. The majority of studies support the assumption that women who are career-oriented rather than homemaking-oriented are significantly higher in achievement motivation, and this situation appears to apply to females of all ages. In her study of high school students in the 1950's, Tyler (1964) found that career oriented females scored higher on the achievement-related attitudes on the California Psychological Inventory (CPI). Bloom (1972) also found that middle-class students in a public and private high school who wanted to combine marriage and a career expressed higher n Ach (on a six-card projective test) than those wanting to be full-time homemakers. These students, who were primarily Jewish and Protestant, chose jobs with similar occupational levels regardless of n Ach. In a study conducted in the 1950's, Hoyt and Kennedy (1958) found that the few college freshwomen who were career-oriented had higher n Ach scores on the EPPS than their homemaking-oriented classmates. In another early study, Zissis (1964) found that among Purdue freshwomen in 1959, career-oriented women described themselves as more competitive on the Leary Interpersonal Check List (ICL) than did

homemaking-oriented women. In her study of Syracuse juniors and seniors, Masih (1967) found that career-oriented women had higher n Ach scores on the EPPS than homemaking-oriented women, and Oliver (1974) found the same trend for University of Maryland psychology students, although in her study the trend was not significant. In a related study, Katz (1969) measured whether college women from the class of 1965 liked to do difficult tasks. He found that at Stanford, career-oriented women were more likely to report that they enjoyed difficult tasks than were homemaking-oriented women; there were no differences among the career-oriented and homemaking-oriented women at San Jose City College. Using a national sample of first year students from 28 campuses, Rand (1968) found that career-oriented women scored higher on n Ach on the American College Survey. In this study, career commitment was defined in terms of viewing college as a preparation for a career (rather than a place to find a husband) and aspiring to a doctorate.

Career women also scored higher on n Ach than full-time homemakers. In their study of 1958-64 graduates of the Univeristy of Missouri who were retested in 1967, Gysbers et al. (1968) found that women who were consistently career-oriented in college and as alumnae were more likely to work to please themselves, rather than to win approval of others. Tinsley (1972) studied women who had entered the University of Minnesota between 1950-58 in a follow-up study in 1970-71, and found that the women who were employed described themselves as more achievement-oriented. Using a sample of white middle-class married mothers (ages 28-48), Kriger (1972) found that those who worked part-time or full-time in traditional

or pioneer careers had higher n Ach scores on the EPPS than their homemaking-oriented counterparts. Morris (1974) found no differences for n Ach on the EPPS for college-educated career women, but they did score higher on competitiveness on the Cattell Personality Inventory (16 PF). Similarly, in Birnbaum's study of full-time homemakers who had graduated with distinction from the University of Michigan between 1945-55 and University of Michigan faculty women, the married faculty women described themselves as more competitive than did the homemakers. In her study of Wellesley students, Counselman (1971) found that career oriented women described themselves as more competitive on the Leary ICL than did homemaking-oriented women, but both groups felt that they were more competitive than they wanted to be.

Vetter and Lewis (1964) studied senior home economics majors at Iowa State University and found that career-oriented women came from achievement-oriented families, but their own n Ach was not measured.

In the majority of the studies cited, career-oriented or working women were higher in n Ach or related traits such as competitiveness or intrinsic motivation. Although the measures of career commitment and n Ach varied, the results were consistent.

Role Innovation. The results were usually similar when n Ach and role innovation were evaluated. Tangri (1972) reported that the University of Michigan women from the class of 1967 who aspired to pioneer careers also aspired to higher levels of accomplishment than did women who aspired to traditional careers,

and they were less likely to displace their n Ach onto their husbands. Cowan and Moore (1971) found that Wayne State women aspiring to pioneer careers described themselves as more achieving than did women aspiring to traditional careers. In her comparison of graduate students in a doctoral program in education and in medical school with juniors majoring in elementary education and homemakers with bachelor's degrees, McKenzie (1972) found that the graduate students scored higher in achievement via independence and achievement via conformance on the CPI. Age and race were controlled in this study. In her study of beginning nursing students, Stein (1969) reported that they scored lower on the n Ach scale of the EPPS than other college women. This comparison is not a traditional/pioneer dichotomy, since some of the other women compared to the nursing students were also aspiring to traditional careers. However, when Sundheim (1963) compared Temple University upperclasswomen who were majoring in mathematics-science fields, languages, and education, she found that the mathematics-science majors scored the highest on n Ach on McClelland's Test, whereas language majors were second highest and the education majors were lowest. Women who major in mathematics or science are not necessarily aspiring to pioneer careers, however, although plans for graduate education usually indicate pioneer aspirations. Mintz and Patterson (1969) found that college women who majored in science but did not plan to pursue a graduate degree were usually not career-oriented and had a weaker need for professional achievement than women majoring in more traditional fields such as occupational

therapy and science education. In contrast, Lovett (1969) found no differences related to n Ach as measured by the Adjective Check List (ACL) in her study of science and social work graduate students. In the one study of black college women, Mednick (1973) found no relationship between pioneer goals and n Ach, M-S, or fear of failure, for her 1971 study of black women in five colleges.

In the one study of career women, Kriger (1972) found that among college-educated, middle-class married mothers, those who were in pioneer careers scored higher on n Ach on the EPPS than those in traditional careers.

The literature on role innovation is fairly consistent despite the variety of measures of n Ach and the different pioneer fields represented. The use of college majors to differentiate between women with pioneer and traditional aspirations is inadequate, however, since women who major in pioneer fields are not necessarily career-oriented and may not plan to pursue pioneer careers. Similarly, a PhD in social work would be considered an androgynous degree rather than a traditional one.

Feminism. Feminists also tended to score higher on n Ach than other women. In her study of primarily Protestant and Jewish middle-class high school students, Bloom (1972) found that for women in a primarily Protestant public high school, those with high n Ach assessed woman's role as more autonomous, and valued education because they felt it facilitates autonomy; this difference was not apparent for women at a primarily Jewish private high school. Houts and Entwistle (1968) found that among tenth graders from four high schools, those with an egali-

tarian view of sex roles were more likely to report that high grades were important to them and that they tried to do better than the boys in their class. In a study conducted in 1970, Joesting (1971) found that college women who belonged to the Women's Liberation group tended to score higher on the achievement for excellence scale of the Torrance Life Experience Inventory than did nonmembers; this difference was not significant however. Frankel (1974) found that college women (ages 20-22) and alumnae (ages 30-40) who had nontraditional views of femininity and appropriate sex role behavior had higher acheivement orientation. In her study of the wives of Boston area graduate students, Lipman-Blumen (1972) found that the 73% of her sample who expressed feminist attitudes were more likely to hope to achieve through their own efforts rather than through their husband's efforts. However, a majority of both feminists and nonfeminists expected to achieve more through their husbands than through their own efforts.

However, the results of three studies conflicted with these trends. Fowler and Van de Riet (1972) found no differences in self-described n Ach on Gough's ACL between women who were attending a feminist workshop at University of Florida and university women or elderly women. In her study of Temple University upperclasswomen, Sundheim (1963) found no differences in n Ach scores on McClelland's Test when she compared women with feminist sex role concepts and women with traditional sex role concepts. In a study of University of Michigan doctoral students, all of whom expressed feminist attitudes, Stoloff (1973) found that the activist feminists were less academically competitive in high

school and college than the nonactivists.

The majority of studies show that women with less traditional concepts of sex role behavior tend to score higher in achievement motivation and are less likely to seek the more traditional forms of achievement for women such as achievement through one's husband's accomplishments. The three studies with conflicting results were somewhat different from the other studies. Fowler and Van de Riet used a small sample of 18 feminists, and these feminists were women attending a conference. Their comparison groups were not necessarily nonfeminists, and also differed from the feminist group in age and other variables. Stoloff's study differs from the others in that all of the women are feminists, and also are doctoral students. Their n Ach is probably fairly high, although the activists are apparently less achievement-oriented in terms of school work. The Sundheim study differed from the other studies in that it was conducted in the early 1960's which was before the "rebirth" of the feminist movement in this country, and several years before the other studies. Sundheim's study is particularly interesting because it suggests that the relationship between n Ach and feminist attitudes was present only after feminist attitudes became a popular topic of conversation in the late 1960's. Before then, a more nontraditional sex role concept was not considered to be a realistic option, even for those who were scored high in achievement motivation. A careful re-evaluation of Sundheim's data, including the specific "feminist" scores, might be helpful in exploring these ideas.

Summary. The research cited strongly indicate that women who are more competitive and score higher on achievement motivation are more likely to be career-oriented, to aspire to pioneer occupations, and to express more feminist attitudes toward the female role. There is only one study of women who were Pioneers when they were evaluated, so there is a need for more research comparing women in traditional and pioneer careers. The two studies of n Ach and feminism which found no relationship also suggest that more research would be helpful, particularly to evaluate the relationship between feminist activism and n Ach, and to determine whether the relationship between "feminist" attitudes and n Ach existed before the rebirth of the feminist movement in the late 1960's.

Although these relationships were strong for the various age groups studied, other researchers have found that n Ach is influenced by age. Morris (1974) found that 20-35 year-old women were higher in n Ach than women in older age groups, and Baruch (1967) found that Radcliffe alumnae were higher in n Ach before and after their peak child-rearing years. Baruch found the same results for a national sample of college-educated women, but not for a national sample of women of varying educational levels. Moreover, Horner (1972) and Kimmel (1974) reported that the motive to avoid success was stronger among college age women than high school juniors. However, by kindergarten most girls show dependency in achievement-related situations, and their anxiety in such situations increases as they mature (Kimmel, 1974).

Despite these age differences, there apparently is some stability of n Ach as a personality characteristic for women. In

their review of the literature, Stein and Bailey (1969), reported that n Ach was fairly stable for females from elementary school through early adolescence and adult years. This indicates that, although n Ach tends to increase and decrease at certain periods in a woman's life, it is still a relatively stable characteristic that should be predictive of later career goals and nontraditional sex role concepts.

Intellectuality

Like achievement motivation, intellectuality is a trait which has been considered "masculine" and which is often associated with career interest, particularly in pioneer fields. Since feminists are also perceived as "unfeminine", feminism and intellectuality are also perceived as interrelated. Intelligence will be considered separately, in the next chapter.

Career Commitment. Studies conducted on career commitment support the hypothesis that intellectual women are more career-oriented than other women. In his study of 140 Psychology students at the University of Illinois in 1962, Wagman (1966) found that career-oriented women scored higher on the theoretical interest scale of the Allport-Vernon-Lindzey scale (AVL) than homemaking-oriented women. This scale measures interest in "the discovery of truth, a cognitive attitude, and an aim to order and systemize knowledge." In his study of 49 students at an Eastern women's college, Freedman (1965) found that those who were career-oriented were more intellectual on the Vassar Attitude Inventory. Similarly, Munley (1974) reported that career

oriented undergraduates in a psychology course had higher academic achievement interest on the SVIB than their homemaking oriented classmates.

Although these three studies used different measures of intellectuality, the results consistently indicate that career oriented women are more intellectual.

Role Innovation. The literature on pioneer aspirations is also consistent. Among students at a Midwestern Catholic high school, Rezler (1967) found that the girls who had pioneer aspirations were more intellectual than those with traditional aspirations, according to their scores on Holland's Vocational Preference Inventory (VPI). In the sample of University of Illinois psychology students cited in the previous section, Wagman (196) found that high SVIB-W scores on the scales for the pioneer fields of physician and psychologist correlated most highly with the theoretical scale of the AVL. Katz (1969) studied Stanford women from the class of 1965, and found that those who aspired to be college professors were more task-oriented and enjoyed intense concentration and difficult tasks more than other career oriented women. College teaching was the most popular pioneer career chosen, and was cited by approximately one-eighth of the career-oriented women. The Katz comparison was not a pioneer/traditional dichotomy, although most of the women compared to aspiring professors were aspiring to traditional careers. In her study of University of Michigan senior women from the class of 1967, Tangri (1972) found that women aspiring to pioneer occupations described themselves as more intellectual on a

semantic differential compared to women aspiring to traditional careers. Studying upperclasswomen from 38 campuses in 1968-69, Karman (1973) found that the women aspiring to pioneer careers described themselves as more analytical and critical-minded than did the women with traditional aspirations, as measured by the Omnibus Personality Inventory (OPI), and theoretical interest was the strongest predictor of pioneer goals.

Despite a variety of measures, including personality and interest inventories and self-descriptions, the results consistently support the hypothesis that women with pioneer career aspirations are more intellectual than women with traditional aspirations.

Feminism. In her study of the wives of Boston graduate students, Lipman-Blumen (1972) found that 77% of the women with feminist attitudes valued intellectual curiosity most highly, compared with 66% of the women with more traditional attitudes. Although the 73% of the women who expressed feminist attitudes were higher on this measure, the majority of the women in both groups clearly considered intellectual curiosity very important.

Because of the high proportion of women with feminist attitudes in this sample, and the equally high proportion of women responding similarly on the measure of intellectual curiosity, this study is not very useful in measuring the relationship between feminism and intellectuality.

Summary. The consistent results strongly demonstrate that women aspiring to pioneer careers perceive themselves as more intellectual and express more interest in intellectual pursuits

compared with women with traditional career aspirations. The three studies comparing career-oriented and homemaking-oriented women suggest that career-oriented women are more intellectual, but more research is needed in this area, particularly with a large national sample. More research is also necessary in the area of career women and feminism before meaningful analyses are possible.

Endurance and Perseverance

Several studies indicate that career-oriented and Role Innovative women have greater endurance or perseverance.

Career Commitment. Masih (1967) found that Syracuse juniors and seniors who were career-oriented tended to show greater need for endurance as measured by the EPPS, and Hoyt and Kennedy (1958) found the same results for an earlier study of career-oriented and homemaking-oriented college freshwomen.

In contrast, Rand (1966) found no differences between career oriented and homemaking-oriented women in perseverance, when career-orientation was measured in terms of doctorate aspirations and the attitude that the purpose of college is training rather than a place to find a spouse. Rand's study used a national sample, and a more contemporary college population. However, her use of a different type of career-orientation measure makes it impossible to directly compare these results with the other two studies.

Role Innovation. In her study of women medical students and women with bachelor's degrees, Cartwright (1972) found that the

medical students described themselves as more deliberate, determined, industrious, persevering, and thorough on an ACL. In her study of upperclasswomen from 38 campuses, Karman (1973) reported that 72% of the women with pionner aspirations described themselves as "determined" compared with 62% of those aspiring to traditional careers. This difference was marginally significant at the .10 level. Lovett (1969) found that both science and social work graduate students described themselves as high on endurance on an ACL.

These studies indicate that women who are career-oriented may tend to describe themselves as determined or persevering whether they are aspiring to pioneer or traditional careers. Since women with bachelor's degrees are less likely to be career oriented as well as less likely to choose pioneer careers, the Cartwright study is not directly comparable to the other studies. However, a study of aspiring pioneers and traditionals which controlled for degree of career commitment would help determine whether specific career goals are associated with determination or perseverance.

Feminism. In the one study of feminism, Fowler and Van de Riet (1972) found no differences between women attending a feminist conference at the University of Florida and university undergraduates or elderly women on self-described endurance on Gough's ACL.

Summary. The small number of studies makes it difficult to analyze any trends. There is some evidence that career-oriented

women have higher need for endurance than homemaking-oriented women, and that women who become medical students describe themselves as more determined and persevering than women with undergraduate degrees. The relationships between these variables and role innovation or feminism cannot be determined from the few studies available.

Passivity, Aggressiveness and Assertiveness

Personal style in dealing with other people on a passive-aggressive or passive-assertive continuum is an important characteristic which has been considered sex-linked in our culture. There is strong evidence that activity and aggressiveness are discouraged in females, and that passivity is encouraged, especially during preadolescence and adolescence (Cohen, 1973). Certainly, passivity is considered a female trait, and one that seems especially antithetical to success in a career, especially if competing in a male-dominated field.

Career Commitment. There is general agreement in studies using a variety of samples that career-oriented women and career women are less passive than homemaking-oriented women and full-time homemakers. In her study of Purdue freshwomen in 1959, Zissis (1964) found that the career-oriented women described themselves as more aggressive and managerial while the homemaking-oriented women described themselves as more docile and self-effacing (on Leary's ICL). Counselman (1971) studied students at Emmanuel College, and found that homemaking-oriented women described themselves as more docile than their stereotype of career-women. In

his interpretation of their goals and other data, Katz (1969) concluded that women from Stanford and San Jose City College who aspired to be homemakers had a more passive orientation toward life and were probably inhibiting aggressive drives. In Rand's study of women from 28 campuses, she found that career oriented women had higher aggression scores on the American College Survey, and were also higher in leadership. Rand defined career commitment in terms of aspirations to a doctorate and the attitude that the purpose of college is to prepare for a career, rather than to find a spouse. Although Rand's "leadership" measure is not exactly comparable to an assertiveness measure, it focuses on similar types of interpersonal behaviors.

When career women were compared with full-time homemakers, the results were similar. Jabury (1968) found no differences in the self-described passivity-activity or the degree of passivity considered ideal for a women when she compared married career women, single career women, and full-time homemakers. The scores which she compared were from the Inventory of Feminine Values and a semantic differential. Morris (1974) found that married career women expressed less need for deference and abasement and more need for aggression on the EPPS, and were more opinionated and socially bold on the 16 PF compared to college-educated homemakers. However, Birnbaum reported that the University of Michigan women who had graduated with distinction between 1945-55 and were full-time homemakers when she studied them in the 1960's had muted their assertive and aggressive drives, whereas she described the married faculty women as self-assertive. Birnbaum's results were based on her interpretation of their responses to

projective tests, and they suggest that women who are homemaking oriented may be as aggressive and assertive as career-oriented women, but that they struggle to overcome these traits.

These studies indicate that career-oriented and career women tend to be more assertive and aggressive on most measures. Birnbaum and Katz interpreted their findings similarly; both felt that homemaking-oriented women inhibited their assertive and aggressive drives, and were less willing to accept them.

The one exception was the Jabury study, which found no differences between career women (married or single) and full-time homemakers. However, Jabury's measure differed from the others in that she used a passive-active continuum rather than a passive-aggressive or passive-assertive continuum. Her study indicates that women with different career goals may not differ in terms of activity, although homemaking-oriented women are apparently more passive when their needs or ideas conflict with others.

Role Innovation. Six studies were concerned with the relationship between passivity and pioneer career goals. In her study of high school girls enrolled in a predominantly middle class Catholic high school in the Midwest, Rezler (1967) found no differences in aggressiveness (on Holland's VPI) between those aspiring to pioneer or traditional careers. Cowan and Moore (1971) found that Wayne State women aspiring to pioneer careers perceived themselves as less passive than did women aspiring to traditional fields. O'Leary and Braun (1972) found that women (ages 27-79) with doctorates in pioneer or androgynous fields were less sub-

missive than males with doctorates or women with undergraduate degrees on the 16 PF. McKenzie (1972) found that female medical students and doctoral students in education were higher on dominance on the CPI than full-time homemakers with bachelor's degrees or juniors majoring in elementary education.

In contrast, Muhlenkamp and Parsons (1972) reported that nursing students' TATS showed more themes of hostility and aggression, although Stein (1969) had found that nursing students expressed greater need for abasement and less need for dominance according to their EPPS scores, compared with other college women. Stern also found that the need for abasement decreased from the first to the fourth year of college. These results indicate that women with more traditional goals may be equally or more hostile and aggressive than other women, but may repress their aggressive thoughts and needs. The TAT and other projective tests may therefore measure different aspects of passivity and aggression than the EPPS and similar tests. Unfortunately, there are only six studies in this area, none of which use large or national samples. More research is needed to examine these issues more closely.

Feminism. The comparisons of feminists and nonfeminists are similar. In a study of students and office workers at Yeshiva University, Hymer and Atkins (1973) found that those scoring high on a WIM scale showed more verbal aggression on projective tests than the other women, although the difference was only marginally significant. There were no differences in physical aggression on these projective measures. Goldschmidt et al. (1974) found

that women from four campuses who were most and least aggressive on the EPPS were more ideologically commited to feminism. There were no differences for those women who were or were not members of the campus Women's Liberation groups. Fowler and Van de Riet (1972) compared women attending a feminist conference at the University of Florida ($\bar{m}$ age = 22.4) with university undergraduates ($\bar{m}$ age = 24.5) and older women ($\bar{m}$ age = 67.5), and found that the feminists rated themselves as more aggressive on Gough's ACL than the other women. Similarly, Cherniss (1972) reported that members of a Women's Liberation group were more assertive than other women.

These studies indicate that, although there may be differences in terms of verbal aggression vs. physical aggression and ideological feminism vs. activist feminism, in general feminists are more assertive or aggressive or perceive themselves as such, compared with other women. The Goldschmidt et al. study also indicates that women who are least aggressive may also be ideologically committed to feminism, perhaps because they are unhappy with the female role but are unable to challenge this role themselves. Since assertiveness and aggressiveness are often confused, this distinction is impossible to make when analyzing these studies, but should be considered in future research.

Summary. The literature on passivity clearly demonstrates that women who are career-oriented, who aspire to pioneer careers, or who are ideologically or actively committed to feminism tend to perceive themselves as less passive. There is some evidence that they do not actually differ from other women in their aggressive

and assertive drives, but that they are less likely to repress or more willing to express or admit their aggressive needs. For this reason, projective tests may be more accurate for measuring these drives than other tests.

Passivity may be a trait that develops early, and would therefore be predictive of later career goals or attitudes towards the female role. In a Fels study, Kagan and Moss (1962) found that young girls who were passive (rather than active) grew up to be passive women who were dependent on their families, withdrew from social situations, and were involved with traditional feminine pursuits. This study suggests that a passive-active continuum may be an appropriate measure for young girls which is predictive of later passive-assertive-aggressive differences, although it did not differentiate between career women and full-time homemakers.

The studies cited also suggest that passivity may be associated with other traits such as dependence, and certainly other personality characteristics may also be interrelated. For example, Norfleet (1968) studied college seniors' descriptions on Gough's ACL, and found that low achievers described themselves as dreamy, easy going, gentle, and lazy, whereas high achievers described themselves as arrogant, bossy, loud and noisy. Although these adjectives do not form an exact passive/aggressive dichotomy, they are obviously closely related to this dimension. Since achievement tends to be associated with career commitment and pioneer aspirations, Norfleet's study points out that other traits which are closely related to career goals and feminism may be partially responsible for the relationship between passivity and

nontraditional goals and attitudes.

Self-Orientation and Other-Orientation; Altruism

It is often assumed that women who reject the traditional female role, particularly as it relates to their career plans, are rejecting the notion that a woman should live for and through others, and the accomplishments of others. Lipman-Blumen's study of the wives of Boston graduate students (1972) demonstrated that, despite rather feminist attitudes, most of the women expected their husbands to be the achievers in the family. This certainly agrees with the traditional view of women as the helpmates for husbands, parents, and children, and as the "angels of mercy" for the poor and helpless. Although this other-orientation is perceived as appropriate for women, and is generally valued, there are strong negative connotations as well. Women are told thay they should live through their husbands and sons, but they are also blamed for pushing their men too far in order to satisfy their own needs.

Women have been well socialized for this role. Elementary school girls are more altruistic than boys (Chaney, 1968; O'Hara, 1962; Looft, 1971) and females usually express greater concern than males about choosing an occupation which will enable them to help others, whether in elementary school (O'Hara, 1962), high school (Gribbons & Lohnes, 1965; Powell & Bloom, 1962; Thompson, 1966; Turner, 1964) or college (Baird, 1973). Even when they choose the same occupation as men, women may do so for different reasons. For example, Cartwright (1972) found that female

medical students at the University of California reported that they decided to study medicine for reasons related to self-development and altruism, whereas men were more likely to report that they were interested in money and prestige.

Career Commitment. The research does suggest that career-oriented women are more self-oriented and homemaking-oriented women are more other-oriented. Angrist (1970) found that self-oriented college women were more likely to be career-oriented than homemaking-oriented. However, in a study conducted in 1958-59, Simpson and Simpson (1961) found that career-oriented and homemaking-oriented college women were equally concerned with helping others and contributing to society. In their study of women students at the University of Missouri from 1958-64 who were retested in 1967, Gysbers et al. (1968) found that women who were consistently career-oriented reported that they were less patient when their personal needs conflicted with the needs of others, and they tended to regard personal achievement as more important than regard from others. Similarly, Birnbaum (1971) found that University of Michigan alumnae who had graduated with distinction between 1945-55 and were homemakers in the 1960's tended to have personalities based on self-sacrifice, which was not the case for the married faculty women at the University. Lozoff (1970) studied Stanford alumnae from the classes of 1939-62 and found that the women who considered a career very important were less likely to participate in service organizations. However, they were more likely to express concern with the problems of others, and cited "service to others" as a

reason for their career commitment.

The five studies used different measures of career-orientation and self-orientation, but the majority showed that career-oriented women and working women are more oriented toward their own needs. However, there is some evidence that career-oriented and homemaking oriented women are similarly concerned with helping others, and that despite their self-orientation, career-oriented women are more interested in "service to others" than most men. Research which differentiates between self-orientation issues and social issues, instead of treating them as mutually exclusive, would help clarify the differences between career-oriented and homemaking oriented women.

Education. In the one study concerned with educational aspirations, Gump (1972) studied University of Rochester senior women in 1966. She found that those who were self-oriented (according to a revised Fand Inventory) were more likely to plan to attend graduate school, while those who were other-oriented planned to find a spouse. There were no significant differences in their grades or desire for academic distinction, but other-orientation was associated with ego strength.

Role Innovation. When women aspiring to pioneer and traditional careers were compared, the aspiring Pioneers tended to be more self-oriented. In her study of middle-class eleventh and twelfth graders in a Catholic high school, Rezler (1967) found that girls who aspired to be nurses or elementary school teachers scored higher on social service interest on the Kuder Vocational

Preference Record than did girls who aspired to careers in medicine, mathematics or science. In her study of freshwomen and senior women from Oklahoma State University, Kalka (1967) found that women majoring in home economics were more other oriented (as measured by the Fand Inventory) than were women majoring in arts and sciences. The latter group was not necessarily oriented toward pioneer careers, but they were certainly more likely to aspire to less traditional careers than the home economics majors. Similarly, McKenzie (1972) found that women medical students and doctoral candidates in education were more self-oriented on the Fand Inventory than full-time homemakers with bachelor's degrees or juniors majoring in elementary education. The graduate students were matched with the other women in terms of age and race. Among Stanford women from the class of 1965, those planning to be college professors, artists, or to enter business careers were less inclined to help others than women planning to teach elementary school or high school (Katz, 1969). Once again, this is not a clear traditional/pioneer dichotomy, since many careers in art and business are traditional ones. In contrast to these results, Karman (1973) found that upperclasswomen aspiring to pioneer careers were more likely to participate in social service extracurricular activities than those aspiring to traditional careers. Her sample consisted of over 1500 women from 38 campuses.

Tangri (1972) found that University of Michigan women with pioneer aspirations chose their career goals for different reasons than women with traditional goals. In her study of women from

the class of 1967, women with pionner goals based their choices on their interests and their desire for personal satisfaction, rather than for altruistic reasons or concern with financial security. Similarly, Almquist (1974) found that 54% of the college women aspiring to traditional careers rated "helping others" as a "quite important" or "very important" consideration in their choice of career, compared to 38% of the women with pioneer aspirations. In her study of black women from five Eastern colleges in 1971, Mednick (1973) found that sophomores who aspired to traditional careers gave more other-oriented reasons for their career choice than did those with less traditional goals. This was not significant for seniors. Most women in both groups gave other-oriented reasons.

There was some evidence that women aspiring to pioneer careers were more likely to consider their careers important, and thus be less willing to give them up if conflicts arose. Nagely (1971) found that white working mothers ($\bar{m}$ age=35) who were in pioneer occupations were more likely to report that they would refuse to give up their careers if their husbands asked them to do so, would be reluctant to move to another city for their husband's professional advancement, and felt that their professional activities were as important as their husbands'. However, a large proportion of career-oriented and working women report that they would defer to their husbands' wishes or careers. Rossi (1965a) studied 3,500 college women, and reported that women planning both traditional and pioneer careers perceived their own careers as less important than helping their husbands'

careers; and Tavris (1973) found that 40% of married working women would turn down a better job if their husbands' were slightly or moderately unhappy about it. Hawley (1972) found that only 10% of her sample of mathematics and science majors at San Diego State reported that they would pursue their present career choices if their husbands objected, compared to 18% of the education majors and 23% of the counseling students. These results directly conflict with Nagel's study, and seem to indicate that women aspiring to pioneer careers are less committed to careers, or that there is more tolerance for a husband who objects to a pioneer (and therefore less acceptable and more threatening) career goal. However, in Hawley's study, the counseling majors were primarily women who had worked as teachers and had returned to school; therefore, they probably were more career-oriented and many were already married. Since the age and marital status of the other two groups was not mentioned, it is impossible to know whether these issues may have also been relevant to the comparison between them.

These studies show that women aspiring to or choosing pioneer careers express less concern with helping others compared to satisfying their own needs. However, only one study explores whether women with pioneer goals actually participate in social service-oriented activities, and that study found that they were more likely to do so than were women aspiring to traditional careers. The relationship between expressed other-orientation and actual behavior needs to be examined in future research.

The studies also show that a large proportion of women, regardless of traditional or pioneer aspirations or careers, report

that they are more oriented towards their husbands' (or imaginary future husbands')needs than their own. In the one study of working mothers, Pioneers did express more self-oriented attitudes towards their career needs than did Traditionals, however.

Summary. There are few studies concerned with the relationship between career commitment or educational aspirations and self-orientation, and the studies which examine the relationship between pioneer aspirations and careers and other-orientation use a large variety of measures. However, the results are generally consistent, indicating that women who have less traditional career choices tend to be more self-oriented than other women. There is some question as to whether they actually behave in a more self-oriented manner, and this deserves further study.

There is no research evaluating the relationship between feminism and other-orientation.

These results are not surprising, particularly since the "housewife" scale of the SVIB-W (which is sometimes used to determine homemaking-oriented women and also is negatively correlated with pioneer aspirations) has been found to correlate with the social scale of the AVL, which measures the altruistic and philanthropic aspects of love: kindness, sympathy, and unselfishness.

There is some evidence that women become more other-oriented in college. Kalka (1968) found that college senior women were more other-oriented on the Fand Inventory than were sophomore women, and also described their "ideal woman" and "average woman" as more other-oriented. However, a recent study indicates that

college women and men may be becoming increasingly self-oriented. Astin and Bisconti (1972) compared 1966 entering college students with 1970 entering college students and found that for both men and women there was less emphasis on altruistic and materialistic goals and an increase in self-directedness in 1970. The dramatic increase in unemployment since 1970 probably has influenced college students' life goals, and as a result this study many no longer reflect current attitudes.

Independence, Dependence, and Affiliation

A dimension which may be closely relted to self or other orientation is the degree of independence and dependence which a woman expresses, which is sometimes measured by nurturance, or need for affiliation or succorance.

Career Commitment. There is remarkable consistency in these results, despite different personality measures used and a variety of populations sampled. The one study of high school girls, conducted with Los Angeles students, indicated that career-oriented girls were more popular than their classmates (Turner, 1964). In this study, the girls who were planning to combine marriage and a career were most often listed as a good friend by their classmates, compared to girls who expected to be single career women or full-time homemakers. In the other studies, however, career-oriented women were less affiliative. In an early study of college freshwomen, Hoyt and Kennedy (1958) found that homemaking-oriented women scored higher on the succorance scale of the EPPS than career-oriented women. Counselman (1971) studied students at Emmanuel College and found that home-

making-oriented women described themselves as more dependent than their stereotype of career-oriented women. Cook (1968) studied Purdue seniors in 1966 and found that career-oriented women scored higher on independence and lower on "need for security" compared to homemaking-oriented women. Freedman (1965) studied a small sample of students at an Eastern women's college and found that career-oriented women were more independent according to their MMPI scores. Using Gough's ACL for affiliation, Oliver (1974) found that among University of Maryland psychology students that she studied in 1971-2, those who were career-oriented were less affiliative than homemaking oriented women. In Rand's national sample of college freshwomen from 28 campuses, career-oriented women were more independent (1968). In this study, career-orientation was defined as aspirations to a doctorate and the attitude that the purpose of college is to prepare for a career, rather than to find a husband.

The results for career women were similar to those for career-oriented college women. In her study of Stanford alumnae from the classes of 1939-62, Lozoff (1970) found that career oriented women valued work because it offered them a feeling of independence. Morris (1974) found that college-educated career women had a greater need for nurturance (on the EPPS) compared to college-educated homemakers. Using projective tests, Birnbaum (1971) found that University of Michigan alumnae from the classes of 1945-55 who became homemakers were more dependent and nurturant than the Michigan married faculty women.

These studies indicate that career-oriented and career women are more independent and that they value this independence, whereas homemaking-oriented women are more dependent and possibly more affiliative, with greater needs for succorance. The results on nurturance are conflicting.

In the one study of high school students, career-oriented girls were more popular; however, their affiliativeness and independence were not evaluated. More research on the behavioral components involved (such as friendships) would contribute greatly to the literature in this area. Turner's study also suggests the possible influence of age on this dimension. In her study of college-educated women, Morris (1974) found that for both homemakers and married career women, the women between the ages of 36-45 expressed greater need for affiliation and nurturance on the EPPS than did the younger (ages 20-35) or older (ages 45 and older) groups. Since this middle age group is most likely to have children of high school age or older, these needs are probably not being met by their family as much as they were in earlier years. An important question is how these women deal with these needs, and what types of women turn to careers or other activities in order to satisfy them.

Role Innovation. Several studies indicate that women aspiring to pioneer careers were more independent than other career-oriented women. Cowan and Moore (1971) found that Wayne State women who aspired to pioneer occupations described themselves as more independent and autonomous than did women aspiring to traditional

careers. Sundhein (1963) found that Temple University upperclasswomen who were majoring in elementary education scored higher on need for affiliation than women majoring in mathematics-science fields or languages. Stein (1969) found that first year nursing students scored higher than other college women on the need for nurturance and succorance on the EPPS, and lower on the need for autonomy. The need for nurturance decreased significantly by the senior year, however, and the need for autonomy increased.

The four studies of graduate students show similar results. In their study of women doctoral students in androgynous and pioneer fields, O'Leary and Braun (1972) found that these women were higher on self-sufficiency (vs. group dependency) on the 16 PF, compared to male doctoral students and women with undergraduate degrees. Lopate (1968) found women in medicine were more likely to express a desire for independence than were women in traditional fields. In contrast, Lovett (1968) found no differences between science and social work graduate students on their self-described autonomy on an ACL.

The Lovett results conflict with all of the other studies. However, social work graduate students may enter androgynous careers, which makes these results less clear-cut than other studies. The other studies consistently show that women aspiring to pioneer careers are more autonomous and independent; unfortunately, there are no studies of career women, which would determine whether or not these differences are maintained. Stein's study indicates that, although women aspiring to pioneer and traditional careers may differ when they are younger, it is

possible that these differences dissipate as they mature. However, several studies show that in at least some cases these differences are still significant among seniors and graduate students.

Feminism. There were four studies concerned with feminists. Cherniss (1972) found that members of a Women's Liberation group were more autonomous than other women. Fowler and Van de Riet (1972) found that women who participated in a feminist conference at the University of Florida described themselves as more autonomous on Gough's ACL than did University undergraduates or a group of elderly women. There were no significant differences between the groups for self-described need for succorance. In a study using three different measures of autonomy, Dempewolff (1974) found that University of Cincinnati women with feminist attitudes were more autonomous than their classmates on the Triandis Social Distance Scale, Kahl's Modernism II Scale, and Barron's Independence of Judgment Scale.

In an earlier study, Sundheim (1963) found no differences on the need for affiliation among Temple University undergraduates with traditional or nontraditional sex role concepts.

Summary. The studies cited consistently demonstrate that career-oriented women, particularly those aspiring to pioneer careers, are more autonomous and independent than other women. The results on need for affiliation, succorance and nurturance are less clear, but they suggest a similar pattern. Research

is needed which will examine whether differences on this dimension merely predict career goals, or whether they are maintained when these women make their career choices. The four studies of feminists show these women to be more autonomous, but more research is needed to evaluate both activist feminists and ideological feminists.

In a recent study, Sedney and Turner (1975) reported that college men and women had similar scores on need for affiliation on the EPPS; however, need for affiliation was inversely correlated with n Ach for the women, but not for the men. An interesting related issue is Lazoff's finding that gifted Stanford women tested between 1961-5 who were more autonomous were also more accepting of dependency and social needs (1974). The literature clearly indicates that despite their accepting attitude, they do not share these needs.

Thing-Oriented vs. People-Oriented.

Women have been perceived as oriented toward helping others and toward being with others, rather than working with things and ideas. This characteristic is sometimes valued, whereas at other times it is discussed as a trait which precludes intellectual accomplishment, particularly in male-dominated fields.

Career Commitment. In their study of college women in 1958-59, Simpson and Simpson (1961) found that career-oriented women were slightly less oriented toward people (vs. things) compared to homemaking-oriented women. In their study of home economics majors at Iowa State, Vetter and Lewis (1964) found

that career-oriented senior women were less tolerant of people than were homemaking-oriented women. Schissel (1968) studied 400 women at Nebraska Teachers College using the SVIB, and concluded that career-oriented women were more interested in things and homemaking-oriented women were more interested in people. Kriger (1972) took a slightly different view, hypothesizing that the kind of parental treatment which facilitated people-orientation (rather than thing-orientation) in men would instead facilitate homemaking-orientation (rather than career orientation) for women. Her study of middle-class women (ages 28-48) supported her hypothesis. In contrast to these studies, Rand's national sample of college freshwomen showed that career oriented women scored higher on "understanding of others" than homemaking-oriented women, and there were no differences between the two groups on "sensitivity to the needs of others" (1968). Rand defined career-orientation differently, however; her career oriented women aspired to doctorates and felt that the purpose of college was to prepare for a career rather than to find a spouse.

There are few studies in this area, and several do not actually compare people-orientation and thing-orientation. Only Rand's study used a large national sample, and her measures of career commitment and people-orientation were not comparable to the other studies. Therefore no conclusion can be reached.

Role Innovation. In the one study comparing women aspiring to traditional and pioneer careers, Levett (1969) found that

science graduate students were less people-oriented than social work graduate students, according to their scores on an interest inventory. Since social work is a more people-oriented profession, this finding is not necessarily generalizable to all pioneer/traditional comparisons.

Summary. The few studies cited indicate that career-oriented women may describe themselves as less people-oriented and more oriented toward other activities. More research is needed to determine whether this is the case, and to discover whether this difference is discernible in the way these women interact with others and approach noninterpersonal activities. The relationships between role innovation or feminism and people-orientation have not been studied.

These results are confusing because the question of people-orientation is closely related to other variables, such as affiliation, and other-orientation is sometimes measured in terms of intellectual interests. When these related variables were evaluated separately, similar trends were apparent, however.

Conformity and Nonconformity

Nonconformity and unconventionality are traits which one expects to be associated with independence, and with assumption-questioning in general. The results confirm these expectations.

Career Commitment. The six studies which evaluate the relationship between career commitment and conformity show simi-

lar results. In an early study, Goldsen et al. (1960) found that among the Cornell women whom he studied in 1952, the career oriented women were less conventional and expressed more irreverance concerning rules. In this study, career commitment was measured in terms of the degree of expected satisfaction from a career compared to other activities. Studying a small sample of students at an Eastern women's college, Freedman (1965) found that career-oriented women were more unconventional on the Minnesota Multiphasic Personality Inventory (MMPI). In her study of women from 28 campuses, Rand (1968) also found that the career oriented women were less conservative as measured by the American College survey. Rand defined career commitment as aspirations to a doctorate and the attitude that the purpose of college is to prepare for a career rather than to find a spouse. In their study of University of Missour women who completed the SVIB between 1958-64 and were retested in 1967, Gysbers et al. (1968) found that the women who were consistently career-oriented were less conventional than those who were consistently homemaking oriented. Similarly, Morris (1974) found that college-educated career women were more free-thinking, according to their scores on the 16 PF, whereas college-educated homemakers were more moralistic and staid. Using projective tests, Birnbaum (1971) found that University of Michigan gifted alumnae from the classes of 1945-55 who were homemakers in the 1960's were more conventional than the University of Michigan married faculty women.

The results are not always comparable, since Rand and Goldsen defined career commitment in unusual ways and Birnbaum did not compare two well-matched groups, and compared women in one pio-

neer field with high ability homemakers. Although the results are consistent, more research is necessary before any conclusions can be drawn about the relationship between these two variables.

Education. In the one study of educational attainment, Faunce (1967) studied college women in the eighty percentile rank. She found that those who dropped out of college were less conventional than those who graduated, and they were more likely to have majored in English, linguistics, languages, natural science, mathematics and business administration. Their greater unconventionality appears to contradict the literature which shows that career-oriented women are more unconventional, since women with more education are more likely to be career-oriented. However, their majors suggest that they may have had pioneer aspirations, and for some reason become too discouraged to pursue these goals. If the research on pioneer aspirations demonstrates that this variable is associated with unconventionality, this would help to explain these puzzling results.

Role Innovation. The two studies of women with pioneer aspirations support the relationship between pioneer goals and nonconformity. Tangri (1972) studied Univeristy of Michigan women from the class of 1967, and found that women with pioneer aspirations described themselves as less conventional on a semantic differential, compared with women with traditional career aspirations. Similarly, O'Leary and Braun (1972) found

that women doctoral students in male-dominated and androgynous fields scored higher than male doctoral students or females with undergraduate degrees on radical temperment (vs. conservative), rebelliousness and nonconformity on the 16 PF.

Feminism. There were two studies concerned with feminists. Joesting (1971) found that white college women who were members of a Women's Liberation group showed higher creativity, risk-taking, and originality on the Torrance Life Experience Inventory. The control group consisted of women who were not active feminists who were matched for their fathers' occupations, and their feelings about illegal drugs and the number of organizations that they belonged to. In their study of Women's Liberation members at Florida State University, O'Neil et al.(1975) found that these women scored higher on the Pd scale of the MMPI, indicating that they were more independent and less constrained by traditional social customs, compared to a nonmember control group. Both studies were concerned with activist feminists, and feminist attitudes were not measured or controlled.

Summary. Although there are few studies which evaluate conformity, and the ones that cited use a variety of measures, this literature shows a strong agreement that career-oriented women, career women, women aspiring to pioneer careers, and activist feminists are more unconventional, or at least describe themselves that way. This supports the hypothesis made in Chapter 1, that women who have a questioning attitude toward the female role

will also be more likely to question assumptions in other areas. Of course, it is possible that these women perceive themselves as nonconformists because of their unconventional attitudes toward the female role, and consider themselves conventional in most other areas. This possibility could be studied with scales which are more specific in terms of type of nonconformity.

The hypothesis that women who choose less traditional goals and express less traditional attitudes are more unconventional is also supported by a study of college women in 1962 (Bott, 1968). In this study, women who expressed "masculine" interests (according to the SVIB M-F scale) were less reliant on the approval and support of others and less likely to conform to social demands, according to their CPI scores. Since women who express more "masculine" interests on the SVIB are usually more career-oriented and more likely to express interest in pioneer careers, this study supports the previously cited research. However, more research on career women and women with feminist attitudes is still necessary.

Faunce's study of college drop-outs also suggests a possible reason for the research on SES which showed that mothers who had not completed college were more likely to have daughters with pioneer aspirations. Faunce's study indicates that women who quit college may be dissatisfied with traditional female fields, and yet feel unable to pursue their more nontraditional interests. If this is the case, it would logically follow that their daughthers' interests would also be less traditional. Since Faunce's study was conducted in the late 1960's, it is possible that her

findings are irrelevant to the college drop-outs of the 1940's (who became the mothers of the college women studied in the 1960's). However, this question certainly deserves further study.

Self Concept and Self-Esteem

Self-esteem is a major concern, since Western society emphasizes the importance of a career as a criterion of status and prestige. Holland (1959) theorized that occupational level is primarily dependent on intelligence and self-evaluation. Many studies have demonstrated that females tend to have lower self esteem than males, and this phenomenon has not changed in recent years. Putnam and Hansen (1972) studied Buffalo eleventh graders and found that the girls had lower self-esteem than the boys. In a study of seniors from 94 colleges and universities in 1971, Baird (1973) found that women rated themselves lower than men did on a variety of measures of academic performance as well as interpersonal skills. These differences were also maintained for women planning to enter graduate or professional schools.

Connell and Johnson (1970) studied girls and boys in a Catholic junior high school, and found that the high sex-role-identified males had higher general self-esteem than the low sex-role-identified females. There was no significant difference between high sex-role-identified females and low sex-role-identified females. However, the low sex-role-identified males had significantly lower self-esteem than either female group. These results indicate that being a "masculine" male contributes to high self-esteem, whereas being a less "masculine" male is the most destructive to self-esteem. In contrast, "feminine" females

do not have higher or lower self-esteem than less "feminine" females, apparently because "feminine" behavior is not valued, even though it is viewed as more appropriate for junior high school girls. One would expect similar results with adult males and females, but there is no comparable data.

The reason for females' lower self-esteem is probably inherent in our cultural stereotype of women. Rosenkrantz et al. (1968) found that women from several New England colleges tended to perceive themselves as having similar personality patterns to their stereotype of a "feminine" personality. Since these traits are measured on a masculine-feminine continuum, with the "masculine" pole usually considered more desirable, the choice of "feminine" traits is also the choice of the less valued traits. Broverman et al. (1972) concluded that these college women incorporated the negative aspects of "femininity" into their self concepts. Moreover, women tend to devalue the work of other women (Goldberg, 1968; Pheterson, Kiesler, & Goldberg, 1971), and in so doing, devalue themselves.

Real vs. Ideal. One way to measure self-esteem is to compare one's self-concept with one's ideal (Silber & Tippet, 1965); Carl Rogers suggests that this is also related to personal adjustment. Several studies have evaluated self-esteem in this manner.

Richardson (1975) found that female college seniors with self and role concepts and role aspirations that were homemaking oriented had medium or low self-esteem, as measured by moderately or highly discrepant self-ideal images. Moreover, high self

esteem strengthened the relationship between self-career woman congruence and career commitment. Women with high self-homemaker congruence and high self-esteem did not have lower career commitment. These results indicate that women with high self-esteem are less likely to be homemaking-oriented, even if they perceive themselves as more similar to homemakers than to career women. Cowan and Moore (1971) reported a nonsignificant tendency for career-oriented college women to have less discrepancy between their real and ideal self-concepts than women who were homemaking oriented.

Counselman (1971) found that career-oriented and homemaking oriented Wellesley students differed significantly on their descriptions of their real and ideal self-concepts, using Leary's ICL. The career-oriented woman's ideal was more skeptical and distrustful than the homemaking-oriented ideal and the homemaking-oriented women reported feeling that they were more competitive and exploitive than their ideal. It is clear from this data that career-oriented women and homemaking-oriented women have different ideal self-concepts, and these results can be interpreted in terms of the career-oriented viewing themselves as somewhat more traditionally "feminine" than their ideal, whereas the homemaking-oriented women viewed themselves as somewhat less "feminine" than their ideal. As the stereotype of appropriate behavior for males and females begins to slowly change, as Burhenne (1972) found in her recent study, this will probably influence women's self-concepts and self-esteem as it relates to their attitudes toward the female role.

Career Commitment. Greenhaus (1973) studied male and female college students and found that the relative priority of a career and the general attitudes towards work were more highly correlated with self-esteem for males than for females. Students with higher self-esteem tended to enjoy planning a career and viewed working as positive way of expressing themselves. Studies of women's career commitment show similar results. Cook (1968) studied graduating seniors in the class of 1966, and found that career-oriented women were more self-confident than homemaking-oriented women. Rand studied freshwomen from 28 campuses, defining career commitment in terms of aspirations to a doctorate and the attitude that the purpose of college is for career preparation rather than to find a spouse. She found that the career-oriented women had higher intellectual self-confidence (as measured by the American College Survey) than the women who responsed differently for both criteria questions. Since Rand's definition of career commitment included higher education aspirations, it is not surprising that she found this group to be more confident of their intellectual skills. In contrast to these results, Katz (1969) found that career-oriented San Jose City College women had higher self-esteem on the Rosenberg scale than homemaking-oriented San Jose women, whereas the opposite was true for homemaking-oriented and career-oriented Stanford women. Both groups were from the class of 1965. Vetter and Lewis (1964) found that senior home economics majors at Iowa State who were homemaking-oriented were more sure of themselves than their career oriented classmates.

The five studies of career women show a similar variety of results. Tinsley (1972) studied University of Minnesota alumnae who were freshwomen between 1950-58 in a follow-up study in 1970-71. She found that the women who were employed had higher intellectual self-confidence and rated themselves higher on academic ability than the women who were full-time homemakers. The homemakers, however, were higher on confidence in social skills. Similarly, Lozoff (1970) found that Stanford alumnae from the clasees of 1939-62 who were homemaking-oriented in the late 1960's were more confident of their competence in home tasks and in their roles as wives and mothers. In her study of University of Michigan alumnae who graduated with distinction between 1945-55 and were homemakers in the late 1960's, Birnbaum (1971) reported that the alumnae homemakers had lower self-esteem and perceived themselves as less attractive to men and more incompetent than did the University faculty women. Several other studies have evaluated women's perceptions of their own attractiveness. Gysbers et al. (1968) studied alumnae who had attended the University of Missouri between 1958-64 in a retest in 1967, and found that those who were consistently career-oriented on the SVIB described themselves as at least moderately attractive, and considered themselves more attractive than the homemaking-oriented women considered themselves. Katz (1970), however, found no difference between the self-described attractiveness of working women and full-time homemakers (ages 26-50) who were alumnae of Stanford and Santa Rosa Junior College in a study conducted in 1968.

These studies indicate that, at least in some samples, career

oriented women have higher self-esteem, particularly in terms of their intellectual abilities and attractiveness. However, homemaking-oriented women may be more self-confident in other spheres, particularly in homemaking and social skills. The 1969 Katz study suggests that SES or intellectual ability may be very influential; apparently career commitment is a sign of lower self-confidence for some women, probably because they do not value this role as highly as more traditional pursuits. This may have also been the case for the Iowa State home economics majors. As a result, the relationship between self-esteem and career commitment varies according to the attitudes of the women involved. However, the majority of the results agree that career-oriented women have higher self-esteem.

Education. In the one study concerned with education, Faunce (1967) found that the high ability college women who dropped out of the University of Minnesota were less self-confident than their high ability classmates who graduated.

Role Innovation. There are three studies concerned with the relationship between self-esteem and pioneer goals. Almquist (1974) found that over four-fifths of the college women aspiring to be pioneers thought that their teachers considered them outstanding students, compared with one-half of the women aspiring to traditional careers. In contrast, McKenzie (1972) found no differences in terms of self-acceptance for women who were doctoral students in education or medical students, compared with home-

makers with bachelor's degrees and juniors majoring in elementary education. Similarly, Resnick, Fauble, and Osipow (1970) found no relationship between scores on the Tennessee self-concept scale and career preferences on the Kuder for male or female Introductory Psychology students at the Ohio State University.

These studies support the trends apparent in the career commitment and education literature. Women with nontraditional career choices who are in college or graduate school appear to have higher self-confidence in terms of their ability, but not necessarily in other areas.

Feminism. Fowler and Van de Riet (1972) found that women ($\bar{m}$ age= 22.4) attending a feminist conference at the University of Florida had higher self-esteem than university undergraduates ($\bar{m}$ age = 24.5) or elderly women ($\bar{m}$ age = 67.5), according to their responses on Gough's ACL. In her study of doctoral students at the University of Michigan, all of whom expressed feminist attitudes, Stoloff (1973) found that the activists were more likely to perceive themselves as attractive to men. However, when Lipman-Blumen (1972) studied the wives of Boston area graduate students, she found that the 73% who expressed more feminist attitudes did not differ from the women with more traditional views in terms of their self-confidence as a wife, mother, student, employee, or their ability to succeed at difficult tasks.

The differences in these three results may be caused by the different measures of feminism used; however, the Fowler and Van de Riet study did not control SES, age, education, or other variables which may have been relevant. Furthermore, Fowler and Van de Riet's samples were small, with only 18 feminists and 16 [illegible]r-

graduates. The Stoloff samples were well matched, but her samples were also small: 22 activists, and 22 nonactivists. The Lipman-Blumen samples were both from the population of wives of graduate students, all had at least some college, and they were similar in age and SES. Furthermore, her sample size of 1,012 represented a very large proportion of the population she was studying. The fact that 73% of the women had nontraditional attitudes indicates that the measure used probably did not differentiate between strong feminists and moderate feminists; however, the similarity between the Fowler and Van de Riet and Stoloff results may be caused by the fact that both studied feminist activists; whereas Lipman-Blumen studied women with feminist attitudes.

Summary. Overall, the research results suggest that women who are career-oriented, who are career women, or who aspire to less traditional careers have more self-confidence in terms of their intellectual abilities, and possibly in terms of feeling attractive. Homemaking-oriented women may feel more confident of their homemaking and social skills. There is no evidence that women who choose less traditional career goals or have more feminist attitudes feel more or less confident about their overall abilities than other women; however, very little research has been done in this area. The majority of measures have evaluated self-esteem in specific areas.

The 1969 Katz study is important because he used a measure of general self esteem and found that the homemaking-oriented

and career-oriented comparisons were opposite for the two samples. Since the two samples differed in SES, ability, and on other dimensions, it is impossible to determine exactly why this phenomenon occured. However, these results strongly suggest that the relationship between self-esteem and career goals is dependent on other variables. Although a career is a source of presitge in this culture, women who choose the more traditional orientation toward the home will not necessarily show lower self-confidence than women who decide to pursue a career. However, there is evidence that self-esteem is integrally related to career choice for women. Korman (1967) found that females with low self-esteem chose occupations which required the skills in which they were less qualified, rather than occupations which required the skills in which they were competent. This suggests that women with higher self-esteem will make more appropriate career choices and will therefore be more satisfied with their careers, and more likely to become career women. More research is needed, particularly using measures of general self-esteem, and to evaluate the relationships between different types of self-esteem.

There is too little research on feminism to analyze further.

Adjustment: General Mental Health and Anxiety

The personality traits that are considered "feminine" are considered mentally healthy for women, although they are considered a sign of poor mental health for "males" or "adults" (Broverman et al., 1970). Rycklak and Legerski (1967) argued that the learning of appropriate sex role behavior is crucially

important for healthy adjustment, and that females who are not retiring and passive "will be more prone to personality maladjustments."

Since career-oriented women and women with pioneer career goals have been shown to have more "masculine" personality characteristics, these studies suggest that they will be perceived as less well adjusted, or will actually be less well adjusted. However, very little research has been conducted in this area.

Career Commitment. In their study of white married mothers, conducted in 1957, Sharp and Nye (1963) found no differences in anxiety level or phychosomatic illness in their comparison of employed women and full-time homemakers. In a study of married and single career women and full-time homemakers, Jabury (1968) found no differences in terms of identity diffusion or anxiety, as measured by a semantic differential. In a study of University of Missouri women who were administered the SVIB between 1958-64 and retested as alumnae in 1967, Gysbers et al. (1968) found that the women who were consistently career-oriented were less content with their levels of personal adjustment than the women who were consistently homemaking-oriented. In her study of Stanford alumnae from the classes of 1939-62, Lozoff (1970) found that the women who reported moderate interest in careers tended to turn to a career after they found that marriage did not meet all their needs, and were more likely to indicate a desire for professional help with their problems, compared to

women with stronger or weaker career interests.

The results are not clear, but these studies suggest that there may be some validity in the assumption that career women are less well adjusted, and that this relationship may reflect the tendency for women who are dissatisfied with homemaking or marriage to pursue careers in an attempt to cure their other problems. Since there are no studies of the mental health of career-oriented and homemaking-oriented college women, it is impossible to determine whether this trend would be maintained for young women aspiring to be career women.

Role Innovation. In their study of freshwomen at Pennsylvania State University, Osipow and Gold (1968) found that personal adjustment clients were more likely to express nontraditional career interests on the SVIB than were other students, although there were no differences in terms of career goals. Karman (1973) found no differences between college upperclasswomen with pioneer and traditional goals in terms of anxiety, in her study of a national sample of college students. In the one study of career women, Standley and Soule (1974) found that 56% of the white married women ($\bar{m}$ = 40 years old) with careers in architecture, law, medicine, and psychology in their sample reported that they were not well adjusted.

Feminism. Fowler and Van de Riet (1972) found that women attending a feminist conference at the University of Florida did not differ from the University undergraduates or two groups of elderly women on their perceptions of their personal adjustment. Similarly, Lipman-Blumen (1972) found that women with feminist

and traditional attitudes were equally happy in her study of the wives of Boston area graduate students. However, the women with feminist attitudes were more likely to report that they had been lonely adolescents. Cherniss (1972) also reported that members of a Women's Liberation group were more likely to report being alienated as adolescents.

Summary. Although women who challenge the traditional female role are often perceived as maladjusted by others, there is little data to support this assumption. Two of the studies suggest that, in some cases, women who choose careers may feel less well adjusted than full-time homemakers; however, this may be the result of a conflict between their two primary roles, rather than the cause of their career commitment. Lozoff's study distinguished between those women who were strongly career-oriented and those who were moderately career-oriented and found that the latter group tended to choose a career as a second choice, after their first choice (marriage) proved disappointing. This study suggests that women who became career-oriented after several years of being oriented toward homemaking activities may feel less satisfied and less well adjusted, but that women with more stable career commitment may be as well adjusted as other women.

The Osipow and Gold study suggests that women with nontraditional career interests who choose traditional career goals may be more likely to seek personal adjustment counseling; there were no differences in the actual career goals of counseling clients and other freshwomen. In the Karman study of college women, and the two studies of feminists, there were no relationships between traditional and nontraditional women in terms of adjust-

ment or anxiety. This may be because all three studies were conducted in the 1970's, when these goals and attitudes were more widely accepted. The Standley and Soule study shows a high degree of self-described poor adjustment among Pioneers; however, there were no Traditionals with which to compare these results. The Lipman-Blumen and Cherniss studies suggest that feminists may have been less well adjusted as children, perhaps because of the more rigid sex roles of the period or of the adolescent culture. More research is needed on this important issue for both young women and adults.

Chapter Summary

There is very little data on the personality characteristics associated with educational aspirations or feminism, but the relationships between career commitment and pioneer aspirations and several personality traits have been strongly demonstrated.

Career Commitment. Three characteristics were consistently associated with career commitment. Career-oriented women and career women were higher in achievement motivation or competitiveness in all of the studies cited. The measures of achievement motivation varied, although the EPPS was used in four studies. Career-oriented women and career women also tended to be more independent and less affiliative; the majority of these studies were conducted with career-oriented undergraduates. Career-oriented and career women also perceived themselves as more aggressive or assertive than homemaking-oriented women and homemakers; however, when an active-passive continuum was used, there were no signficant differences.

The results were less clear for five other traits. Career

oriented college women tended to be more intellectual than homemaking-oriented women in the three studies cited, but there were no studies of graduate students or working women. Career-oriented women and career women tended to be more self-oriented, whereas homemaking-oriented women were more other-oriented; however, both groups were interested in helping others. The six studies on conformity agreed that career-oriented and career women were less conventional than homemaking-oriented women and homemakers; however, the variety of criteria used to measure career commitment weakens the impact of these results. Three studies indicated that homemaking-oriented women were more sociable than career-oriented women, whereas Rand found that career-oriented women who aspired to doctorates or professional degrees were more sociable than homemaking-oriented college women. Finally, there was some evidence that career-oriented and career women felt more attractive and intelligent than homemaking-oriented women and full-time homemakers, and that the latter felt more confident of their homemaking and social skills. The results concerning general self esteem were not clear, and there were strong indications that other variables such as SES influenced this relationship, probably because women's careers are considered more desirable by some cultural groups than others.

The least conclusive results were for the literature on orientation towards things vs. people, endurance, and personal adjustment. The data suggests that career-oriented and career women are more oriented towards things and ideas and less towards people, that they are more persevering, and less content with their adjustment. However, there are few studies and the results are less consistent than for the other traits discussed.

Education. There are only three studies on educational attainment or aspirations. Faunce's study found that women who dropped out of college were less conformist and less self-confident. Gump's study demonstrated that women aspiring to graduate degrees were more self-oriented than other women. Korn found no differences between female graduate students and women with undergraduate degrees in terms of masculinity on the SVIB M-F scale, which suggests that these women may be very similar on most of the traits discussed in this chapter, since these traits are included in the M-F scale. More research is necessary to examine this hypothesis further.

Role Innovation. Four traits were strongly associated with pioneer aspirations or pioneeer careers. Achievement motivation was consistently stronger for college women with pioneer aspirations; however, there was little data on career women on graduate students. Mednick's study indicated that this relationship may not pertain to black women, a consideration which deserves further study. College women with pioneer aspirations were more intellectual, but there were no studies of graduate students or women with pioneer careers. Women with pioneer goals and pioneer careers also expressed greater self-orientation and less orientation toward helping others. These trends were apparent in their expressed reasons for their career choice and in their reluctance to give up their careers to please their husbands. Despite these differences, women with pioneer goals tended to put their husbands careers first, and in one study college women with pio-

neer aspirations were more likely to participate in social service extracurricular activities. This suggests that even women with pioneer goals are very other-oriented, and that their behavior may be more other-oriented than their expressed attitudes. Other variables, such as political beliefs, may confound the results; for example, if women with pioneer goals are more liberal politically, they might be more likely to participate in social service activities than other women, but also be more willing to defend their personal needs in their relationships with family members or close friends. Women with pioneer goals were also more autonomous, but there were no studies of actual Pioneers.

The results for conformity, passivity, and endurance were less convincing. The literature suggests that women with pioneer aspirations are less conventional and less willing to conform, and that they are less willing to express aggression. However, there is some evidence that women with traditional career aspirations are repressing their aggressive and assertive drives, so that they are not apparent with some personality tests, but become obvious when projective techniques are used. The literature also indicates that there is probably no difference between the endurance or perseverance of women with pioneer aspirations and those with traditional goals, although women in certain fields, such as medicine, may be particularly high on this dimension.

The least conclusive results were for people vs. thing-orientation, sociability, self-esteem, and personal adjustment and anxiety. The results suggest that women with pioneer goals are more confident of their academic ability, but do not differ

from aspiring Traditionals in terms of general self-esteem, sociability, or anxiety. The major difficulty with the studies in these areas is that there were too few to analyze.

Feminism. The strongest trend for feminists was the positive relationship between achievement motivation and feminism. Most of the studies were of high school and college women with less traditional attitudes, who were not necessarily strongly feminist.

There was some evidence that feminists were more autonomous, and that the most and least aggressive women were likely to be feminists. More research is needed in these ares.

There were very few studies of intellectuality, endurance, sociability, self-esteem, and personal adjustment, and no studies of people vs. thing orientation. The one study of endurance found no differences between feminists and nonfeminists and two of the three studies on self-esteem found that feminists were more self confident. The two studies of personal adjustment found no differences for adults, although two studies found that feminists were more likely to report a lonely or alienated adolescence. There were too few studies of sociability to analyze.

There were very few studies concerned with the personality traits of feminists compared to women with more traditional attitudes towards the female role. More research is necessary before meaningful analysis is possible for most of these characteristics.

Conclusions. Overall, the strongest predictors of career commitment, pioneer aspirations, and feminism are achievement motivation (for all three), and independence and autonomy (for

career commitment and career women and women with pioneer aspirations). Greater willingness to express aggressive and assertive needs also was fairly consistently associated with career commitment, pioneer aspirations, and feminism. Intellectuality and an orientation toward one's personal needs were also strongly associated with pioneer aspirations and fairly consistently associated with career commitment, and nonconformity was consistently associated with career commitment, pioneer aspirations, and feminist activism in the few studies conducted in this area.

Many of the traits were interrelated; for example, affiliativeness is related to people-orientation and possibly with helping others. However, many of these overlapping measures can be corrected, and need not necessarily be controlled, as was necessary for the related family background variables discussed in Chapter 4. The comparison of people-oriented women vs. thing oriented women was probably the weakest, in that it was rarely studied in that context, but rather overlapped with other measures.

The general picture that emerges is that women who challenge the traditional female role in their career choices (and, to a lesser extent, their attitudes) are more sensitive to their own needs, more willing to pursue their goals, and more oriented toward intellectual and competitive tasks. In contrast, the more traditional women appear to be more self-sacrificing, more likely to express interest in helping and being with others, less likely to express aggressive or assertive needs, and less interested in achievement or intellectual tasks. In the past, the women with the less traditional personality characteristics were labeled

"masculine" and were considered to be more like men than like other women. Most of the studies cited here have not compared these career-oriented and pioneer aspiring women to both men and women to determine whether this assumption is accurate; however, several studies do indicate that even though career oriented and pioneer aspiring women differ from other women, they still score moderately high on many of the characteristics considered "feminine". It appears that these women may be more "androgynous" than "masculine", that is, high in traits that are traditionally associated with masculinity and femininity. Recent studies have indicated that more intelligent men and women are more likely to be androgynous, and the need for research on the relationship between androgeny and nontraditional attitudes towards the female role is strongly suggested by the literature.

Since personality is developed over a long period of time, the relationship to family background must be extremely important. Block (1973) found that parents encourage "masculine traits" such as achievement and competition in their sons, and encourage interpersonal skills in their interactions with their daughters. She also found that the greatest difference between parent-daughter and parent-son encouraging behavior was from the fathers. This strongly suggests that the father's attitudes towards appropriate sex role behavior is of crucial importance in the development of the daughter's personality; however, this relationship has not been studied as thoroughly as has the relationship between the mother's and daughter's attitudes.

CHAPTER 6
PERSONAL CHARACTERISTICS

Intelligence and Ability

Since housework and traditional female occupations are less prestigious and are devalued as requiring less ability than male-dominated careers, one would hypothesize that women who aspire to careers, particularly in pioneer fields, would be more intelligent than other women. Similarly, more intelligent women would be expected to reject the notion that women are inferior and incapable of doing a "man's job" or competing in "a man's world." The literature indicates that, to some extent, these hypotheses have been supported.

Career Commitment. The results for high school students were consistent. Tyler (1964) studied high school girls from Eugene, Oregon in the 1950's and found that career interest was associated with higher IQ. In a study of eleventh and twelfth grade girls in Missouri and Wyoming schools, Fortner (1970) found that those with higher I.Q. scores chose higher level occupations, which are generally associated with career commitment. Similarly, Turner (1964) found that twelfth grade girls who expected careers were more likely to be regarded as very intelligent by their peers. In several longitudinal studies of high school girls from the national Project TALENT samples in the early 1960's, Astin (1968a; 1968b) found that brighter girls tended to change from their initial homemaking-oriented choices as ninth graders to career-oriented choices as twelfth graders or the year following

high school graduation, whereas the less able girls who were career-oriented as ninth graders shifted to homemaking-oriented goals. Higher math ability as ninth graders predicted career commitment as twelfth graders, and higher mathematics and verbal aptitude as seniors predicted career commitment one-year and five years later (Astin, 1968a; Astin and Myent, 1971). In another longitudinal study, Watley and Kaplan (1971) found that National Merit Scholars who planned a career immediately after they were to graduate from college had higher verbal and math Scholastic Aptitude Test (SAT) scores than those who planned to delay their careers or to become full-time homemakers. Thus, even among the most intelligent high school girls, those with higher ability were more likely to be career-oriented.

The results were less consitent for college women. Kosa et al. (1962) found that Catholic college freshwomen who were career-oriented were nonsignificantly higher on scholastic aptitude as measured by the Ohio State University Aptitude Test. In a study of freshwomen in the college of home economics at Kansas State, Metzger et al. (1969) found that women in the honors program were more likely to plan to work as mothers than were women in the nonhonors control group. The groups were matched for SES, size of home town, and size of their high school. The percentage of women planning to work when raising preschool children was small however; 25.7% of the honors women and 15.2% of the group. Women in the honor program were also more likely to hope to raise their occupational level than were the control group women. Rand (1968) studied a large national sample of college freshwomen in 1964, and found that the career-oriented

women had higher mathematics and science ability. In this study, career commitment was defined as the attitude that the purpose of college is to prepare for a career rather than to find a spouse, and aspirations for a doctorate or professional degree.

In contrast, Vetter and Lewis (1964) found that Io State home economics majors who were career-oriented were less intelligent according to their achievement test scores than their homemaking-oriented classmates. Oliver (1974) found no SAT differences among career-oriented and homemaking-oriented University of Maryland psychology students in 1971-72. In a study conducted in 1973, she found no differences on a Quick Word Test (1975). In this latter study, Oliver defined career commitment differently, by using a standard type of career vs. family commitment question and also the achievement motivation and affiliation scales of the Gough ACL. Only those women who were higher on achievement motivation than affiliation were considered career-oriented, and only those higher on affiliation than achievement motivation were included in the homemaking-oriented comparison group. Oliver's decision was based on her finding that career oriented women tend to be higher in achievement motivation and homemaking-oriented women tend to be higher on affiliation; however, this new definition is not helpful in generalizing the results, although it does control these two important variables related to career commitment.

When college grade point averages (GPA) were compared, Goldsen et al. (1960) found that 1952 Cornell freshwomen who were career-oriented had higher GPA's. In this study, career

commitment was measured in terms of the degree of satisfaction the women expected to derive from their careers compared to their homemaking-related activities. In contrast, Parker (1966) found no differences in GPA for career-oriented, homemaking-oriented or "neutral" college women, and Zissis (1964) found no differences between career-oriented and homemaking-oriented Purdue freshwomen that she studied in 1959.

Although the studies of high school students consistently demonstrated that higher ability was associated with career commitment, the studies of college women showed a variety of results. The differences do not appear to be caused by the differences in the college population, since state universities and more select colleges results were similarly inconsistent. The Vetter and Lewis results, showing higher homemaking-oriented aptitude, can be attributed to the sample of home economics majors; since home economics is a low status, traditional female field, especially popular among women who are interested in homemaking-oriented skills, women who are career-oriented home economics majors may be less able women who have chosen this major because it is considered less demanding that other fields. However, the Metzger et al. study of Kansas State home economics majors showed that those who were in the honors program were more career-oriented than the other women. This appears to directly conflict with the Vetter and Lewis study of Iowa State students which was probably also conducted in the early 1960's. There is a potentially important difference, however; honors students may be more intellectually motivated or achievement oriented than other women, and not necessarily

the most intelligent women in the group.

The two college studies which showed significantly higher aptitude for career-oriented women both described career orientation using unusual criteria. In the Cornell study, career orientation was measured as the amount of satisfaction which the student expected to derive from a career, and in the Rand national study, career commitment included aspiring to a doctorate, which would be highly associated with pioneer aspirations. These criteria are different than those used in the majority of studies, and would be likely to produce a pioneer-homemaker comparison rather than a homemaking-oriented/career-oriented comparison. In the Cornell study, the satisfaction question may tend to discriminate between women who are planning prestigious careers and those planning less valued, more traditional careers in addition to those planning full-time homemaking. Moreover, the Cornell admissions criteria for women was especially high in the 1950's since few women were admitted; therefore, those who were career oriented may have been more likely to aspire to pioneer careers since they were probably exceptionally intelligent and motivated. These possible explanations were not discussed and cannot be proven; however, they raise important questions about the validity of these findings particularly in view of the results of the other studies.

Education. The results of studies pertaining to educational aspirations were also inconsistent. In his study of students at Berkeley and Stanford, Korn found no differences in aptitude between the women in graduate school and those with other plans

(Katz, 1968). Gump (1972) studied seniors at the University of Rochester in 1966 and found no differences in grades or desire to achieve academic distinction when she compared those planning to enter graduate school and those planning to attain only a bachelor's degree. Baird (1973) found no differences in academic achievement between women planning to attain a master's degree and women with no graduate school plans, among a national sample of graduating seniors in the class of 1971. O'Leary and Braun (1972) compared 19 men with doctorates, 19 women with doctorates in nontraditional fields, and 19 women with bachelor's degrees, and found no differences for the three groups in intelligence. The age range for the samples was 27-79 years old. In contrast, Astin (1969) found that women who received doctorates in 1957 or 1958 had higher high school intelligence scores, and higher high school class ranks and GPA's in science and math subjects than men with doctorates. Metzger et al. (1969) found that the Kansas State home economics honors students were more likely to aspire to a graduate degree than their nonhonors classmates.

The majority of the studies indicate that graduate school aspirations do not discriminate between women with higher and lower ability or grades. It is possible that the results of the Astin study are not generalizable to a more contemporary graduate school population; however, it is also possible that her results were different because she evaluated women with doctorates rather than graduate school plans. The O'Leary and Braun study evaluated women with doctorates too, but their samples were small and the age range was extremely wide. Other issues of potential importance are the difference between women aspiring to doctorates

and those aspiring to graduate degrees (which would primarily be master's degrees), and the differences between high school grades and ability and college criteria. The Astin study is particularly weak because there is no college-educated female control group. The Metzger et al. study is not comparable to the other studies because an honors program does not necessarily attract the most intelligent women in the major, and home economics majors may differ substantially from women in other areas.

Role Innovation. Since pioneer careers tend to be more prestigious and more competitive, one would expect that women with pioneer goals would be the most intelligent and able. However, even among the most able college-educated women, pioneer aspirations are rare. In a study of 50 gifted college-educated women, Mowsesian, Heath, and Rothney (Hoyt & Hebeler, 1974) found that only four entered graduate or professional schools, three were employed in pioneer occupations, and 13 were employed in androgynous careers. However, other studies have demonstrated that women with pioneer aspirations do tend to be more able than other women. In her study of eleventh and twelfth graders at a primarily middle-class Midwestern Catholic shcool, Rezler (1967) found that the girls who aspired to careers in the pioneer fields of medicine, mathematics, or natural science had higher grades and Preliminary Scholastic Aptitude Test scores on both verbal and mathematics sections than did the girls aspiring to careers in nursing and elementary school teaching. Moore and Veres (1975) studied two-year college women at several schools in New York

State in 1974, and found that 42.1% of the women with pioneer aspirations had a GPA of B+ or higher, compared to 27.4% of the women with traditional career goals. In a national sample of college upperclasswomen tested in 1968-69, Karman (1973) found that those with pioneer golas had higher high school and college grades. Among the women with pioneer aspirations, 79% had a GPA of B or higher in hig school compared to 62% of those who later aspired to traditional careers; 75% of those who aspired to pioneer careers had a B+ or higher in college compared with 50% of those who aspired to traditional careers. The women with pioneer goals also scored higher on a verbal aptitude test of 20 vocabulary words. In her study of black women a ve Southeast and MidAtlantic campuses in 1971, Mednick (1973) found that the women with pioneer aspirations tended to have higher GPA's than their more traditional classmates, although the difference was only marginally significant at the .10 level. Mednick had found no differences between Howard University women with pioneer goals and those with traditional goals in a study conducted in 1970.

Mednick's study suggests that the relationship between intelligence or grades and pioneer goals may be weaker or nonsignificant for black college women, particularly those attending a selective black university. The other studies did not differentiate between black and white women, so that comparisons are not possible between the studies.

Feminism. There is some evidence that women with less traditional attitudes towards the female role may also be more intelli-

gent or have higher grades. Houts and Entwisle (1968) studied 405 tenth grade girls in four high schools, and found that those with a more feminist view of the female role had higher grades than those with a more traditional view. In a study conducted in 1971, Joesting (1971) matched white North Carolina State students who were Women's Liberation members with 25 non-members on the basis of the father's occupation, and the woman's attitudes towards illegal drugs and the number of organizations she belonged to. She found that 68% of the Women's Liberation members had a B+ or higher GPA compared to 36% of their non-member classmates. This difference was not statistically significant, however. Goldschmidt et al.(1974) compared several hundred undergraduate women from four campuses on the basis of scores on a Women's Liberation Movement ideology scale and membership in the campus Women's Liberation groups. She found that the Women's Liberation members were more likely to have A averages or to be in an honors program; however, there was no relationship between feminist attitudes and GPA. In an early study, Sundheim (1963) found no differences in GPA when she compared Temple University upperclasswomen with traditional and nontraditional attitudes towards the female role.

These few studies suggest that college women who are active in the Women's Liberation Movement tend to have higher GPA's, as do high school girls with more feminist attitudes. There is some indication that feminist attitudes among college women are not necessarily associated with higher grades, but more research is necessary.

Summary. In an early study, Terman and Oden (1947) found that although there was a relationship between the level of occupational achievement and school years I.Q. for men, there was no such relationship for women. Apparently, this discrepancy still exists to some extent. Although the relationship between intelligence or grades and career commitment was consistent for high school students, it was not consistent for college women. It is possible that when the range of intelligence becomes somewhat foreshortened, as it is in a college population, other characteristics exert more influence on a woman's decision to break away from the traditional female role of homemaker. However, for those college women who choose to pursue a career, intelligence or grades again become an important discriminator between those choosing pioneer and traditional fields. Similarly, women who join a Women's Liberation group also tend to have the highest college grades, although the relationship between intelligence and feminist attitudes is not clear from these studies.

The differences between college or high school grades and intelligence cannot be determined from these results, because most of the studies used one measure or the other. Since achievement motivation was found to be strongly associated with career commitment, pioneer aspirations, and feminism, this trait may be confounding the results, as n Ach is also associated with higher grades and participation in an honors program. GPA's are probably the most easily accessible measure related to intelligence, but other measures, such as I.Q. or aptitude scores, would be more valid measures of intelligence.

Education

Educational aspirations and attainment have already been discussed as predictors of career commitment, pioneer aspirations, and feminism. However, several other aspects of education are also important. Astin and Myent (1971) studied a national sample of Project TALENT women, and found that women with less than a college degree tended to become full-time homemakers, office workers, or planned business careers, whereas a college degree predicted career choices in natural science, social service, social science, teaching, or the professions. Graduate school degrees were associated with natural science careers. Parnes and Nestel (1975) found that for white women with at least a college degree, women with liberal arts degrees were less likely to pursue careers than those with education degrees, whereas other professional programs were most strongly associated with careers. Watley and Kaplan (1971) found that intelligence was a potentially confounding variable in their study of National Merit Scholarship women from 1956-60, 51% of the homemaking-oriented women planned to attain a graduate degree. However, career-oriented women were even more likely to aspire to graduate degrees; 91% of the few women who planned to become single career women had graduate school aspirations. This study suggests that when high ability women are studied, the career-oriented women have higher educational aspirations, but that even the homemaking-oriented high ability women have higher educational goals than most women.

They types of colleges attended were also predictive of later career goals. Leland (1967) found that women at a private university were more career-oriented than those attending a state

university. Karman (1973) found that women with pioneer aspirations represented 15% of the upperclasswomen at selective liberal arts colleges and 15.7% of the upperclasswomen at engineering schools, compared to 2.2% at teacher's colleges and 1.7% at state universities. Tidball (1973) found that women from women's colleges were more likely to be listed in Who's Who of American Women than other college-educated women, and the higher proportion of women faculty members appeared to be at least partially responsible. Alumnae of women's colleges are also more likely to attend graduate school and receive doctorates (Carnegie Commission, 1973). In contrast, Moore and Veres (1975) found that students from a private women's junior college were less likely to plan to be employed in 15 years, and more likely to plan to become full-time homemakers than women attending other 2-year colleges. However, a private 2-year women's college probably offers a different kind of education than a 4-year women's college, and attracts a different type of student.

Summary. Although there are few studies which evaluate issues closely related to college education, the majority indicate that many factors may influence students' career goals. The woman's ability, the type of college attended, and the major chosen are related to one another and to career goals.

Physical Appearance: Size and Attractiveness

Physical appearance is an area that has been virtually ignored, despite its relevance to a woman's self-concept and attitudes, and the popular mythology concerning the association between largeness

or unattractiveness and nontraditional female goals.

Size. Women's size has been ignored completely. Although research has demonstrated that height is related to achievement and leadership for men (Jones & Gerard, 1967) this issue has not been studied for women. On the average, women are shorter than men, and in our culture it is considered appropriate for females to be shorter or appear shorter than the males they are with, whether they are husbands, friends, or colleagues. Most females fit into this role easily, except during adolescence. However, females who were taller than many of their male friends and companions during childhood and adulthood would be expected to perceive themselves differently and be treated differently by others. Since height is associated with strength and power to some degree, one would expect taller females to consider themselves less helpless and more capable, and to be taken more seriously by others. In some cases, they might also take on a more dominant role with their shorter female friends.

Whether or not tall women feel comfortable with their height, it seems reasonable to hypothesize that they would be more likely to challenge the traditional female role because of their height they already do not fit this role as easily as other women. To some extent, their position would be similar to that of intelligent females, who realize early in life that they are more capable than most of the males they know. However, an intelligent female can hide her intelligence and thus be accepted as "feminine"; this is not possible for tall women.

Another possibility is that extremely short women, who would be treated as especially helpless and expected to behave in a very "feminine" manner, may find themselves uncomfortable with the role of perpetual child. This role would be particularly dissatisfying for very intelligent short women or those who were brought up in a less traditional manner. These women might be more likely to aspire to careers which they think would facilitate their being treated as competent adults. Their choices might be presigious occupations or positions with less interpersonal contact.

There are other aspects of size which would be expected to exert a similar influence on women's attitudes. Women who are moderately overweight 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. Strong or athletic women would be expected to have similar attitudes and be perceived by others as more "masculine" and therefore more capable. However, the fact that a woman is strong or athletic suggests that she has a more nontraditional view of the female role, at least for herself.

Attractiveness. Physical attractiveness is a more difficult attribute to measure objectively, but it is important because there are strong cultural expectations associated with attractiveness in women. Traditionally, women who are attractive are expected to be less intelligent, less capable, less career-oriented, and generally more "feminine". Since women who are less attractive

probably feel less able to compete in traditional female spheres related to attracting men, one would expect that they would tend to compete in more "masculine" spheres such as scholastic achievement or careers, and would express more feminist attitudes. In the one study conducted in this area, Goldberg, Gottesdiener, and Abramson (1975) found that male and female college students, even those who considered themselves feminists, expected Women's Liberation supporters to be less attractive than other women. This was determined by showing students photographs of college women, and asking them which women were the Women's Liberation supporters. The women's attractiveness had previously been judged by students using the same photographs, and in fact, there were no differences in the judged attractivess of the real feminists and nonfeminists.

Self-perceptions of attractiveness were discussed in Chapter 5 as a measure of self-esteem, and several studies indicated that career-oriented women and women with pioneer aspirations perceive themselves as more attractive. This is an unexpected finding, but it is impossible to determine the relationship between self perceived attractiveness and others' perceptions of a woman's attractiveness, although one would expect them to be strongly related. This is an interesting area, but one that is more difficult to study than the other dimensions discussed.

Summary. Physical appearance has rarely been considered by social scientists as a dimension relevant to women's goals and attitudes, although there are cultural expectations which associate larger and less attractive women with more "masculine" goals and behavior. There is some evidence that, contrary to popular

mythology, career-oriented women and women with pioneer goals perceive themselves as more attractive than other women. Variables related to size are easily measured, and deserve further study; physical attractiveness is more difficult to measure objectively.

Age

At different stages of their lives, women are more likely to express career-oriented or homemaking-oriented interests, and related personality traits also fluctuate in response to different needs and interests. For example, Baruch (1967) found that for Radcliffe alumnae, n Ach decreased 5-10 years after college and increased 15 years after college. Among 15-58 year old women in a vocational school, the younger women were more interested in careers, whereas the older women were more interested in earning money (Willmarth, 1969). Similarly, Blai (1970) and Sobol (1963) found that women in different age groups expressed different reasons for working and different work values. Unfortunately, these studies did not control for the possible influence of historical factors. Women of differing ages have been socialized in a slightly different way, and women's values are influenced by changing cultural expectations, so that the cultural mores of the time may have been the crucial issue, and not the the women's ages. However, marital status and the number and age of the children are probably more important than fluctuations in cultural expectations, and may even be more important than age itself. Lyon (1967) found that women with undergraduate degrees

usually planned to re-enter the labor force around the age of forty, after their children were old enough to be fairly independent. Since the majority of career-oriented women marry and have children, it is impossible to determine the influence of age independent of marital status and childrearing responsibilities.

Marital Status

Career Commitment. Since careers and marriage are often viewed as conflicting activities, it is not surprising that Richardson (1975) found that career-oriented college women value marriage less than homemaking-oriented women, or that married teachers care less about their jobs than single teachers (Kuhlen & Johnson, 1952). Women who are career-oriented tend to marry at later ages, are less likely to marry, and are more likely to be divorced; these findings were consistent when the women studied were college students (Angrist & Almquist, 1970; Cook, 1968; Richardson, 1975; Watley & Kaplan, 1971), alumnae (Gysbers et al., 1968; Katz, 1969; Lozoff, 1970) or career women and full-time homemakers (Harmon, 1970; Kuhlen & Johnson, 1952; Parnes & Nestel, 1975). Parnes and Nestel also found that for black women, the number of years between finishing school and marriage was positively related to the probability of steady employment. Moreover, career-oriented college women had a higher ideal marriage age (Klemmack & [illegible]ards, 1973).

Four studies show conflicting results. In his study of elementary school teachers between the ages of 21-24, White (1967) found that married women were more career-oriented than the single women. Farmer and Bohn (1970) found no differences

in marital status of career-oriented and homemaking-oriented working women, when the latter were measured by scores on the home and career scales of the SVIB-W. Edwards (1969) studied student teachers and student nurses and found no relationship between marital status or relationships with men and career commitment, and in her study of students a Macalaster College and several other campuses, Dodge (1974) found that less than 10% cited marriage as a possible deterent to a full-time career.

Whether or not single women are more committed to careers, they are more likely to pursue them. Single, divorced and separated women are more likely to be employed (Siegel et al. 1963) although the number of married working women is increasing dramatically (Osipow, 1975; Waldman, 1967). Married women consider the homemaking role as more important than do divorced and single women (Blai, 1970) and they have different attitudes about the kinds of advantages a job should provide (Blai, 1970; Wolfe, 1969). Furthermore, married women who work make less money than single women, although the opposite is true for men (Havens, 1973).

The majority of the studies indicate that married women are less career-oriented, are less likely to be employed outside the home, and tend to have different reasons for wanting to work. The different results in White's and Edward's studies are probably the result of the women's status as young, new teachers and nurses. The single women involved in these studies may have preferred to be married which would have resulted in less career commitment; this hypothesis seems reasonable because women in traditional fields are usually less career-oriented. In contrast, women who

continued to work after marriage may have been less likely to idealize homemaking responsibilities, and more likely to be working out of choice, rather than necessity. Since Farmer and Bohn did not discuss the specific attributes of their small sample of 50 working women, it is impossible to ascertain why their results conflicted with the majority of the research; however, it may be that the SVIB scales did not measure the degree of career commitment in a comparable way to the other studies. Similarly, the Dodge study results were not comparable, because she measured college women's attitudes towards combining marriage and e career, rather than evaluating career women.

A related issue is whether career-oriented women are less involved with men in terms of dating in high school or college. In an early study, Hoyt and Kennedy (1958) found that the small minority of freshwomen who were career-oriented were lower on the heterosexuality scale of the EPPS. However, in a more recent study of Syracuse juniors and seniors, Masih (1967) found no differences between career-oriented and homemaking-oriented women in terms of a heterosexuality scale, and Almquist and Angrist (1970) found no differences between career-oriented and homemaking-oriented women in terms of frequency of dating in high school or college. The women in this sample were enrolled in a woman's college of a private coeducational university between 1964-68. In their study of seniors at a large state university. Sedney and Turner (1975) found no differences in the frequency of high school dating for women who were career-oriented or homemaking-oriented in college. Career-oriented women dated slightly less often in college, but they were still dating moder-

ately frequently. These studies suggest that career-oriented women are involved in relationships with men, but that they sometimes choose to date less or to marry later. It does not appear that these women became involved with careers because they were unsuccessful with men.

Education. Five studies demonstrated that married women tend to be less educated than other women. Astin (1969) found that women who obtained doctorates in 1957 or 1958 were more likely to be single than other college-educated women, and Simon, Clark and Galway (1967) found that 50% of their sample of women who obtained doctorates between 1958-63 were married compared to 95% of their male colleagues. Katz (1969) reported that Stanford women from the class of 1965 who were married were less likely to enter graduate school than their single classmates. The Carnegie Commission (1973) reported that there were no differences in the marital status of college-educated women and women with less education, but 18% of the women with at least five years of college are single, compared to 8% of other women. In their study of a national sample of women between the ages of 35-49, Parnes and Nestel (1975) found that the single women had an average of 1.3 years more education than married women with children. However, a recent study found that marital status is no longer as strong a predictor of graduate school plans as it was in the past (Luria, 1974).

Role Innovation. The four studies of women with pioneer goals or careers all agreed that they were less likely to be married than women with more traditional career choices. In her study of University of Michigan women from the class of

1967, Tangri (1972) reported that the women who aspired to pioneer careers were more likely to expect to delay marriage. Klemmack and Edwards (1973) studied women at an Eastern university and found that those with pioneer aspirations reported an older ideal marriage age. Rossi (1965c) reported that women scientists were more likely to be single than male scientists or women employed in other fields; only 40% of the employed women scientists were married. Bachtold (1975) evaluated persons listed in Who's Who in 1972-3, and found that 62% of the women were married compared to 94% of the men, and 47% of those in pioneer or androgynous fields were married compared to 75% in traditional fields.

In the one study concerned with dating, Almquist (1974) found no differences in dating frequency in high school or college for college women aspiring to pioneer or traditional careers. This is the same sample she evaluated in terms of career-oriented/homemaking-oriented comparisons, and the majority of the homemaking-oriented women were aspiring to traditional careers. Therefore, these results are somewhat misleading, and the women involved in the comparison were grouped similarly to the Almquist and Angrist (1970) study cited earlier.

These studies indicated that women with pioneer careers are less likely to marry and that women aspiring to pioneer careers tend to want to marry at an older age than their classmates.

Feminism. Despite the popular stereotype of feminists as single or divorced women who either hate men or are unable to

attract them, there are few studies which evaluate the relationship between attitudes towards men and marriage and feminism. The reason for the lack of research on marital status is probably related to the fact that most studies of feminists have been conducted on college campuses, where the majority of the students are single. However, in a study of doctoral students at the University of Michigan, Stoloff (1973) found that approximately half of the women who were active in the Women's Liberation Movement were married, as were half of the nonactivists who were enrolled in the same programs and were similar in age. Women in both the activist and nonactivist groups expressed feminist attitudes. The activist women had more sexual experience than the nonactivist women; however, this difference was apparently primarily due to the fact the activists were from more urban-suburban backgrounds than the nonactivists. Goldschmidt et al. (1974) found that among college women on four campuses, those who reported that they were "unsure" whether they would marry or responded that they "definitely" would marry were the least likely to express feminist attitudes or be members of campus Women's Liberation groups. Most of the feminists planned to marry, but expressed interest in a nontraditional marriage; women who reported that they "definitely" would never marry were also likely to be feminists. The activist feminists did not differ significantly from the other women in terms of experience with intimate heterosexual relationships. Furthermore, the women who were ideologically or actively commited to feminism did not differ from other college women in terms of their satisfaction with male relationships.

In her study of Psychology Today readers, Tavris (1972) found that the women who supported the Women's Liberation Movement were more likely to express anger towards men on a questionnaire, but they did not differ from the other women in terms of reported sexual experience or relationships with men.

These studies indicate that feminists do not differ significantly from other women in terms of relationships with men, although their attitudes towards marriage may differ from women with more traditional views.

Summary. Although there are not many studies in this area, the literature as a whole indicates that married women tend to be less career-oriented, less likely to have careers, less likely to aspire to or choose pioneer careers, and are less well educated than other women. Since married women tend to have children, it is not clear whether children are a major factor; however, several studies suggest that women who are career-oriented in college are less interested in marriage, and expect to or want to marry later than their classmates. The differences in marital status also seem to be associated with different interests and job values, but it is not clear whether these differences are caused by marital status or are a primary source of influence determining marital status.

In contrast to the other studies, the studies on feminism suggest that feminism and marital status are not necessarily related, although there are too few studies to analyze. However, the studies indicate that feminists do not differ significantly

from other women in terms of relationships with men, although they may prefer less traditional marriages. Since the studies of feminists are more recent than the majority of the other studies, it is possible that they lend further support to the trend reported by Luria, which showed that marriage is less of a deterent to career-related activities than it used to be. It may be too early to study this question for career women in their thirties, but the trend may be apparent for younger women.

Husbands

The kind of person a woman marries will influence her goals, attitudes and needs, so one would expect that his occupation, income, and attitudes will effect her independently of other marriage-related variables such as children.

Husband's SES and Wife's Career Commitment. In her study of alumnae who entered the University of Minnesota between 1953-55 who were retested in 1965, Harmon (1970) found no differences between career-oriented and homemaking-oriented women in terms of their husbands' educational attainment or occupational level. However, this was not a random sample, in that all of the women studied had high scores on the social worker scale of the SVIB when it was administered in their first year in college. In this study, a woman was considered career-oriented if she listed a career under "usual occupation", whether or not she was currently employed. Similarly, in their study of the parents of college students, Vogel et al. (1970) found no relationship between the employment status of the mothers and the educational and occu-

pational levels of the fathers. The mothers were labeled as either currently employed, or full-time homemakers who had never been employed during their child's lifetime. In their study of the parents of kindergarten children in California in 1957-58, Siegel et al. (1963) found no relationship between the mother's employment status and the mother's employment status and the father's SES. In contrast, in a study of the parents of high school students in Washington, Nye (1963) found that the husbands of working women had lower level occupations than the other husbands. Levitt (1971) studied employed librarians in seven metropolitan areas, and found that the women's career patterns were influenced by their husbands' salaries. Men with higher salaries were more likely to have wives who had delayed their own careers.

The specific careers that the husbands pursue may also be relevent. Rossi (1965) reported that less than a quarter of the wives of doctors, scientists, engineers and lawyers were employed outside the home, compared to 44-47% of the wives of social workers, librarians, and school teachers. There are several possible reasons for these differences. One explanation is that the doctors, scientists, engineers and lawyers earn higher incomes than the social workers, librarians and school teachers. Another possibility is that the men in the first group of occupations are themselves more nontraditional, since they work in occupations which are considered traditionally female or androgynous. Similarly, the fact that these husbands work with women may influence their attitudes about their own wives' employment. There is not enough research to determine

whether this study merely supports previously cited results concerning the inverse relationship between husbands' salaries and wives' employment, or whether it indicates that husbands in specific occupations, particularly in androgynous or female-dominated fields are more likely to encourage or tolerate their wives' employment. It will be difficult to distinguish between these two explanations, because male-dominated fields tend to offer higher salaries than androgynous and female-dominated occupations.

In their study of National Merit Scholars between 1956-60 who were interviewed in 1965, Watley and Kaplan (1971) found no relationship between the husbands' education and the wives' career commitment. However, in their national study of women between 35-49, Parnes and Nestel (1975) found that 81 % of the white women whose husbands were not high school graduates were career women, compared to 5.0% of the women whose husbands had at least one year of college. These differences were not significant for black women. Particularly at this educational level, one would expect that the less educated men would earn lower incomes, which again supports the hypothesis that women are more likely to work if their husbands earn lower salaries. Furthermore, SES is related to the reasons why women choose to work (Wolfe, 1969). Women with lower SES (as measured by their husbands' occupations) have different job values. Surprisingly, they are less likely to stress the importance of the income involved, but they do care more about the feeling of independence which employment offers. They are also less concerned about dominance in the job or in finding an interesting position, com-

pared to women with higher SES. However, Haller and Rosenmayer (1971) found that blue-collar workers were more likely to list money as a reason for working, especially older mothers.

The results are not consistent, but they do indicate that in some samples the husbands' occupational level or education is inversely related to the probability of his wife being employed, whereas in other samples there seems to be no relationship between these variables. It appears that the income involved is the crucial issue, although it is possible that men with higher level occupations are more conservative in their attitudes towards working wives. This issue may be related to race, since black men tend to have lower occupations and are also more accepting of the role of working wife and mother; however, Parnes and Nestel found no relationship between the husband's educational attainment and the wife's employment status for blacks, suggesting that black men's attitudes are not related to SES.

Husband's SES and Wife's Education. In the early 1960's, Ginzberg (1966) studied women who had completed at least one year of graduate school at Columbia between 1945-51. He found that the husbands tended to be highly educated, and 60% were at the highest occupation level. Although 25% of the men did not have graduate degrees, compared to 2% of the women, 40% of the men had received a doctorate or professional degree compared to 33% of the women. Astin (1969) found a similar relationship between husband's and wife's educational attainment in a study of

women who had received doctorates in 1957 or 1958.

Husband's SES and Wife's Role Innovation. In the one study concerned with the relationship between husband's SES and wife's role innovation, Nagely (1971) found that white working mothers with pioneer careers tended to have husbands with higher level occupations than were mothers working in traditional careers.

Husband's Attitudes and Wife's Career Commitment. There is some evidence that the husband's attitudes are also influential. In his study of Stanford and Santa Rosa Junior College alumnae from several classes between 1939-63 who were interviewed in 1968, Katz (1970) found that the women who were employed were more likely to report that their husbands supported their outside interests, which included their occupations as well as other activities. Weil (1966) studied 200 married women with children at home, and found that the husband's positive attitude was associated with the wife's employment. In contrast, Lovett (1969) found no relationship between employed librarians past employment patterns and their reports of their husbands' attitudes towards the wife's employment. However, the fact that these women were all employed may indicate that even those husbands with negative attitudes were not extremely negative. For this reason, this study is not directly comparable to studies of full-time homemakers and career women.

Several studies have also demonstrated that the husbands of working women are more likely to help with household chores (Blood, 1963; Hoffman, 1963; Parnes and Nestel, 1975; Weil, 1966). This does not necessarily indicate that women will only work if

their husbands' are willing to help with household chores, or that career-oriented women choose husbands that they think will be willing to share homemaking responsibilities. However, Farley (1970) studied graduate students in 1969, and found that career oriented women were more likely to state that they thought husbands should have equal responsibility for childrearing and housework.

Whether career-oriented women choose men who they think will be supportive of their goals and willing to share the housework, or whether only those women who marry supportive men are able to pursue career goals cannot be determined from these studies. Research on the career-oriented woman's specific marital expectations would help resolve this issue.

Husband's Attitudes and Role Innovation. In the one study of women with pioneer aspirations, Tangri (1972) found that University of Michigan alumnae from the class of 1967 who aspired to pioneer careers were interested in finding a husband who would support their career involvement, whereas women with traditional goals emphasized the importance of a man who would be a good husband and father.

Husband's Attitudes and Feminism. In 1970-71, Arnott (1972) studied women from various organizations including NOW and other Women's Liberation groups, Fascinating Womanhood (an antifeminist group), the American Association of University Women, and the Business and Professional Woman's Club. She found that the women who

expressed less traditional attitudes on the Autonomy for Women Attitude Inventory expected their husbands to adjust to their career goals, and their husbands were generally supportive of their wives' independence. However, these women tended to perceive more disagreement between their attitudes and their husbands' attitudes than appeared to be the case when the husbands reported their own attitudes. Arnott also reported that many of the moderate and conservative women misperceived their husbands' preferences for their roles, which enabled the women to do what they wished while they assumed that their husbands agreed.

Summary. The literature indicates that career commitment is inversely related to the husband's occupation and education. It appears that this is either caused by the greater financial need of lower SES families, or by the nservative attitudes of men with higher SES. There is some evidence that the latter may be the case. In a 1950 study of college men from several Ivy League and large universities, Goldsen et al. (1960) found that 22% approved of women working only if they were not married, and an additional 19% approved only if there were no children. Entwisle and Greenberger (1970) found that for ninth graders, middle class boys with high I.Q.'s held the most conservative attitudes towards women's roles, and middle-class girls with high I.Q.'s were the most liberal. These two studies suggest that the kind of men who have higher level occupations tend to be very conservative in their attitudes towards working wives. However, it is also true that husbands and wives tend to have similar educational

levels, and since women with more education are more likely to be career-oriented or employed, one would expect that women with highly educated husbands would be more career-oriented and more likely to work. There would therefore be a conflict between the husband's attitudes and the wife's expectations, which might possibly be resolved by the husband's income; a woman with young children might decide not if work if her husband's salary is adequate, although she may choose to rejoin the labor force when her children are grown.

Several studies suggest that women with graduate education or pioneer careers tend to have husbands with similarly high occupational and educational levels.

The research demonstrates that women who work tend to have husbands who have positive attitudes towards their wives' employment and who help with household chores. Since most of these studies were evaluating working women, rather then college women contemplating marriage, it is not possible to determine whether these women work because their husbands are supportive, or whether they chose husbands who they knew would support their career commitment. The latter appeared to be the case in Farley's study of career-oriented graduate students and Tangri's study of college women with pioneer goals.

Arnott's study is not necessarily generalizable to feminists, but it does suggest that women's perceptions of their husbands' attitudes are not always accurate, and that women may blame their husbands or use their husbands alleged attitudes as an excuse to justify their own decisions.

Other variables are also related to this dimension. For example, Katz (1969) found that San Jose and Stanford alumnae who were conservative Republicans were less likely to work and more likely to report that their husbands would not want them to work. The influence of husbands and other persons and the importance of political, religious, and other beliefs will be discussed later in this chapter.

Influential Others

There are many people who are potential sources of influence for a woman's goals and attitudes. Mat hews and Tiedeman (1964) found that even ninth grade girls were concerned with potential problems resulting from male attitudes. Similarly, Leland (1966) found that college graduates who were closely associated with a male were more likely to be influenced in their career goals than their classmates. Parents and professors were also cited as influential.

Career Commitment. Males, whether boyfriends, husbands, or men-in-general, were the most important source of influence for most of the women studied. Farmer and Bohn (1970) instructed 50 working women to "pretend that men like intelligent women" and would not discriminate against them, and found that both single and married women gave more career-oriented responses on the SVIB-W, than they had without the special instructions. Cook (1968) studied senior women and reported that the homemaking-oriented women were more influenced by men in their decision-making. In a study of black and white college freshwomen, Turner and McCaffrey (1974)

found that black women with high career expectation (not preference) thought that men prefer working wives; this relationship was not present for the white students. Edwards (1969) reported that student teachers and student nurses who were homemaking-oriented expressed values that were more like their boyfriends' than did their career-oriented classmates, despite the fact that only half of the homemaking-oriented women had regular boyfriends. The women who were moderately career-oriented had values most similar to their best girlfriends, whereas strongly career oriented nursing students expressed values most like their mothers'. This relationship was not present for the strongly career-oriented student teachers.

In a 1969 study of married alumnae from the Northwestern School of Education who graduated between 1949-58, Okun (1972) found that 18% cited friends as the major influence in their occupational choice. Professional persons were cited by 16%, parents by 12%, and husbands by only 7.3%; 46% stated that there were no major influential persons. This lack of influence, particularly from husbands, may be due to the fact that education is a widely accepted and popular fields for women; these women probably made their career choice relatively early and easily.

In general, the research indicates that women are influenced by others, particularly males, and that women who perceive men as disapproving of career women tend to be homemaking-oriented. However, many different measures were used, so that conclusions are not possible.

Education. In the one study concerned with education, Kalka (1968) evaluated Oklahoma State University freshwomen and seniors and found that the seniors had different views of "man's ideal woman." She concluded that the more traditional women had dropped out of school before their senior year, resulting in a more homogeneous population.

Role Innovation. Women with pioneer goals appear to be influenced by different people than women with more traditional goals. In her longitudinal study of college women enrolled between 1964-68, Almquist (1974) found that the women with pioneer career goals were more likely to report that their decisions were influenced by people in the occupation or by college professors, than were women with traditional aspirations. Their classmates with traditional goals were more likely to report no outside influence, or to have been influenced by family members or peers. In her study of white college-educated working mothers, Nagely (1971) found that Pioneers were more likely to report that their fathers approved of career women than were the Traditionals. Horner (1972) found that Radcliffe women who expressed anxiety about success and social rejection and had shifted to more traditional career choices either were not dating or were dating men who did not approve of career women. The importance of male attitudes was further demonstrated in a study by Little and Roach (1974) where college women who saw a film of a male guidance counselor encouraging female students to pursue nontraditional goals were more interested in pioneer careers than women who saw the same film with a female counselor, or a group which did not

see a film.

Hawley conducted two studies which evaluated women's beliefs concerning male attitudes. First, she studied women who were full-time homemakers, and career women in traditional and nontraditional fields, and found that the women working in nontraditional fields thought that men did not believe that sex was a basic determinant of behavior (1971). In the second, a study of San Diego State women, Hawley (1972) found that women majoring in mathematics-science fields reported that men in their lives believed women could successfully combine home-making and professional tasks, and strongly disagreed that men cared more about women's beauty and approved of "feminine wiles" and helplessness. The counseling graduate students disagreed less strongly with these statements, and the education majors were the least likely to disagree.

In general, men seem to be mentioned less often as a source of influence for women with pioneer career goals, but their attitudes are still taken into consideration. It is unclear from these studies whether the women with pioneer goals or majors have different views of male attitudes, or whether the men they know have different attitudes than the men that the more traditional women know. Another issue is whether the women in one of the groups have a more accurate understanding of male attitudes. In an early study, McKee and Sherriffs (1959) found that men's "ideal woman" was less restricted than women expected, and in a more recent study, Peterson and Peterson (1975) found that male and female college students responded similarly to hypothetical problems related to husband-wife job conflicts. It may be that

women with pioneer goals are more knowledgeable about male attitudes than the women with traditional goals; however, it is also possible that males express more liberal attitudes in hypothetical situations than in real situations.

Summary. Specific males and men-in-general are apparently important influences on women's career choices. Women who perceive men as supportive of their own nontraditional views tend to pursue nontraditional goals, whereas other women shift towards more traditional aspirations.

There is some evidence that women with pioneer goals were more likely to cite the people who influenced their choices, and that these were often professors and people in their chosen fields. This may be because women with traditional goals are exposed to many role models and are generally encouraged to pursue their career choice, whereas women with pioneer goals are more likely to be encouraged by fewer people. Female role models can be influential (Plost & Rosen, 1974) but they are rare in pioneer fields. It is interesting to note that women with pioneer aspirations rarely report that they are influenced by their parents, boyfriends or husbands.

The literature also suggests that women who choose pioneer goals have significantly different perceptions of male attitudes towards the female role than women who aspire to traditional careers. Whether these perceptions are accurate, or more accurate than the perceptions of aspiring Traditionals, has not been explored.

Children.

The presence of children in a family usually increases the mother's responsibilities, making a career more difficult. One expects that women who challenge the traditional female role will be less interested in having children, or prefer smaller families, compared to other women.

Career Commitment. In an early study, working wives were reported to be the most effective contraceptive users, resulting in fewer children and more completely planned families (Freedman, Whelpton, & Campbell, 1959). However, in two studies conducted in Washington in the 1950's, Nye (Nye & Hoffman, 1963) found conflicting results. In one study working mothers had fewer children than nonworking mothers, whereas in the other study there was no difference in family size associated with the mother's employment status, although working women were more likely to report that they wanted more children than they had. In her study of married Stanford alumnae who graduated between 1939-62 and were interviewed in 1967, Lozoff (1970) found that the women who were more homemaking-oriented had more children; 60% of the homemaking-oriented women had at least three children. In his study of women who had attended Columbia graduate school for at least one year between 1945-51 and were interviewed in 1960, Ginzberg (1966) found that the more children a woman had, the less likely that she was currently employed. Similarly, The Carnegie Commission (1973) reported that family size was inversely related to the likelihood of woman's employment.

In a national sample of women between the ages of 35-49, Parnes and Nestel (1975) found that black and white women who did not have children were most likely to be employed, and that white women with only one child were twice as likely to be career women as those with two or more children. Among white women with two or more children, the probability of a career increased as the number of years between children increased. When the children were at least six years apart, the mothers' career rates were more than twice as high as those women whose children were less than two years apart. Parnes and Nestel also found that, for white women, the sooner after marriage the first child was born, the more children there were. They were unable to make these comparisons for black women, because there were too few black women to evaluate in detail.

Of course, the ages of the children are also important factors. Siegel et al. (1963) studied mothers of Kindergarteners enrolled in several suburban California schools in 1957-58, and found that the working mothers tended to have fewer children, and fewer pre-school children. Astin (1969) found that preschool children were the greatest deterent to full-time employment for her national sample of women who had received their doctorates in 1957 or 1958. Forty-nine per cent of the women in her sample had preschool children, an unusually high proportion for women in the age group represented; this indicates that these women started their families later than most women. In a study of women listed in Who's Who in 1972-73, Bachtold (1975) found that 59% of the women were childless, compared to 8% of the men, and the women who had children had fewer than the men who were fathers.

It is unclear whether or not the presence of children influences the career commitment of women who are employed. Haller and Rosenmayer (1971) found that white-collar mothers were more career-oriented than women without children; this relationship was not apparent for women with blue-collar jobs, however.

There are only three studies of expected or actual family size of college women and new alumnae and the results are conflicting. Klemmack and Edwards (1973) studied women at an Eastern university and found no relationship between anticipated family size and career commitment. Similarly, Wately and Kaplan (1971) found no relationship between number of children and career commitment for women who were National Merit Scholars between 1956-60 who were interviewed in [illegible]. In contrast, Farley (1970) reported that 64% of the career-oriented graduate students she studied in 1969 wanted two children or less, compared to 33% of the homemaking oriented graduate students. In this study, 73% of the women were in their first or second year of graduate school, and 65% were single.

The literature indicates that although children, particularly preschool-age children, tend to deter women from working, career oriented women do not necessarily plan to have fewer children or have fewer children. The few studies on career-oriented college women suggest that these women may have unrealistic goals in terms of the responsibilities inherent in childrearing and pursuing a career; in fact, the years that they plan to work sometimes directly conflict with the years that they intend to spend at home with their children (Veres & Moore, 1975). Other factors such as the spacing of children may be important, presumably because women

seek employment between children who are born several years apart, or because older children can serve as babysitters and help with homemaking tasks.

Education. In one study concerned with the relationship between educational aspirations and children, Astin (1969) found that 28% of her national sample of women who received doctorates in 1957 or 1958 were childless when she studied them in the 1960's. This is twice as large as the proportion of childless women in the general population. In addition, the mean number of children was 2.0, compared to 2.6 for the general population. Women with medical degrees, however, had more children than women with doctorates.

In their study of a national sample of black and white women between the ages of 35-49, Parnes and Nestel (1975) found no differences between the educational levels of married women with children and married women without children. This does not necessarily conflict with the Astin study, since the Parnes and Nestel sample is representative of the range of women in the general population, rather than focusing on highly educated women.

The Astin study does not examine whether women who are unable to have children are more likely to pursue graduate education, a situation that is possible since the graduate students studied represented a very heterogeneous age range. It may be that women who were unable to have children returned to school, and not that they chose not to have children because of their other interests. However, it is apparent that women who can have children choos to have fewer children if they are more educated.

Research in the area of attitudes towards childrearing would help clarify these issues.

Role Innovation. In the one study of pioneer aspirations, Klemmack and Edwards (1973) found that traditional aspirations were associated with larger anticipated family size for women at an Eastern university. The correlation between the two variables was significant, but below .20.

Summary. The available statistics and the studies cited demonstrate that career women and women with higher educational attainment tend to have fewer children than other women. Preschool children appear to be a particularly strong deterent to employment. The one study of women with pioneer aspirations suggests that they anticipate a smaller family than their more traditional classmates. More research is needed to determine whether college women who are career-oriented or who aspire to advanced degrees or pioneer careers consistently anticipate smaller families, or whether these decisions are made after these women marry, or after they choose their careers.

One would expect that feminists would also anticipate fewer children and have smaller families, since they tend to emphasize the importance of nonhomemaking activities. However, there have been no studies in this area.

Religious Attitudes

Religious background was discussed in Chapter 4; however, as women mature they sometimes change their religious affiliation

and may modify their beliefs in many different ways. In Chapter 1, I hypothesized that questioning assumptions in one sphere, such as religion, is associated with assumption-questioning in other spheres, such as traditional sex roles. The literature supports this hypothesis.

Career Commitment. Several studies have demonstrated that religiousness is inversely related to career commitment for women. Wagman (1966) studied University of Illinois psychology students in 1962, and found that women who scored higher on homemaking-orientation expressed stronger religious interest on the AVL. Among women at a Catholic college, Kosa et al. (1962) found that for lower SES women, those who were more religious (as measured by the LeMoyne Religion Test) tended to have lower aptitude, lower educational aspirations, and were more homemaking oriented. In this study, career commitment was measured by expressed desires, and the women were told to disregard their abilities, financial situation, or job opportunities. Cook (1968) found that among Purdue seniors in 1966, those who were more career oriented reported that they were less religiously conforming than their more homemaking-oriented classmates. Career commitment and homemaking commitment were measured on a continuum according to the students' expressed preferences.

There were two studies of working women. Gysbers et al. (1968) administered the SVIB-W to University of Missouri students between 1958-64, and in a follow-up study in 1967. They found that women who were career-oriented in college and in the follow

up were more skeptical regarding religion than were their consistently homemaking-oriented classmates. In her study of Stanford alumnae from classes between 1939-62 who she interviewed in the late 1960's, Lozoff (1970) found that those who were career-oriented were less likely to belong to religious clubs; however, there was no relationship between employment status and membership in religious clubs for these women, or for Santa Rosa Junior College alumnae from the same classes (Katz, 1970).

These studies indicate that women who are career-oriented, which in this culture reflects a challenge to the traditional female role, are also more likely to have a questioning attitude toward traditional religious beliefs. Since the most recent studies were conducted eight years ago, this relationship may have changed, especially since career commitment and the questioning of traditional religious values have both become increasingly popular in the last decade.

Role Innovation. In the one study of the relationship between religious convictions and pioneer aspirations, McKenzie (1972) found that medical students and graduate students in a doctoral program in education held less traditional attitudes towards church attendance than did college-educated homemakers or juniors majoring in elementary education. The women in the less traditional group were matched with the women in the traditional group on the basis of age and race, which resulted in an unusually old undergraduate sample.

Feminism. Religious beliefs have been found to be related to radical protest, with nonreligious males and females usually very active (Flacks, 1967). Although feminist protest on university campuses was usually related to other political protest in the late 1960's and early 1970's, the relationship between feminism and religiousness was not evaluated in the studies of campus protest. Several recent studies show that the results are similar.

In her study of the wives of Boston area graduate students, Lipman-Blumen (1972) found that feminists were more likely to have changed religious affiliations, and 78% of these "converts" considered themselves atheists or agnostics. Tavris (1973) measured support for the Women's Liberation Movement ideology among Psychology Today readers in 1971. This sample was a primarily liberal, college-educated Eastern group, and the most Women's Liberation support was from atheists, both male and female. In their study of college students, Ellis and Bentler (1973) found that feminist ideology and nonreligiousness was correlated .38 for males and .29 for females; both were significant. At the University of Cincinnati in 1972, Dempewolff (1973) found that women and men with feminist attitudes tended to be atheists or agnostics, whereas 75% of the opposers were moderately or strongly religious. A Goldschmidt et al. (1974) study of undergraduate women on four campuses also supported this relationship. In their study, nonreligious women were the most likely to be active in campus Women's Liberation groups, and were also most likely to be ideologically committed to the Women's Movement. In their study of women at Florida State University, O'Neil et al. (1975) found that the 19 Women's Liberation members that they studied were less religious on the MMPI than a control group of women.

Summary. The literature clearly supports the hypothesis made in Chapter 1, that questioning assumptions about the traditional female role tends to be associated with questioning assumptions about religion. Women who are career-oriented or who have feminist attitudes or belong to feminist groups are more likely to consider themselves atheists or agnostics, or to be less traditionally religious. The one study of religiousness and role innovation showed similar results. In some cases, however, this questioning attitude may be learned from the parents, as was the case with the Demewolff (1974) and Stoloff (1973) studies cited in Chapter 4.

Political Attitudes

Parents' political beliefs were discussed in Chapter 4, and although there were only three studies, all suggested that women with less traditional attitudes towards the female role tended to have parents who were more liberal. As one would expect, these women also appear to express more liberal and radical political beliefs.

Career Commitment. In his 1968 study of Stanford and Santa Rosa Junior College alumnae who had graduated between 1939-62, Katz (1970) found that those who considered themselves conservative Republicans were most homemaking-oriented, and most likely to think that a working mother was detrimental to the family, even when the children were teenagers. They also tended to report

that their husbands were opposed to working mothers. The alumnae who were employed tended to be liberal Democrats. Using the same sample of Stanford alumnae, Lozoff (1970) found that those who reported that their careers were very important to them were also more politically liberal than other women. In her study of University of Minnesota alumnae who were freshwomen between 1950-53 and were interviewed in 1970-71, Tinsley (1972) found that those who were employed were less conservative on current educational and social issues.

Feminism. There were three studies concerned with the relationship between feminism and political beliefs. Ryckman et al. (1972) studied male and female Introductory Psychology students at the University of Maine and found no relationship between willingness to support the Women's Liberation Movement and political activism on the Gold-Ryckman Student Activism Scale. For this sample, the Women's Liberation Movement was very unpopular, particularly among the males. Pawlicki and Almquist (1973) compared NOW members with psychology students at the State University of New York at Oswego. They found that the NOW members were more politically liberal; however, they were also older and better educated. Because of the inadequacy of the students as a comparison group, these research results are not meaningful. In her comparison of University of Michigan doctoral students who were actively involved with the Women's Liberation Movement and those who were not active, Stoloff (1973) found that the activist feminists were more politically radical than their parents,

who were more liberal than the parents of the nonactivist women. The activists had been more active in political organizations in high school and college, and were more likely to have participated in the Civil Rights and Peace Movements. They also considered political action more important to them than did the nonactivist women. The women in the two groups were similar in age and marital status, and were matched for the year and field of graduate study. However, the study did not differentiate between feminist and nonfeminist attitudes; women in both groups expressed similarly feminist attitudes. Therefore, the study differentiated between activist feminists and women who were ideologically but not actively commited to feminism.

Summary. Although there are few studies exploring the relationship between political beliefs and attitudes towards the female role, the research supports the hypothesis that a more questioning, liberal attitude towards politics is associated with a more questioning, liberal attitude toward the female role. It is not clear, however, to what extent these political attitudes were learned from the parents, and to what extent they developed independently of the parents' beliefs.

There is no research on the relationship between political beliefs and educational attainment or pioneer careers, and the feminism studies focused on active rather than ideological commitment. The literature in this area would be strengthened by research with national samples, and with comparisons of parent-daughter political differences.

Career Attitudes

The relationship between career commitment and other goals and attitudes towards the female role has already been dicussed; however, there are other career values which also differentiate between women with traditional and nontraditional goals and attitudes.

Career Commitment. Career-oriented women consistently express different career values than homemaking-oriented women. Goldsen et al. (1960) found that Cornell women who were studied in 1952 were not particularly concerned with the money, status, and security that a job could offer; however, the career-oriented women were even less interested in these factors than the homemaking-oriented women. The career-oriented women tended to stress the importance of an occupation offering the opportunity to be creative and to exploit one's talents. Simpson and Simpson (1961) studied undergraduate women enrolled in sociology classes in 1958-59, and found that the homemaking-oriented women were more interested in extrinsic job values, including salary, prestige, advancement, a comfortable relationship with co-workers, parents' pride, and helping others. The career-oriented women were more concerned with self-expression and the nature of the occupation itself, and both groups were equally concerned with having adequate time for family responsibilities. Angrist (1972) studied women who were enrolled in the women's college of a private coeducational university between 1964-68, and found that those who were career-oriented were more concerned with freedom

from supervision in their work than were homemaking-oriented women. In her study of almost 2,000 New York women with above average ability, Wolfe (1969) found that the women with the most stable career patterns were more interested in the independence a job provides, and less concerned with social service, the opportunity to meet people, or interesting activities. All the women tended to care most about a job providing the opportunity to use their skills.

Role Innovation. The comparisons between women with pioneer goals and those with traditional goals differed from the career oriented/homemaking-oriented comparisons. Tangri (1971) did a 1969-70 follow-up study of University of Michigan women who had graduated in 1967, and found that the women who were in traditional occupations derived less satisfaction from their co-workers than those in pioneer occupations. The Traditionals derived more satisfaction from the salary and the convenient hours and location. Similarly, in her comparison of career women (ages 28-48), Nagely (1971) found that the Pioneers considered their careers more satisfying, necessary, permanent, and liberating. In her study of women who attended a women's college of a private coeducational university from 1964-68, Almquist (1974) found that the women with pioneer goals were more interested in finding a job where they could use their abilities, and were also interested in high income, whereas the women with traditional goals were more interested in pleasing their parents.

In the one study dealing exclusively with black women,

Mednick (1973) studied black women enrolled in five Southeastern and MidAtlantic colleges in 1971, and found that those with pioneer aspirations were more likely to consider their career choice ideal than were those with traditional career goals. Women with pioneer goals were also more concerned with self-fulfillment in a job, and wanted a career that would offer an opportunity for idependence, assertion, and challenging tasks.

There were too few studies to analyze collectively, but there is some evidence that women aspiring to pioneer and traditional careers express different career values, and that women who work in traditional fields tend to stress the importance of different advantages than those they were initially concerned with, such as income and convenience. The research also suggests that women with pioneer goals or careers are more satisfied with their career choices.

Summary. The research in this area suggests that career-oriented women and stable career women are more interested in careers which offer them the opportunity for self-expression and to make use of their talents, whereas women with less career commitment are more interested in values related to financial and social considerations. The research on pioneer and traditional aspirations suggests that women with pioneer golas or careers are more satisfied with their career choices and are also more interested in self-fulfillment. The importance of income is not clear, although the two studies concerned with this issue suggest that women with pioneer aspirations are interested in higher income,

although those with pioneer careers are less likely to cite income as an important advantage than are women in traditional careers. There were no studies comparing the career values of feminists and nonfeminists.

Chapter Summary

As was the case in the previous chapters, there is less information available on feminism and education; however, several strong relationships emerged in the analysis of the career commitment studies, and several trends were apparent for education, role innovation, and feminism.

Career Commitment. The most consistent relationships between career commitment and personal characteristics were for intelligence of high school students, marital status, husbands' attitudes, children, and religiousness. More intelligent high school girls were more likely to be career-oriented or to shift their goals toward stronger career commitment, although this relationship was not consistent for college women or career women. Career-oriented women and employed women tended to marry later and were less likely to be married than homemaking-oriented college women or full-time homemakers. Women who were employed and were career-oriented also reported more positive attitudes and support from their husbands than did women who did not work; however, it was not clear whether career-oriented women had chosen more supportive husbands or whether only those women with supportive husbands were able to work. Working women also tended to have fewer children, and apparently career-oriented women planned to

have fewer children than homemaking-oriented women. Career oriented college women and women with careers were less religious and less interested in traditional religious activities than other women.

Several trends were moderately consistent and persuasive. The research suggested that there is probably no relationship between career commitment and intelligence or grades for college women, or between career commitment and dating behavior in high school. There was some evidence that career-oriented women dated slightly less often than homemaking-oriented women; however, these differences were very small. In some samples, the husband's occupational or eduational level was inversely related to the wife's probability of employment, but this was not always the case, and the reasons for the inconsistency in the results were not apparent. The "influential others" who were cited as important in the women's career decisions varied in the different studies, but males were clearly important for both career-oriented and homemaking-oriented women. There was some evidence that women with younger children are less likely to be employed. In terms of attitudes, career-oriented women tended to be more politically liberal, and more concerned with nonfinancial career advantages, such as self-expression.

The relationships between career commitment and age or expected family size could not be determined from the research available. There were two studies which suggested that career oriented women were more likely to attend private colleges than other types of schools.

Education. The relationship between education and marital status was strongly demonstrated in the literature. Married women tended to be less educated than other women; however, there is some evidence that marriage may no longer be as strong a deterent to graduate education as it was in the past.

The research on the relationship between intelligence and educational aspirations and attainment strongly suggested that women who plan to study for master's degrees are not more intelligent than women who are content with an undergraduate degree. However, the relationship between doctoral aspirations or attainment and intelligence or grades is not clear. There is also evidence that women with graduate degrees tend to have husbands with graduate degrees or with higher level occupations.

There are too few studies concerned with the relationship between educational goals and women's colleges, influential others, and the number and age of children to analyze. There are no studies concerned with age, religiousness, political attitudes, or career values.

Role Innovation. None of the variables in this section were shown to be strongly and consistently related to role innovation. However, several trends were apparent. Women with pioneer goals or careers tended to be more intelligent than other women and were less likely to be married. They also tended to report that their career decisions had been influenced by professors and people in their chosen profession, rather than by parents or male friends. Women with pioneer careers also tended to perceive

male attitudes differently than women with more traditional goals; they were more likely to state that males preferred more liberal sex-role expectations. There was some evidence that women who attended liberal arts colleges, particularly women's colleges, were more likely to become Pioneers than women attending state universities or teacher's colleges. Women with pioneer goals and careers were also more satisfied with their career choices than women with more traditional goals, and were more likely to stress the importance of career values related to self-fulfillment.

There was too little research in the areas of husbands' SES and attitudes, family size, or religiousness to analyze meaningfully. There were no studies on the relationship between pioneer goals and age or political beliefs.

Feminism. There was less research on feminism than on the other dimensions, and none of the variables in this section were strongly related to feminism. However, there were several trends pertaining to intelligence, relationships with men, and attitudes. Women who expressed feminist attitudes in high school or were activist feminists in college tended to be more intelligent than their classmates. There were no significant differences between feminists and nonfeminists in their relationships with men. There was also evidence that feminists were less religious and more politically liberal, thus supporting the hypothesis made in Chapter 1 that assumption-questioning in one sphere tends to be associated with assumption-questioning in other spheres.

There were very few studies concerned with the relationship between feminism and marital status or husbands' attitudes, and no studies of age, husbands' SES or the woman's own career values.

Conclusions. There were fewer studies related to personal characteristics than there were in other areas, thus making it more difficult to assess the relationship between variables. The strongest predictors were marital status and religiousness. Married women were less likely to be career-oriented or to be currently employed and they tended to be less well educated than other women. The inverse relationship between religious convictions and career commitment was also strongly demonstrated, and the trend for feminists to be less religious was moderately persuasive.

Variables related to physical appearance, such as size and attractiveness are potentially important personal characteristics which have been virtually ignored by social scientists studying attitudes towards the traditional female role.

CHAPTER 7

THE OHIO STATE UNIVERSITY STUDY

This investigator conducted a study of women students at the Ohio State University(O.S.U) in September 1975. The study focused on the major dimensions which were discussed in the review of the literature: career commitment, educational aspirations, nontraditional career goals, and feminism. A questionnaire was designed to provide data on the relationships between these major dimensions and parents' SES, religious affiliation, birth order, family size, race, age, marital status, and GPA. Most of these relationships have been evaluated in previous studies, but the results have not been conclusive. The questionnaire also included a question regarding the mother's employment status, a variable which has been strongly associated with the daughter's career commitment in the past, in order to determine whether this association has been maintained now that working mothers and women's career-orientation are more common. In addition, the questionnaire included questions about height and weight, two variables which have not been studied in previous research on women's career goals and attitudes towards the female role.

The questionnaire also included several measures of self-esteem, a trait which is of particular interest since women tend to have lower self-esteem than men (Baird, 1973; Crandall, 1969). Careers are a major source of status in this culture, and since "women's careers" and the traditional "feminine" characteristics are devalued, one would predict that a nontraditional attitude

toward the female role would be associated with higher self-esteem for women.[1] The relationships between general self esteem and the major dimensions were evaluated, and in addition, the questionnaire included several new measures of self-concept and self-esteem which were factor-analyzed and correlated with the general self-esteem scores and the major dimensions.

The study also provided the opportunity to closely examine the interrelationships between all of the major dimensions and religious assumption-questioning and general nonconformity; these comparisons have never been available for a single sample population. Two different groups of college women were evaluated: a relatively traditional sample and a relatively feminist sample, in order to examine whether the relationships between the variables would be maintained for both groups of women, or whether they were significant for only certain types of women.

Method

Subjects

The subjects were 85 Ohio State University women who were enrolled in six Women's Studies classes and 37 white students from two Educational Psychology classes. All of the students were at the sophomore level or above; the majority of the Women's Studies (WS) women were seniors, and the majority of the Educational Psychology (PSYCH) students were sophomores. Only students between the ages of 18-25 were included in this study.

[1] Feminist attitudes are correlated with self-esteem on the Rosenberg scale for male college students (Miller, 1973). However, this is interpreted in terms of men with higher self-esteem being less threatened by the Women's Liberation Movement.

Questionnaire

The questionnaires, which took approximately 15 minutes to fill out, were distributed by the professors before class during the second week of the quarter; they were completed by over 95% of the students present. Students were told that the questionnaire was unrelated to the class, and anonymity was assured since their names were not required.

The questionnaire was designed to elicit information on demographic and family background; height and weight; educational goals; career goals; preferred and expected degree of career commitment as measured by Turner and McCaffrey's multiple-choice questions (1974); self-concept in terms of height, strength, attractiveness, conformity, and intelligence (using a five-point Likert-type scale for each item); satisfaction with traditional female role (also using a five-point scale); and membership in a feminist group. The ten-item Rosenberg self-esteem scale and 25-item Spence and Helmreich Attitudes Towards Women Scale (AWS) were also included. The questionnaire and instruction sheet appear in Appendix A.

The five self-concept items were factor-analyzed separately for the two groups. In both cases two factors emerged: 1) Physical self-concept, which included self-perceived height and strength and 2) Attractive-Intelligent self-concept.[2] The scores for the two individual items were therefore added together to form a factor score (from 2-10) for each respondent. The other self-concept

[2] The Varimax factor loadings were above .55 for each item in each sample.

item, unconventionality, was treated separately.

A correlational matrix was developed for each group, correlating each item with every other item. However, only the 77 white WS students were included in the WS analyses, except for the racial comparisons. This was necessary because there is evidence that black and white college women differ in terms of their attitudes towards the female role, and there were too few black women (N=8) to analyze separately.

Results

The Samples

As expected, the WS students were significantly less traditional than the PSYCH students on all of the major dimensions. However, the PSYCH women were more traditional than was expected; 27 (73%) were planning to pursue careers as teachers in traditional fields, only 7 (19%) reported nontraditional career choices, and only one (3%) aspired to a doctoral degree. This homogeneity made it difficult to study differences related to traditional/pioneer career goals or educational aspirations, and as a result, there were few significant correlations between these dimensions and other variables for the PSYCH sample. The comparisons between the two samples are presented in Table 2.

The mean age of the WS women was 21.8 years, which was 2.0 years older than the mean age of the Psych women; this was consistent with the fact that the WS women were more likely to be upperclasswomen. The samples were also different in terms of religious affiliation. Since 89% of the PSYCH women were Protestant, religious comparisons were not possible for that group.

Table 2

Comparison of Women Students in Educational Psychology and Women's Studies Courses

Variable	Women's Studies N=77		Psychology N=37		t value	Significance Level
	X	S.D.	X	S.D.		
Age	21.82	1.56	19.81	1.17	6.93	.001
Grade Point Average	3.12	.57	3.15	.43		N.S.
Self-Esteem Rosenberg Scale (Scored 10-20)	18.16	1.86	18.38	1.26		N.S.
Attractive-Intelligent Self-Concept (Scored 2-10)	7.08	1.00	6.27	1.33	3.52	.01
Strong-Tall Self-Concept (Scored 2-10)	5.89	1.07	5.59	1.28	1.30	N.S.
Unconventional Self-Concept (Scored 1-5)	3.59	.81	3.03	.52	3.73	.01
Preferred Career Commitment (Scored 1-8)	6.08	1.24	4.56	1.65	5.43	.001
Expected Career Commitment (Scored 1-8)	5.56	1.56	3.92	1.67	5.13	.001
Educational Aspirations (in years)	18.07	1.36	17.19	1.10	3.38	.01
Traditional/ Pioneer Goals[a]	2.03	.88	1.31	.67	4.24	.001
Attitudes Towards Women Scale (25-100)	93.32	8.32	80.35	11.13	6.90	.001
Satisfaction With Female Role (Scored 1-5)	2.01	.92	3.43	.87	7.89	.001

[a]Traditional career=1, Androgynous=2, Pioneer=3

Interrelationships Between the Major Dimensions

For both groups there were significant correlations between the major dimensions of career commitment, educational aspirations, pioneer goals, dissatisfaction with the traditional female role, and feminist attitudes as measured by the AWS. These statistics are presented in Table 3. Only 12 women belonged to a feminist group, and membership was not significantly related to any other variables; therefore, feminist activity will not be discussed.

Preferred career commitment (Question #18) was strongly correlated with expected career commitment (Question #1[illegible]); 38% of the women studied expressed higher commitment than they preferred. None of the WS women preferred to be a full-time, never employed homemaker or to be employed only before motherhood and only one woman (1.5%) expected to be employed only before motherhood. Eleven (12.2%) of the WS women expected to become single career women and nine (10.8%) preferred to become single career women. In contrast, three (8.1%) of the PSYCH women preferred to be employed only before motherhood and eight (21.6%) expected this choice; none of the PSYCH women preferred to become single career women, and only one (2.7%) expected to make this choice. On the open-ended question career choice (Question #17) none of the women in either sample cited "homemaker" or "housewife".

Greater preferred career commitment was also significantly correlated with nontraditional career choices (for the WS sample only), dissatisfaction with the female role (Question #25), and feminism as measured by the AWS (Question # 36-60).

Table 3

Interrelationships Between the Major Dimensions Of Women's Goals and Attitudes Toward The Female Role

Dimension	Dimension	Sample	r	Significance Level
Preferred Career Commitment	Expected Career Commitment	WS	.63	.001
		PSYCH	.60	.001
	Educational Aspirations	WS	.17	N.S.
		PSYCH	.20	N.S.
	Traditional-Pioneer Goals	WS	.28	.10
		PSYCH	.20	N.S.
	Attitudes Towards Women Scale (AWS)	WS	.64	.001
		PSYCH	.55	.001
	Dissatisfaction with Traditional Female Role	WS	.49	.001
		PSYCH	.58	.001
Expected Career Commitment	Educational Aspirations	WS	.21	.10
		PSYCH	.31	.10
	Traditional-Pioneer Goals	WS	.39	.001
		PSYCH	.31	.10
	AWS	WS	.52	.001
		PSYCH	.34	.10
	Dissatisfaction With Female Role	WS	.50	.001
		PSYCH	.19	N.S
Educational Aspirations	Traditional-Pioneer Goals	WS	.38	.001
		PSYCH	.33	.05
	AWS	WS	.31	.01
		PSYCH	.35	.05
	Dissatisfaction With Female Role	WS	.30	.01
		PSYCH	.15	N.S.
Traditional-Pioneer Goals	AWS	WS	.42	.001
		PSYCH	.05	N.S.
	Dissatisfaction With Female Role	WS	.45	.001
		PSYCH	.12	N.S.
AWS	Dissatisfaction With Female Role	WS	.49	.001
		PSYCH	.30	.10

The correlations between nontraditional choices and preferred career commitment was in the same direction for the PSYCH sample, but was not signficant. Preferred career commitment was not correlated with educational aspirations for either sample.

Greater expected career commitment was marginally correlated with higher educational aspirations, and significantly correlated with nontraditional career goals, dissatisfaction with the female role (WS only), and feminism on the AWS (WS only). Higher educational aspirations were positively correlated with pioneer goals, dissatisfaction with the traditional female role, and feminism on the AWS. Dissatisfaction with the female role was also strongly correlated with feminism on the AWS.

Family Background

Family background variables which were measured included parents' educational attainment, mother's employment status, mother's occupation (traditional, androgynous, or pioneer), birth order and family size, race, and religious upbringing.

Socio-Economic Status and Mother's Employment. The parents of both groups of women tended to be highly educated, with the mothers' mean educational level at 13 years and the fathers' mean at 14 years. The father's educational attainment was unrelated to career commitment, role innovation, educational aspirations, or the feminism measures. The mother's educational attainment was significantly correlated with only one dimension, the daughter's educational aspirations ($r=.36$, $p<.05$), and this was true only for the WS sample. However, the mother's and father's educational levels were signficantly correlated with each other (WS: $r=.53$, $p<.001$;

PSYCH: r=.45, p<.01). The mother's employment status was measured on a three-point scale from full-time homemaker to full-time employment. Working women tended to have daughters who preferred greater career commitment (r=.27, p<.05) and expected greater career commitment (r=.33, p<.01); however, these relationships were significant for the WS group only. there were no significant relationships between mother's employment status and the daughter's pioneer goals, educational aspirations, or the AWS for either sample. However, satisfaction with the female role and mother's employment were inversely related for the WS sample (r= -.27, p<.05) and positively related for the PSYCH sample (r=.44, p<.01).

Birth Order and Family Size. There were no significant relationships between birth order, family size, or sex of siblings and career commitment, educational aspirations, pioneer goals, or feminism for either sample. Only child status could not be compared, since there were only two only children in the WS sample, and none in the PSYCH sample. There were significant relationships between family size and religious upbringing for the WS sample, however; Catholicism was correlated with more siblings (r=.21, p<.10) and Jewish affiliation was correlated with fewer siblings (r=.23, p<.05).

Religious Background. Religious differences could not be determined for the PSYCH women, because 33 (89%) were Protestant. However, the WS group was more diverse: 34 (46%) were Protestant,

19 (26%) were Jewish, and 15 (20%) were Catholic. For the WS sample, Protestants were the most conservative group; they preferred less career commitment ($r=.34$, $p<.01$), reported more traditional career choices ($r=.36$, $p<.01$), were more satisfied with the traditional female role ($r=.44$, $p<.01$) and were less feminist on the AWS ($r=.61$, $p<.001$). Jewish women were most likely to report pioneer or androgynous career goals ($r=.33$, $p<.01$). There were no other significant relationships associated with religious upbringing. There was only one Unitarian, and she was not included in the Protestant group.

Race. When the black and white WS students were compared, the black women were more satisfied with the female role ($r=.29$, $p<.01$) and less feminist on the AWS ($r=.30$, $p<.01$). There were no other significant differences between the black and white women; however, there were only eight black women in the sample.

Personality Characteristics

General self-esteem, conformity, and self-confidence in terms of perceived intelligence and attractiveness were evaluated for both groups.

Self-esteem. General self-esteem, as measured by the Rosenberg scale (Questions #26-35), was not significantly correlated with the individual Attractiveness or Intelligence self-concept items, or with the two items combined to form a factor. It was

also unrelated to career commitment, educational aspirations, pioneer goals, or feminism. However, the WS women who scored higher on the Attractive-Intelligent factor expressed higher educational aspirations ($r=.41$, $p < .001$), less traditional career goals ($r=.28, p < .05$) and were more feminist on the AWS ($r=.25$, $p < .05$). There was a marginally significant tendency for WS women with higher Attractive-Intelligent self concept scores to be more dissatisfied with the female role ($r=.20, p < .10$). There were no significant relationships in the PSYCH sample, and again, the women were quite homogeneous; the majority rated themselves as average on the Attractiveness and Intelligence scales. The PSYCH women scored significantly lower than the WS women on the Attractive-Intelligent factor ($r=3.52$, $p < .01$).

Nonconformity. Women who considered themselves less conventional than most other Ohio State University students tended to expect higher career commitment ($r=.24, p < .05$, WS only) and were less satisfied with the traditional female role ($r=.48, p < .01$, PSYCH only). There were no other significant correlations with the major dimensions.

Personal Characteristics

Personal traits that were evaluated included ability as measured by the college GPA, height, weight, the Physical factor (self-perceived height and strength), age, marital status, and religious convictions.

Ability. The only significant differences related to the GPA were for the WS students. Women with higher GPA's tended to have less traditional career aspirations ($r=.25, p<.05$) and higher educational aspirations ($r=.26, p<.05$).

Physical Appearance. There were no significant differences related to height, either measured by correlations or by a chi-square comparison of average, very short, and very tall women. However, when WS women weighing less than 110 pounds were compared to all other WS women, they were significantly less satisfied with the traditional female role ($x^2 = 7.36, p<.01$). The Physical factor was also unrelated to the major dimensions; however, WS women who were less conventional tended to score higher on this factor ($r=.41, p<.001$), and PSYCH women who were religious converts or who were higher in general self-esteem tended to score higher on this factor (Converts: $r=.39, p<.05$; Self esteem; $r=.31, p<.01$).

Age. Age was not significantly related to any of the major dimensions for the WS students. However, among the PSYCH students, older women expressed higher preferred career commitment ($r=.36, p<.05$) and expected career commitment ($r=.52, p<.001$).

Marital Status. Differences related to marital status could not be determined for the PSYCH sample, since 96% were single. There were no significant relationships between marital status and the major dimensions for the WS group, 83% of whom were single.

Religious Convictions. Religious convictions were measured in terms of the number of women who considered themselves atheists, agnostics, or unaffiliated with any organized religion (called "nonreligious") and the number of women who had converted or ledt their original religious group. A change from the initial religious affiliation was strongly correlated with labeling oneself in the nonreligious categories in both groups (WS: $r=.89, p<.001$; PSYCH: $r=.69$, $p<.001$). Since only two (6%) of the PSYCH students were nonreligious, this group was excluded from these analyses.

Nonreligious women tended to prefer higher career commitment ($r=.32, p<.01$); to expect higher career commitment ($r=.28$, $p<.05$); to be less satisfied with the traditional female role ($r=.23, p<.05$); and to be more feminist on the AWS ($r=.44$, $p<.001$). Women who had converted tended to have higher expectations of career commitment (WS: $r=.27$, $p<.05$; PSYCH: $r=.29$, $p<.10$); were less satisfied with the female role (WS: $r=.26, p<.05$; PSYCH: $r=.30, p<.10$); and were more feminist on the AWS (WS: $r=.35, p<.01$; PSYCH: $r=.30$, $p<.10$). There were no significant relationships between religious convictions and pioneer or educational aspirations.

Discussion

The Samples

As expected, the WS sample was less traditional than the PSYCH sample in terms of preferred career commitment, expected career commitment, educational aspirations, specific career goals, and feminism as measured by their dissatisfaction with the female role

and the AWS. The WS women were more career-commited and more likely to aspire to nontraditional careers compred to women in previous studies, whereas the PSYCH women were fairly similar to previous samples on these dimensions.

The PSYCH sample was difficult to study, in that the sample was exceptionally homogeneous on several measures, including educational aspirations, traditional-pioneer career goals, and the self-concept measures.

Interrelationships Between the Major Dimensions

For both samples, most of the interrelationships between the major dimensions were significant; women who were less traditional on one dimension tended to be less traditional on the others as well. The exception was the correlation between career commitment and educational aspirations, which was not significant. This may reflect two trends: 1) in the WS sample, a majority of the women aspired to a graduate degree, and since most were majoring in liberal arts fields, a graduate degree was a pre-requisite for most jobs and 2) in the PSYCH sample, most of the women were planning to teach, and would not need a graduate degree to pursue their expected career.

Expected career commitment, a measure that has rarely been used, was also related to preferred career commitment, pioneer goals, and feminism for the WS sample, but was not related to either of the feminism scales for the PSYCH sample. As expected, there were more women in both samples who preferred greater career commitment than they expected than vice-versa, as was the

case for white college students in the Turner and McCaffrey (1974) study.

Family Background

Socio-Economic Status. SES was not related to either measure of career commitment; this supports the tentative conclusion of the literature review, which could demonstrate no relationship between these variables. However, the father's educational attainment had influenced the daughter's educational aspirations in several studies, and this was not the case for either the WS or PSYCH samples. The mother's educational attainment had a positive effect on the daughter's educational aspirations, unlike the results of the Parnes and Nestel (1975) study, where the mothers with less than a college degree had more highly educated daughters. However, the Ohio State University and Parnes and Nestel samples differed in that the Ohio State University women were 10-25 years younger, were more educated, and were measured in terms of educational aspirations rather than completed educational attainment; any of these differences could have been responsible for the different results. SES was unrelated to pioneer goals in this study, although these variables were related in the majority of studies cited; this suggests that as nontraditional aspirations have become more acceptable, variables such as SES may become less important. SES was also not related to feminism, which lends further support to the lack of association between these variables in the four studied cited, and conflicts with the stereotype of feminists

as middle-class women. As expected, the mother's and father's educational aspirations were strongly correlated.

Mother's Employment Status. The mother's employment status was significantly related to the daughter's career commitment, as was consistently demonstrated in the literature; however, this relationship was not maintained for the PSYCH sample. This is surprising since the PSYCH sample, as a fairly traditional sample of college women, is more similar to the samples used in previous studies than the WS sample. Pioneer aspirations were unrelated to the mother's employment, as was the case in the majority of the studies reviewed; it is possible that the lack of Pioneers among the mothers may have been responsible. The women's educational aspirations were also unrelated to their mothers' employment status in three previous studies, conducted with graduate students in the 1940's, 1950's and early 1960's. This finding suggests that this relationship may be weakening as a larger proportion of women aspire to graduate degrees.

Feminism, as measured by the AWS, was unrelated to the mother's employment status for both samples; however, daughters of working mothers in the WS sample were less satisfied with the female role, whereas daughters of working mothers in the PSYCH sample were more satisfied with the female role. Since there were no differences related to the AWS, this difference suggests that the PSYCH women perceive the "traditional female role" differently than the WS women; they may be less sensitive to discrimination against women than the WS women, and may perceive the role as less

limited than their PSYCH classmates with homemaker mothers.

Birth Order and Family Size. There were no significant differences related to birth order, family size, or sex of siblings. This is consistent with the previous research results on career commitment and feminism, but conflicts with the trends apparent in the literature showing that women with higher educational attainment tended to be from smaller families and to be the first born or only children. There were too few only children in the samples to evaluate, and the other apparent conflict of results may be caused by the differences between educational aspirations and educational attainment.

Race. Racial differences were difficult to evaluate, since there were only eight black women in the WS sample. However, it is interesting to note that the few black women in the WS course were significantly less feminist than their white classmates on both measures. This supports the popular view that black women are less concerned with the Women's Liberation Movement than white women; however, these results must be interpreted with caution because of the small number of black women involved.

Religious Affiliation. Religious affiliation was only evaluated for the WS sample. Protestants were the most conservative women for all the dimensions measured, except for educational aspirations where there were no significant differences related to religion. Jewish women were the most likely to aspire to non-

traditional careers. These results differ somewhat from the research literature, which tended to show that Protestants and Catholics were similarly conservative, and sometimes suggested that Catholics were even more conservative than Protestants. Clearly, in this sample of WS students, Catholics and Jews were similarly nontraditional, and Protestants were most traditional. There were too few Unitarians to evaluate. There were no other relationships associated with religion which help to explain these religious differences, and it is interesting to note that the more traditional group of women, the PSYCH sample, were also overwhelmingly Protestant.

Personality Characteristics

Self-Esteem. There were no significant relationships between general self-esteem as measured by the Rosenberg scale and any of the major dimensions. This conflicts with the Katz (1969) study, where career-oriented Stanford women scored lower on the Rosenberg scale than their homemaking-oriented classmates, and the career-oriented San Jose City College women scored higher than their homemaking-oriented classmates. Since the Katz study was conducted with women who graduated from college in 1965, it may be that the different results reflect the changing attitudes towards women's careers of the last decade. There was too little research on the relationship between general self-esteem and educational aspirations, pioneer goals, or feminism to compare to the results for these two samples.

The nonsignificant correlations between the Attractive-Intelligent factor and preferred and expected career commitment fails to support the previous research which indicated such a relationship when self-perceived intelligence or attractiveness were evaluated separately. However, for the WS sample, this factor was related to educational aspirations, pioneer goals, and feminism as measured by th AWS, and marginally related to dissatisfaction with the traditional female role. This supports the previous research, which indicated that women who consider themselves more intelligent or competent tend to aspire to higher degrees and to nontraditional careers. The fact that the relationships were not significant for the PSY sample is probably due to the fact that there was very little range for self-perceived attractiveness or intelligence, dissatisfaction with the female role, or educational or pioneer goals for that sample.

The fact that self-perceived attractiveness and intelligence consistently formed a factor in both samples is in itself surprising, especially for the more traditional sample, since the cultural stereotype predicts that women who feel successful in one of these spheres will not feel successful in the other. It is especially interesting that this factor was related to feminism, which is perceived as a set of attitudes expressed by women who are less concerned with or less secure about their physical attractiveness.

Conformity was significantly related to preferred and ex-

pected career commitment for the WS women, and to dissatisfaction with the female role for the PSYCH sample. The relationship between nonconformity and career commitment supports the similar trends apparent in the few studies conducted in this area. However, the relationship with the PSYCH sample is surprising, in that 76% of the PSYCH women listed themselves as average in terms of conformity, making it very difficult to determine any significant differences related to this variable. However, it is understandable that women in a traditional field would tend to perceive themselves as unconventional if they were liberal enough to consider themselves dissatisfied with the traditional female role. This relationship between feminism and nonconformity supports the three studies in the literature.

Personal Characteristics

Ability. The lack of a significant relationship between GPA and career commitment supports the results of the studies by Parker (1966) and Zissis (1964), but conflicts with an earlier study of 1952 Cornell students which used an unusual measure of career commitment (Goldsen et al., 1960). In the literature, there was some indication that intelligence was associated with obtaining a doctorate, but was not associated with aspiring to a master's degree. In this study, the relationship between GPA and educational aspirations was significant but not strong, accounting for only 6% of the variance. The significant

relationship between pioneer aspirations and GPA supports the trends apparent in the research. GPA and feminism were not significantly correlated in this study, and there were no previous studies in this area with which to compare these results.

GPA is an easily accessible measure for college students, which is why it was used in this study. However, self-reported GPA may not be accurate, and GPA itself is not the best measure of academic ability.

Physical Appearance. There were no previous studies of physical appearance, but in Chapter 6 it was hypothesized that the tallest and shortest women would be less traditional. This hypothesis was not supported; there were no significant differences attributable to height for any of the dimensions. However, the one significant difference related to weight indicated that women who weighed 110 lbs or less were less satisfied with the traditional female role than women in the moderate or heavy weight groups. Since height and weight were strongly correlated (WS: $r=.52$, $p<.001$; PSYCH: $r=.49$, $p<.01$) it is surprising that this relationship was not significant for shorter women as well. There is no obvious explanation for this difference.

Contrary to the hypothesis, there were no significant relationships between perceiving oneself to be tall and strong (on the Physical factor) and any of the major dimensions, although it was related to nonconformity for the WS women.

Age. The only significant correlations related to age were with preferred and expected career commitment for the PSYCH sample. Apparently, more traditional women who choose a traditional major will become more career-oriented as they grow older. This relationship was unrelated to marital status, since 96% of the women were single. There were no comparable studies in the research literature, although several longitudinal studies conducted in the 1960's had indicated that women became less career oriented during their college years.

Marital Status. Despite weaker career-commitment, lower educational aspirations, and more traditional career choices of married women in the studies reviewed in Chapter 6, there were no differences related to marital status in this study. However, there were very few married or divorced women in either sample.

Religious Convictions. Women who had changed their religious beliefs and those who did not consider themselves members of an organized religion were more career-oriented than other women. This lends further support to the relationship between nontraditional religious beliefs and career commitment which was demonstrated in the literature.

Conclusions

The O.S.U. study strongly supports the literature review evidence of interrelationships between the major dimensions which were used to measure the challenging of the traditional female role: career commitment, educational aspirations, nontraditional

career choices and feminism. It also offers further evidence that questioning assumptions about the female role is associated with assumption-questioning in other fields, such as religion and general nonconformity.

The results of the O.S.U. study also support the tentative conclusions of the literature review regarding the relationship between Jewish affiliation and pioneer aspirations, between GPA and pioneer aspirations, and between intellectual self-confidence and educational and pioneer aspirations. It did not support the relationship between Catholocism and traditional career goals and attitudes, or the relationship between career commitment and an attractive or intelligent self-concept; both of these relationships were suggested by the research literature. The lack of relationships between SES and career commitment, and between birth order and family size and career commitment or feminism which were indicated by the literature review were also supported by the O.S.U. study. However, several trends that were suggested by the literature were not supported; in contrast to the majority of the studies, the study found no relationship between SES and nontraditional career goals or between the father's educational attainment and the daughter's education, and it found a positive relationship between the mother's educational level and the daughter's educational aspirations. In terms of the mother's employment status, the correlation between the mother working outside the home and the daughter's career commitment was significant only for the WS sample, the lack of a relationship between the mother's employment status

and the daughter's pioneer aspirations was supported, and the relationships between the mother's employment and the daughter's educational aspirations or feminism which were imdicated by the research literature were not supported. The differences in the results for the two samples for the relationship between dissatisfaction with the traditional female role and the mother's employment status suggests that in addition to measuring feminism, this question is influenced by the woman's perception of what the traditional female role is. This question was correlated with the AWS, but this correlation accounted for only 25% of the variance for the WS sample, and only 9% of the PSYCH sample. In order to make this question more useful, it would be necessary to either find out what the Respondent's perception of the female role is, or to clearly define the traditional female role in the questionnaire itself.

The study also did not support the relationship between educational level and birth order which was indicated in the literature; however, in this study educational aspirations were measured. There were also no significant relationships between height and career commitment, educational aspirations, nontraditional career goals, or feminism; between weight and career commitment, educational aspirations, nontraditional career goals, or the AWS; between age and educational aspirations, nontraditional career goals, or feminism; or between GPA and feminism. These comparisons had not been considered in the previous research. For the Educational Psychology group, increased career

commitment was positively correlated with age, although it was not correlated with the number of quarters of school enrollment. This appears to conflict with the trend for college women to become increasingly traditional during their college years; however, it is not clear since the correlation was significant with age, and not with year in school.

Unfortunately, there were too few black women and married women to make meaningful comparisons, although the WS group, which was more diverse than the PSYCH group, suggested that there was no relationship between marital status and the major dimensions, and indicated that black women were less feminist on the AWS and less dissatisfied with the traditional female role.

The questionnaire itself was satisfactory, although several issues were raised. The career commitment questions, which were used in the Turner and McCaffrey study (1974), were not totally clear because they were open to individual interpretation to some degree. For example, it was not clear at what point a woman would decide that her children were "grown" and she would return to work. A more specifically worded question would make the choices clearer. Another source of confusion were the self-concept questions, which required the Respondent to compare herself to other college students; in some cases, the Respondents compared themselves to other college women instead.

In general, the O.S.U. study supported some of the previous findings, but tended to suggest that some of the relationships which were significant in previous studies are no longer relevant.

This seems to indicate that, now that attitudes towards the female role are changing, factors such as SES, marital status, and the mother's employment status may become less influential. The study also reflects certain changes in the college student population: more women are aspiring to master's degrees, and fewer women want or expect to work only before children are born. However, conclusions cannot be drawn because the WS sample is not generalizable to all college women, and the PSYCH sample was too small and homogeneous to provide an adequate comparison for several of the variables. Another consideration is that the Midwestern state university sample is not necessarily generalizable to United States college women in general. Although the two extreme groups were helpful in determining the interrelationships between variables for different types of college women, a third comparison group consisting of a random sample of college women would have been helpful, and a larger sample of traditional women, consisting of women from several traditional fields would also have improved the generalizability of the results. Comparisons of similar samples from other types of colleges or universities would also have improved the study.

CHAPTER 8

SUMMARY AND CONCLUSIONS

The literature strongly demonstrates that various dimensions related to challenging the traditional female role, including career commitment, higher educational aspirations, pioneer career goals and choices, and feminist attitudes are interrelated. The results of a study of Ohio State University women enrolled in six Women's Studies courses and two Educational Psychology classes also support this hypothesis, although the Educational Psychology women tended to be a conservative and homogeneous group, and perhaps because of that several of the significant relationships were not maintained.

The hypothesis that challenging the traditional female role is related to assumption-questioning in other spheres was also strongly supported by the research literature and the O.S.U. study. Women who were career-oriented or who aspired to or chose nontraditional careers, or expressed feminist attitudes also tended to adhere less strongly to traditional religious beliefs, and behaved and thought in a more conventional manner. The few studies concerned with political beliefs indicated that these nontraditional women are also more politically liberal or radical. Moreover, they are less conventional in terms of their less stereotyped view of themselves; they have incorporated personality traits and interests that are usually considered "masculine" into their self-concept and self-descriptions.

Family Background

There is strong evidence that several family and demographic

background factors influence and contribute to women's development as either traditional or nontraditional women. The literature demonstrates that black women tend to be more career oriented and have higher educational aspirations, and are more likely to become lawyers or physicians. The majority of the studies also indicated that the daughters of working mothers are more career-oriented and express less traditional attitudes about woman's role in society; in the Women's Studies sample of the O.S.U. study, these women had higher prefereed career commitment and expected career commitment, but did not differ from the daughters of homemakers in terms of feminism on the AWS. In that study, the mother's employment status was also correlated with satisfaction with the traditional female role, although the direction of the correlation differed in the two samples, suggesting that the mother's employment status also influenced the daughter's perception of the traditional female role. SES was strongly related to pioneer aspirations in the research literature, but only moderately related to educational aspirations, and apparently unrelated to career commitment or feminism; in the O.S.U. study it was unrelated to all these dimensions with the exception of the daughter's educational aspirations, which were positively correlated with the mother's educational attainment. There were few studies of parents' religious or political beliefs, but there was some evidence that parents who were Unitarian, Jewish or nonreligious and those who were politically liberal had less traditional daughters in terms of the dimensions measured. The O.S.U. study supported the

relationship between Jewish upbringing and nontraditional career goals, but found that Catholic women were similarly nontraditional. There were too few Unitarians to compare to the other groups.

The literature also suggested that women with less traditional goals and attitudes, especially in terms of career commitment, are more autonomous or less close to one or both parents, and that women who identify with their fathers rather than their mothers are more likely to aspire to or choose pioneer careers. There is also some evidence that women who are first born or only children attain higher degrees and are more likely to pursue pioneer careers; this could not be evaluated in the pilot study because there were few only children, and educational aspirations were measured rather than attainment.

Future research needs to focus on evaluating the following

1) What is the influence of the parents' educational attainment or SES? There is strong evidence that there is no significant relationship between SES and career commitment, but the relationships between SES and educational aspirations, pioneer goals, or feminism have not been established. It is not clear whether SES is important because higher income facilitates higher educational goals, or whether higher SES is associated with more liberal attitudes. These issues deserve further study.

2) Are working mothers still as important an influence as they were in the past? The O.S.U. study suggests that the mother's employment status is still an important influence on the daughter's

preferred and expected career commitment. However, the relationship between the mother's employment and the daughter's nontraditional career goals may depend on the proportion of mothers with nontraditional careers. Furthermore, the study did not support the conclusion of the review of the literature, which indicated that working mothers have more feminist daughters, but did suggest that working mothers may have daughters with different perceptions of the traditional female role.

3) How are attitudes towards the female role related to the parent-daughter relationship? Are the less traditional women less happy, less close to their parents, or merely more independent? If the relationship with the parents does differentiate between more and less traditional women, are these differences the cause of the women's attitudes, or do the attitudes influence the parent-daughter relationship?

4) What is the impact of birth order and family size? The research literature and the O.S.U. study do not support Kammeyer's hypothesis that first born women are more traditional, but it is not clear whether birth order has any influence on these dimensions, in either direction.

5) Are the differences attributed to race and religion influenced by other factors, such as the mother's employment status? The literature does not consider whether black and other nonwhite women, or particular ethnic groups, have different attitudes towards the traditional female role in general, or whether they merely have different attitudes towards women's em-

ployment or achievement. The O.S.U. study suggests that black women may be more conservative about the traditional female role on noncareer issues.

6) More research is needed on feminism, particularly comparing ideological and activist feminists, and controlling for other relevant variables. National samples would be more generalizable than women from one college.

Personality

The research indicates that women who challenge the traditional female role differ from other women in terms of several personality characteristics, including achievement motivation (for career-oriented, role innovative or feminist women); autonomy (for career-oriented women, women aspiring to pioneer careers, and possibly for feminists); aggressiveness and assertiveness (for career-oriented women and possibly feminists); self-orientation (for women aspiring to or choosing pioneer careers) and intellectuality (for college women with pioneer goals). In general, the nontraditional women appeared to have more "masculine" personality traits than other women, and described themselves using these more "masculine" attributes. However, it was not clear from the literature whether these women were less "feminine" in terms of the culturally valued traits associated with women, such as an orientation toward helping others in need, people-orientation, and sociability. The concept of androgyny may be relevant to this issue. Rand's study (1968) suggested that

career-oriented women may score highly on both "masculine" and "feminine" traits and would therefore be labeled androgynous. This is consistent with Bem's study (1975) which demonstrated that the most intelligent men and women are more androgynous; especially since Rand's definition of career commitment included aspirations to a doctorate or a professional degree. However, the fact that Rand's definition does include this additional criterion means that her study is not comparable to the other studies of career commitment, and probably is more suitable as a measure of pioneer aspirations.

Since "masculine" characteristics are more valued in our culture and are considered a sign of mental health for adults (Broverman et al., 1970) both self-esteem and mental health are crucial areas of study in the context of women's attitudes toward the female role. Neither of these areas has been adequately studied, however. General self-esteem has rarely been evaluated, and there is some indication that nontraditional women score higher on specific measures related to their self-perceived attractiveness and intelligence, but lower on self-perceived confidence in homemaking-oriented and social skills. In the O.S.U. study, self-perceived attractiveness and intelligence were strongly related to one another but were only weakly related to educational and nontraditional career goals and feminism, and were unrelated to career commitment. General self-esteem was unrelated to the major dimensions or the Attractive-Intelligent self-concept. Mental health would be expected to be affected by both self-concept and attitudes towards the female role in a variety of ways.

On the one hand, women who perceived themselves in traditionally "feminine" terms and pursue "feminine" goals would be expected to consider themselves better adjusted because they would be perceived as "normal" and therefore well-adjusted by others. However, the majority of married women do not score higher on the SVIB for the careers they pursue than for other careers (Harmon, 1967), and this suggests that women in traditional careers have not based their career choices on their interests or abilities, and would therefore find these careers unsatisfying and feel unhappy and less well adjusted. Moreover, since the traditional female role is a relatively helpless and weak role, which is not perceived as mentally healthy for an "adult" and not valued in our culture, it would follow that women who perceive themselves in terms of traditional female traits would feel weak, helpless, incompetent, and dependent, which seems antithetical to healthy adjustment. In the few studies in this area, it appears that the traditional stereotype of women is the stronger influence; therefore, women who did not fit into the traditional female mold felt less well adjusted than other women. However, there are many ways to measure adjustment, and self-preceived adjustment may not be a particularly useful one. These are important issues which deserve further study.

Future research should also focus on the following:

1) Are nontraditional women less interested in social service and helping others than traditional women, or are they

merely more self-oriented (and equally other-oriented)?

2) What is the relationship between intellectuality and career commitment? This is not clear from the research results and deserves further study.

3) The definitions of aggressiveness and assertiveness need to be clarified, and the use of projective tests, personality inventories, and adjective check lists for these measures needs to be compared. The literature suggests that greater aggressive and assertive needs expressed by nontraditional women on personality inventories and adjective check lists are not apparent on projective tests. This suggests that more traditional women may have the same aggressive needs and drives as nontraditional women, but that these are not apparent when self-reporting techniques are used.

4) People-orientation vs. Things-orientation is a potentially interesting trait; however, a variety of measures have been used, and there has been substantial overlap with other related variables. Studies of the relationship between pioneer goals and people-orientation have been further plagued by a lack of control of the degree of people-orientation inherent in the career itself. For example, comparisons of physicians with social workers or nurses are more appropriate than comparisons of engineers or economists and social workers.

5) The relationship between nontraditional goals and attitudes and unconventionality has been demonstrated, but it is not clear whether these nontraditional women describe themselves as unconventional because of their unconventional atti-

tudes towards the female role, or whether they are also unconventional in other respects. Although it appears that assumption-questioning in one sphere is related to assumption questioning in other spheres, this trait can be studied more carefully by specifying what areas of conventionality are being considered.

6) More research on educational aspirations and feminism is needed in all of the areas of study.

7) The relationship between family background and personality has not been studied adequately, although several relationships are obviously relevant. For example, working mothers differ from homemaker mothers in similar ways to the differences between career-oriented and career women and homemakers; they are not exactly congruent because of age and historical differences. As a result, working mothers probably model different personality types for their daughters than do full-time homemakers. One would expect this to influence the daughter's personality; however, this relationship has not been studied. Another important issue is the influence of the father. Block (1973) found that fathers differentiate between appropriate sex role behavior for their children more than mothers; this indicates that the father's attitudes toward sex role behavior may be of crucial importance in the upbringing of children. However, in most of the studies it was the mother's attitudes which were measured, not the father's. The parents' attitudes, personalities, and behavior all may be related to other variables such as SES, religion, and ethnic membership, which also should be considered.

Personal Characteristics

Other traits such as intelligence and ability, educational level and type of education received, age, marital status, husband's SES and attitudes, number and age of children, and attitudes towards religion, politics, and careers have been considered, although only intelligence and marital status have been studied fairly extensively. The literature review suggests that career commitment is strongly associated with intelligence (for high school students) and with nonmarried status, husband's supportive attitudes, fewer children or older children, and nonreligious attitudes; and that educational aspirations and attainment are strongly correlated with unmarried status. There was too little research on role innovation or feminism, to draw any conclusions for that data. In the O.S.U. study, the relationship between career commitment and nonreligious attitudes, higher GPA and higher educational aspirations was supported, but there were no differences related to marital status. Age was inversely correlated with satisfaction with the traditional female role for Educational Psychology women.

Relationships between the major dimensions and age, attractiveness, marital attitudes of college women and expected family size, and political beliefs were rarely studied, and height, weight, and strength were never studied. The O.S.U. study found no relationship between the major dimensions and height and weight except that the women in the lightest weight group (110 lbs and under) were more dissatisfied with the traditional female role.

The focus of future research should be in the following areas:

1) What is the relationship between intelligence and

ability and challenging the traditional female role? There is some evidence that although higher intelligence predicts career commitment in high school, this is not necessarily the case for college women. The literature and the O.S.U. study both suggest that the most intelligent women are not more likely to pursue male dominated careers. Since these professions are the most presitigious and the most intellectually demanding, this suggests that many highly able women pursue careers for which they are intellectually overqualified.

2) Do women who choose different types of colleges differ in their initial interests, abilities, and attitudes, or do they differ more after they graduate? The type of college chosen is apparently important, but it is not clear whether the college itself is the crucial influence, or whether the self-selection process of choosing a college is more important. If, however, such issues as the propotion of women on the faculty is found to be influential, as Tidball (1973) concluded, then these issues are crucially important, and nedd to be evaluated thoroughly.

3) Although marital status has been considered, the attitudes of college women toward marriage and the expectations that they have regarding their future husbands have rarely been studied. As a result, it is not possible to determine to what degree marriage or the type of husband influences career commitment and career decisions, compared to the degree to which the choice of whether and who to marry is influenced by the woman's initial goals and attitudes.

4) The age and number of children have been studied, but it is not clear whether smaller families are the cause or result of

career commitment and other nontraditional attitudes.

5) Physical factors such as height and weight do not seem to be important according to the O.S.U. study, although there was some evidence that women in the lightest weight group were more dissatisfied with the traditional female role. Since these variables are so easy to measure, further research would be worthwhile. Moreover, it would be beneficial to study career women in addition to college students, since these factors might be more important in terms of how others perceive a woman rather than how she perceives herself. Attractiveness is another factor which has not been studied, but it is a variable which is very difficult to study objectively.

6) Attitudes and beliefs concerning religion, politics, and careers deserve further study, although the relationship between career commitment and nonreligiousness has been firmly established, and the relationship between liberal or radical political beliefs and career commitment, nontraditional career goals, and feminism have been strongly suggested by the literature.

General Issues

Despite a wide range of measurements used to evaluate career commitment, pioneer career goals, and feminist or similarly nontraditional attitudes towards sex-roles, the research results have generally been comparable in terms of the major issues under consideration. Strutz (1972) factor-analyzed career oriented and homemaking-oriented measures and found two major

factors: self-reports and SVIB profiles. However, it is unfortunate that several studies have used measures that were so different or so limited that their results could not be meaningfully compared to the majority of the studies. This was the case for the Rand (1968) national study, which included aspirations for a doctorate or professional degree as part of its career-oriented criteria, and for the studies which compared full-time homemakers with Pioneers, or women in one traditional field with women in one pioneer field.

The infrequent used of national samples has also limited the generalizability of the research results. Only eight large national samples were cited in this literature: Astin's two studies of Project TALENT high school students (1968a; 1968b), Watley and Kaplan's study of National Merit Scholars (1971), Rand's freshwomen from 28 campuses (1968); Karman's upperclasswomen from 38 campuses (1973), Baird's graduates from 94 colleges in 1971 (1973), Astin's study (1969) of women who received doctorates in 1957 and 1958, the Simon et al. study of men and women receiving their doctorates between 1958-63 (1967), and Parnes and Nestel's national sample of women between the ages of 35-49 (1975). Several other studies sampled women from several colleges or universites, but the majority studied women from one college, often from one course. The studies of high school students and career women tended to focus on one town or city.

A third major issue is the lack of studies which control for or evaluate racial differences. If black and white women differ in terms of the dimensions being studied, then combining them into one group might cause some of the relationships between

variables to disappear. Therefore, it is imperative that black and white women first be compared, and analyzed together only if there are no significant differences between them.

Another shortcoming of the research literature is the tendency to focus on college-educated women and white-collar jobs. The increase in the number of women in male-dominated fields which do not require a bachelor's degree will make research possible in professions which were previously limited to men.

A related issue is the importance of time as a variable. It is often unclear whether results from studies conducted ten or even five years ago would be supported by studies conducted today. Longitudinal studies and trend analysis are two methods which would be useful in helping determine changing goals and attitudes which are attributable to changing cultural mores, and to maturation.

Chapter Summary and Conclusions

The purpose of this paper was to restructure, review, and clarify the research that has been conducted in the areas of women's career commitment, educational aspirations, nontraditional career goals and choices, and feminism. The review indicates that, despite a large number of studies, particularly in the area of women's career commitment and goals, very few conclusions can be reached. The research literature has been plagued by the lack of control of potentially influential variables, and a lack of studies using large national samples. Furthermore, comparisons between the studies strongly indicate that career commitment and nontraditional career goals have become increasingly popular, so that replicative studies are now

necessary in some areas. Unfortunately, some of the original measures of career commitment are now outdated, because they are too vague about the amount of time to be spent at a career, or because they treat careers and homemaking as mutually exclusive.

As career commitment has become increasingly wide-spread among college women, there is some evidence that women's goals have become increasingly unrealistic. Rose (1951) noted that college women planned to attempt an impossible combination of career, homemaking, and community activites, and Moore and Veres' recent study (1975) demonstrates that this is still true; in their study, women who planned to be full-time homemakers and mothers when their children were pre-school age also planned to be full-time career women for the next fifteem years. To some extent, college women are still ambivalent about homemaking and careers, and as a result their goals are not well thought-out. Future research needs to focus on the activites women actually pursue in their twenties and thirties, rather than focusing primarily on their plans as college or high school students. Longitudinal studies would be especially valuable, in order to determine the relationship between goals and actual choices.

STUDENT QUESTIONNAIRE

1. Date of birth: ____/ ____ / ____

2. Sex: Female Male

3. Race: _____

4. Height _____

5. Weight _____

6. Religion: Agnostic Atheist Catholic Jewish Protestant
Unitarian Other _____

6a. Religious upbringing, if different from that listed above. _____

7. Marital status: _____

8. Number of quarters left before graduation (include this one) _____

9. Major: _____

10. College grade point average: _____

11. SAT scores: Verbal _____ Math _____

12. Which state did you live in before entering college? _____

13. Parents' Occupations: Mother _____ Full or Parttime
Father _____ Full or parttime

14. Parents' Educational Attainment: Mother _____ Father _____

15. Number of older brothers _____ older sisters _____
Number of younger brothers _____ younger sisters _____

16. What is the highest degree you plan to attain?
A.A. B.A./B.S. Masters PhD EdD M.D. DDS LLD

17. What career do you plan to pursue? _____

18. Which of the following best describes your preference?
a. Fulltime homemaker
b. Employed only before children are born, then a homemaker
c. Employed before children are born, and after they've grown up
d. Occasionally employed throughout marriage and childrearing
e. Combine marriage and childrearing with steady parttime work
f. Combine marriage and childrearing with fulltime career
g. Combine marriage and career, but have no children
h. Remain single, pursue career only

19. Which of the above situations do you realistically expect? _____

CIRCLE THE NUMBER WHICH BEST DESCRIBES YOU.

20. How tall are you compared with other OSU students?

1	2	3	4	5
shorter than almost all (90%)	shorter than 75%	average	taller than 75%	taller than almost all (90%)

21. How strong are you compared with other OSU students?

1	2	3	4	5
weaker than 90%	weaker than 75%	average	stronger than 75%	stronger than 90%

22. How attractive are you compared with other OSU students?

1	2	3	4	5
less than 90%	less than 75%	average	more than 75%	more than 90%

23. How unconventional are you compared with other OSU students?

1	2	3	4	5
less than 90%	less than 75%	average	more than 75%	more than 90%

24. How intelligent are you compared with other OSU students?

1	2	3	4	5
less than 90%	less than 75%	average	more than 75%	more than 90%

25. How satisfied are you with the traditional female role?

1	2	3	4	5
Not at all satisfied	Dissatisfied with most		Satisfied with most	Very Satisfied

FOR EACH OF THE FOLLOWING STATEMENTS, CHOOSE BETWEEN THESE FOUR CHOICES:

1	2	3	4
Agree Strongly	Agree Mildly	Disagree Mildly	Disagree Strongly

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

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

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

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

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

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

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

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

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

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

31. I take a positive attitude toward myself.

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

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

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

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

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

34. I certainly feel useless at times.

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

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

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

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

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

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

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

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

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

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

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

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

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

41. 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.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

49. Sons in the family should be given more encouragement to go to college than [illegible]ters.

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

50. It is ridiculous for a woman to run a locomotive and for a man to darn socks.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

59. Women should be given equal opportunity with men for apprenticeship in the various trades.

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

60. 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.

61. Please list the (men's or) women's organizations to which you belong.

_____

_____

62. Please list the men's or women's magazines or newspapers which you read regularly. _____

_____

63. Please list any Women's Studies courses you are taking. _____

_____

Please list any Women's Studies courses you have taken previously. _____

_____

Appendix A

Questionnaire Instructions

Students are asked to answer all questions as accurately as possible. Slightly inaccurate responses are preferred over no response. However, if there are any questions that a student does not want to answer, s/he does not have to do so.

All information is confidential; the purpose of the questionnaire is to learn about the attitudes and demographic background of class members as a group, not as individuals.

Specific directions:

13. Parents' occupations: be as specific as possible about their job titles and positions, and circle whether part-time or full-time. (Full-time= at least 30 hours/week).

14. Parents' education: last grade completed or degree received.

18. This may seem an unusual question for males. They should assume that they have this choice, and circle their preference. Students may designate another choice if necessary.

20-25. Average includes a 10% range in either direction from the 50-50 point. Students should compare themselves to all other students, male and female. Question #21 refers to physical strength. Males should answer Question #25 in terms of the "traditional male role."

26-60. The same 4-point scale applies for all these questions, as listed above #26.

61. Men should list men's organizations, women should list women's organizations.

62. Both men and women can list both men's and women's magazines.

REFERENCES

1. Almquist, E. M. Sex stereotypes in occupational choice: The case for college women. Journal of Vocational Behavior, 1974, 5, 13-21.

2. Almquist, E. A. and Angrist, S. S. Career salience and atypicality of occupational choice among college women. Journal of Marriage and the Family, 1970, 32, 242-249.

3. Almquist, E. A. and Angrist, S. S. Role model influences on college women's career aspirations. Merrill-Palmer Quarterly, 1971, 17, 263-279.

4. Angrist, S. S. Role constellation as a variable in women's leisure activities, Social Forces, 1967, 45, 423-431.

5. Angrist, S. S. Changes in women's work aspirations during college (or work does not equal career). Paper presented at the Ohio Valley Sociological Society annual meeting, 1970.

6. Angrist, S. S. Counseling college women about careers. Journal of College Student Personnel, 1972, 13, 494-498.

7. Arnott, C. C. Husbands' attitude and Wives' commitment to employment. Journal of Marriage and the Family, 1972, 34, 673-684.

8. Ash, P. A. Job satisfaction differences among women of different ethnic groups. Journal of Vocational Behavior, 1972, 2, 495-507.

9. Astin, H. S. Career development of girls during the high school years. Journal of Counseling Psychology, 1968, 15, 536-540. (a)

10. Astin, H. S. Stability and change in the career plans of ninth grade girls. Personnel and Guidance Journal, 1968, 46, 961-966. (b)

11. Astin, H. S. The woman doctorate in America. New York: Russell Sage Foundation, 1969.

12. Astin, H. S. and Bisconti, A. S. Trends in academic and career plans of college freshmen. (Report No. 1) Bethlehem, Pa.: College Placement Council Foundation, 1972.

13. Astin, H. S. and Myent, T. Career development of young women during the post-high school years. Journal of Counseling Psychology, 1971, 18, 369-393.

14. Bachtold, L. M. Women, eminence, and career-value relationships. Journal of Social Psychology, 1975, 95, 187-192.

15. Baird, L. L. The graduates: A report on the plans and characteristics of college seniors. Educational Testing Service, Princeton, N. J., 1973, ERIC ED 093 185.

16. Bardwick, J. M. and Douvan, E. Ambivalence in the socialization of women. In V. Gornick and B. K. Moran, eds., Woman in sexist society: Studies in power and powerlessness. New York: Basic Books, 1971.

17. Baruch, G. K. Feminine self-esteem, self-ratings of competence, and maternal career commitment. Journal of Counseling Psychology, 1973, 20, 487-488.

18. Baruch, G. K. Maternal career-orientation as related to parental identification in college women. Journal of Vocational Behavior, 1974, 4, 173-180.

19. Baruch, R. The achievement motive in women: Implications for career development, Journal of Personality and Social Psychology, 1967, 5, 260-267.

20. Beier, E. G. and Ratzburg, F. The parental identification of male and female college students. Journal of Abnormal and Social Psychology, 1953, 48, 569-575.

21. Bem, S. L. Beyond Androgyny: Some presumptuous prescriptions for a liberated sexual identity. Presented at the American Psychological Association-National Institute of Mental Health conference, Madison, Wisconsin, May, 1975.

22. Berman, Y. Occupational aspirations of 545 female high school seniors. Journal of Vocational Behavior, 1972, 2, 173-177.

23. Beuf, A. Doctor, lawyer, household drudge. Paper presented at the Pennsylvania Sociological Society annual meeting, November, 1973.

24. Birnbaum, J. L. Life patterns, personality style and self-esteem in gifted family-oriented and career committed women. Dissertation Abstracts International, 1971, 32-B, 1834.

25. Blai, B. Job satisfactions and work values for women. Harcum Junior College, Bryn Mawr, Pa., 1970, ERIC ED 040705.

26. Block, J. H. Conceptions of sex role: Some cross-cultural and longitudinal perspectives. American Psychologist, 1973, 28, 512-526.

27. Blood, R. O. The husband-wife relationship. In F. I. Nye and L. W. Hoffman, The employed mother in America, Chicago: Rand McNally, 1963.

28. Bloom, A. R. Achievement motivation and occupational choice: a study of adolescent girls. Dissertation Abstracts International, 1972, 33-B, 417.

29. Bott, M. M. Measuring the mystique. Personnel and Guidance Journal, 1968, 46, 967-970.

30. Broverman, I. K., Broverman, D. M., Clarkson, F. E., Rosenkrantz, P. S., and Vogel, S. R. Sex-role stereotypes and clinical judgments of mental health. Journal of Consulting and Clinical Psychology, 1970, 34, 1-7.

31. Bruce, J. A. The role of mothers in the social placement of daughters: Marriage or work? Paper presented at the American Sociological Association convention, New York, 1973.

32. Burhenne, D. P. Female and male evaluations of sex-appropriate and sex-inappropriate sex-role stereotypes. Doctoral dissertation, The Ohio State University, 1972.

33. Cain, G. G. Married women in the labor force: an economic analysis. Chicago: University of Chicago Press, 1966.

34. Campbell, D. The Strong-Campbell Interest Inventory: Merged Form of the SVIB. Stanford: Stanford University Press, 1974.

35. Carlson, N. L. Occupational choice and achievement of women graduate students in psychology as a function of early parent-child interactions and achievement motivation. Dissertation Abstracts International, 1970, 31-A, 2679.

36. Carnegie Commission. Opportunities for women in higher education. Berkeley: McGraw-Hill, 1973.

37. Cartwright, L. Conscious factors entering into decisions of women to study medicine. Journal of Social Issues, 1972, 28, 201-216.

38. Chaney, R. Vocational values of children as they relate to economic community, grade level, sex, and parental occupational level. Dissertations Abstracts International, 1969, 29-A, 2956.

39. Cherniss, C. Personality and ideology: A personological study of women's liberation. Psychiatry, 1972, 35, 109-125.

40. Clark, A. J. and Seals, J. M. Students perceptions of social status of careers for college graduates. Journal of College Student Personnel, 1975, 16, 293-298.

41. Clark, E. T. Influence of sex and social class on occupational preference and perception. Personnel and Guidance Journal, 1967, 45, 440-444.

42. Cohen, M. B. Personal identity and sexual identity. In J. Miller, ed., Psychoanalysis and Women, New York: Brunner/Mazel Publishers, 1973.

43. Conaway, C. Y. and Niple, M. L. The working patterns of mothers and grandmothers of freshmen women at the Ohio State University, 1955 and 1965. Journal of the National Association of Women Deans and Counselors, 1966, 29, 167-170.

44. Connell, D.M. and Johnson, J. E. The relationship between sex-role identification and self-esteem in early adolescence. Developmental Psychology, 1970, 3, 268

45. Cook, B. I. W. Role aspirations as evidenced in senior women. Dissertation Abstracts International, 1968, 28-A, 2067.

46. Counselman, E. F. A comparison of the self-concepts, self acceptance, ideal self-concepts, and career women stereotypes of career and non-career-oriented women. Dissertation Abstracts International, 1971, 32-A, 1996-1997.

47. Cowan, G. and Moore, L. Female identity and occupational commitment. Paper presented at the American Psychological Association annual convention, 1971.

48. Crandall, V. C. Sex differences in expectancy of intellectual and academic reinforcement. In C.P. Smith, ed., Achievement-related Motives in Children. New York: Russell Sage, 1969.

49. Davis, D.A., Hagan, N. and Strouf, J. Occupational choices of twelve-year olds. Personnel and Guidance Journal, 1962, 40, 628-629.

50. Dempewolff, J. A. Feminism and its correlates. Dissertation Abstracts International, 1973, 33 B, 3913-3914.

51. Dempewolff, J. A. Some correlates of feminism. Psychological Reports, 1974, 34, 671-676.

52. Diamond, E. E. The masculinity-femininity scale in interest measurement: an idea whose time has passed. Paper presented at the American Psychological Association convention, 1972.

53. Dodge, D. Attitudes of undergraduate women toward careers. (Final Report). Macalester College, Saint Paul, Minn., 1974, ERIC ED 096 571.

54. Douvan, E. Employment and the adolescent. In F.I. Nye and L. W. Hoffman, eds, The employed mother in America, Chicago: Rand McNally, 1963.

55. Drabick, B. Perceived sources of influence upon occupational and educational expectations. North Carolina University, Raleigh, N. C., 1977, ERIC ED 202 352.

56. Edwards, C. N. Cultural values and role decisions: A study of educated women. Journal of Counseling Psychology, 1969, 16, 36-40.

57. Edwards, J. N. and K[illegible]ck, D. L. Birth order and the conservators of tradition hypothesis. Jounral of Marriage and the Family, 1973, 35, 619-625.

58. [illegible]is, L. J. and Bentler, P. M. Traditional sex-determined role standards and sex stereotypes. Journal of Personality and Social Psychology, 1973, 25, 28-34.

59. Elton, C. F. and Rose, H. A. Significance of personality in the vocational choice of college women. Journal of Counseling Psychology, 1967, 14, 293-298.

60. Entwisle, D. R. and Greenberger, E. A survey of cognitive styles in Maryland ninth graders: Views of women's roles. Johns Hopkins University, Baltimore, 1970.

61. Epstein, C. F. Woman's place. Berkeley: University of California Press, 1970.

62. Epstein, C. F. Positive effects of the multiple negative: Explaining the success of black professional women. American Journal of Sociology, 1973, 78, 912-935.

63. Epstein, C. F. Bringing women in. In R. B. Kundsen, ed., Women and success: The anatomy of achievement. New York: William Morrow, 1974.

64. Erickson, L. G. and Nordin, M. L. Sex role ideologies and career salience of college women. Kansas State University, Manhattan, 1974.

65. Eyde, L. D. Work values and background factors as predictors of women's desires to work. Ohio Studies in Personnel Research, Monograph No. 108, The Ohio State University, Bureau of Business Research, 1962.

66. Farley, J. Graduate women: Career aspirations and desired family size. American Psychologist, 1970, 25, 1099-1100.

67. Farmer, H. S. and Rohe, W. J., Jr. Home-career conflict reduction and the level of career interest in women. Journal of Counseling Psychology, 1970, 17, 228-232.

68. Faunce, P. S. Academic careers of gifted women. Personnel and Guidance Journal, 1967, 46, 252-257.

69. Fichter, J. Graduates of predominantly Negro colleges: Class of 1964. Public Health Services, Publication No. 1571, 1964.

70. Flacks, R. The liberation question: An exploration of the roots of student protest. Journal of Social Issues, 1967, 23, 52-75.

71. Flanders, R. B. The changing job scene to 1985. Paper presented at the American Personnel and Guidance Association annual convention, New Orleans, Louisiana, April 1974.

72. Fortner, M. L. Vocational choices of high school girls: Can they be predicted? Vocational Guidance Quarterly, 1970, 18, 203-206.

73. Fowler, M. G. and Van de Riet, K. Women today and yesterday: An examination of the feminist personality. Journal of Psychology, 1972, 82, 269-276.

74. Frankel, P. M. Sex-role attitudes and the development of achievement need in women. Journal of College Student Personnel, 1974, 15, 114-119.

75. Freedman, M. The role of the educated woman: An empirical study of the attitudes of a group of college women. Journal of College Student Personnel, 1965, March, 145-155.

76. Freedman, R., Whelpton, P. K. and Campbell, A. Family planning, sterility, and population growth. New York: McGraw-Hill, 1959.

77. Ginzberg, E. Life styles of educated women. New York: Columbia University Press, 1966.

78. Ginzberg, E. and Yohalim, A. M. Educated American women: Self-portraits. New York: Columbia University Press, 1966.

79. Goldberg, P. A. Are women prejudiced against women? Transaction, 1968, April, 28-30.

80. Goldberg, P. A., Gottesdiener, M. and Abramson, P. R. Another put-down of women? Perceived attractiveness as a function of support for the feminist movement. Journal of Personality and Social Psychology Supplement, 1975, 32, 113-119.

81. Goldschmidt, J., Gergen, M. M., Quigley, K. and Gergen, K.J. The Women's Liberation Movement: Attitudes and action. Journal of Personality, 1974, 42, 601-617.

82. Goldsen, R. K., Rosenberg, M., Williamson, R. M. and Suchman, E. A. What college students think. Princeton: Van Nostrand, 1960.

83. Gordon, M. S. (ed.) Higher education and the labor market. New York: McGraw-Hill, 1974.

84. Green, L. H. An investigation of factors which influence the vocational classification of career-oriented and home-oriented women. Dissertation Abstracts International, 1971, 32-B, 2377-2378.

85. Greenhaus, J. H. A factoral investigation of career salience. Journal of Vocational Behavior, 1973, 3, 95-98.

86. Gribbons, W. D. and Lohnes, P. R. Shifts in adolescents' vocational values. Personnel and Guidance Journal, 1965, 44, 248-252.

87. Grosz, R. D. and Joseph, C. D. Vocational interests of black college women. Colorado University, Boulder, 1973, ERIC ED 075 731.

88. Gump, J. P. Sex-role attitudes and psychological well-being. Journal of Social Issues, 1972, 28, 79-91.

89. Gysbers, N. C., Johnston, J. A., and Gust, T. Characteristics of homemaker and career oriented women. Journal of Counseling Psychology, 1968, 5, 541-546.

90. Haller, M. and Rosenmayer, L. The pluridimensionality of work commitment: A study of young married women in different social contexts of occupation and family life. Human Relations, 1971, 24, 501-518.

91. Harmon, L. W. Women's working patterns related to their SVIB housewife and "own" occupation scores. Journal of Counseling Psychology, 1967, 14, 299-301.

92. Harmon, L. W. Anatomy of career commitment in women. Journal of Counseling Psychology, 1970, 17, 77-80.

93. Harmon, L. W. The childhood and adolescent career plans of college women. Journal of Vocational Behavior, 1971, 1, 45-65.

94. Harmon, L. W. Variables related to women's persistence in educational plans. Journal of Vocational Behavior, 1972, 2, 143-153.

95. Hartley, R. E. Children's concepts of male and female roles. Merrill-Palmer Quarterly, 1960, 6, 83-91.

96. Havens, E. M. Women, work, and wedlock: A note on female marital patterns in the United States. American Journal of Sociology, 1973, 78, 975-981.

97. Hawley, P. What women think men think: Does it affect their career choice? Journal of Counseling Psychology, 1971, 18, 193-199.

98. Hawley, P. Perceptions of male models of femininity related to career choice. Journal of Counseling Psychology, 1972, 19, 308-313.

99. Heilbrun, A. B. Parental identification and the patterning of vocational interests in college males and females. Journal of Counseling Psychology, 1969, 16, 342-347.

100. Hennig, M. M. Family dynamics and the successful woman executive. In R. B. Kundsin, ed., Women and success: The anatomy of achievement. New York: William Morrow, 1974.

101. Hewer, V. H. and Gerhard, N. Attitudes of college students toward employment among married women. Personnel and Guidance Journal, 1964, 42.

102. Hoffman, L. W. Mother's enjoyment of work and effects on the child. Child Development, 1961, 32, 187-197.

103. Hoffman, L. W. Parental power relations and the division of household tasks. In F.I. Nye and L.W. Hoffman, eds., The employed mother in America. Chicago: Rand McNally, 1963.

104. Hoffman, L. W. Effects of maternal employment on the child: A review of the research. Developmental Psychology, 1974, 10, 204-228.

105. Hoffman, L. W. Personal communication, September 1975.

106. Holland, J. L. A theory of vocational choice. Journal of Counseling Psychology, 1959, 6, 35-45.

107. Horner, M. S. Why women fail. In 51% minority, Connecticut Conference on the Status of Women, Storrs, 1972, National Education Association, USOE-0-72-2507.

108. Houts, P. S. and Entwisle, L. R. Academic achievement effort among females: Achievement attitudes and sex-role orientation. Journal of Counseling Psychology, 1968, 15, 284-286.

109. Hoyt, D. P. and Kennedy, C. E. Interest and personality correlates of career motivated and homemaking motivated college women. Journal of Counseling Psychology, 1958, 5, 44-48.

110. Hoyt, K. B. and Hebeler, J. R. Career education for gifted and talented students. Salt Lake City: Olympus, 1974.

111. Hymer, S. and Atkins, A. The relationship between attitudes toward the Women's Liberation Movement and modes of aggressive expression in women. Paper presented at the American Psychological Association eighty-first annual convention, Montreal, September 1973.

112. Jabury, D. E. Identity diffusion as a function of sex-roles in adult women. Dissertation Abstracts International, 1968, 28-B, 5207-5208.

113. Joesting, J. Comparison of Women's Liberation members with their nonmember peers. Psychological Reports, 1971, 29, 1291-1294.

114. Johnson, R. W. Parental identification and vocational interests of college women. Measurement and Evaluation in Guidance, 1970, 3, 147-151.

115. Jones, E. E. and Gerard, H. B. Foundations of social psychology. New York: John Wiley & Sons, 1967.

116. Kagan, J. and Moss, H. A. From birth to maturity: A study in psychological development. New York: John Wiley, 1962.

117. Kalka, B. S. A comparative study of female role concepts of a selected group of college women. Dissertation Abstracts International, 1968, 28-A, 4822.

118. Kammeyer, K. Birth order and the feminine sex role among college women. American Sociological Review, 1966, 31, 508-515.

119. Karman, F. J. Women: Personal and environmental factors in role identification and career choices. California University, Los Angeles, Center for the Study of Evaluation, August 1973, ERIC ED 084 383.

120. Katz, J. No time for youth. San Francisco: Jossey-Bass, Inc., 1968.

121. Katz, J. Career and autonomy in college women. In J. Katz, W. A. Korn, C. A. Leland, H. H. Levin, and R. L. Stark, eds., Class, character, and career. Stanford: Institute for the Study of Human Problems, Stanford University, 1969.

122. Katz, J., Comstock, P. and Lozoff, M. Educational and Occupational aspirations of adult women. Report to the College Entrance Examination Board. Stanford: Institute for the Study of Human Problems, Stanford University, 1970.

123. Keyserling, M. D. Your talents--let's not waste them. Symposium of Stern Brothers and American Girl Services. New York, 1967, ERIC ED 015 283.

124. Kimmel, E. S. Educational influences on career opportunities for women. Teacher Education Forum Series, 1974, 2, 13, ERIC ED 099 423.

125. King, K., McIntyre, J., and Axelson, L. J. Adolescents' view of maternal employemtn as a threat to the marital relationship. Journal of Marriage and the Family, 1968, 30, 633-637.

126. Kinnane, J. F. and Bannon, M. M. Perceived parental influence and work-value orientation. Personnel and Guidance Journal, 1964, 43, 273-279.

127. Klemmack, D. L. and Edwards, J. N. Women's acquisition of stereotyped occupational aspirations. Sociology and Social Research, 1973, 57, 510-525.

128. Kohlberg, L. A cognitive-developmental analysis of children's sex-role concepts and attitudes. In E. Maccoby, ed., The development of sex differences. Stanford: Stanford University Press, 1966.

129. Korman, A. K. Self-esteem as a moderator of the relationship between self-perceived abilities and vocational choice. Journal of Applied Psychology, 1967, 51, 65-67.

130. Korn, H. A. The social psychology of career choice and its implications for manpower policy. In J. Katz et al., Class, character, and career. Stanford: Institute for the Study of Human Problems, Stanford University, 1969.

131. Kosa, J., Rachiele, L., and Schommer, D. Marriage, career, and religiousness among Catholic college girls. Marriage and Family Living, 1962, 24, 376-380.

132. Kriger, S. F. N Ach and perceived parental child-rearing attitudes of career women and homemakers. Journal of Vocational Behavior, 1972, 2, 419-432.

133. Kuhlen, R. G. and Johnson, G. H. Changes in goals with adult increasing age. Journal of Consulting Psychology, 1952, 16, 1-4.

134. Lee, S. L. High school senior girls and the world of work: occupational knowledge, attitudes, and plans. Ohio State University, Columbus, 1971, ERIC ED 047 155.

135. Leland, C. Women-men-work: Women's career aspirations as affected by the male environment. Dissertation Abstracts International, 1967.

136. Levin, M. M. The impact of social class on personal needs and career choice in males. In J. Katz et al., Class, character, and career. Stanford: Insititute for the Study of Human Problems, Stanford University, 1969.

137. Levitt, E. S. The study of four career patterns and associated life history characteristics among female professional librarians. Dissertation Abstracts International, 1971, 31-B, 4381.

138. Lipman-Blumen, J. How ideology shapes women's lives. Scientific American, 1972, 226, 34-42.

139. Little, D. M. and Roach, A. J. Videotape modeling of interest in nontraditional occupations for women. Journal of Vocational Behavior, 1974, 5, 133-137.

140. Looft, W. R. Vocational aspirations of second-grade girls. Psychological Reports, 1971, 28, 241-242.

141. Lopate, R. Women in medicine. Baltimore: Johns Hopkins Press, 1968.

142. Lovett, S. L. Personality characteristics and antecedents of vocational choice of graduate women students in science research. Dissertation Abstracts International, 1969, 29, 4287.

143. Lozoff, M. Career oriented versus homemaking oriented women. In J. Katz, P. Comstock, and M. Lozoff, Educational and occupational aspirations of adult women. Report to the College Entrance Examination Board, Stanford Institute for the Study of Human Problems, Stanford University, 1970.

144. Lozoff, M. M. Fathers and autonomy in women. In R. B. Kundsin, ed., Women and success: The anatomy of achievement. New York: William Morrow, 1974.

145. Luria, Z. Recent women-college graduates: A study of rising expectations. American Journal of Orthopsychiatry, 1974, 44, 312-326.

146. Lyon, E. M. Career interests of married women with college degrees (Doctoral dissertation, Northwestern University). Ann Arbor, Michigan: University Microfilms, 1967, No. 67-15, 283.

147. Masih, L. K. [illegible] alienacy and its relation to certain needs, interests, and job values. Personnel and Guidance Journal, 1967, 45, 658-663.

148. Mathews, E. and Tiedeman, D. V. Attitudes toward career and marriage in the development of life styles in young women. Journal of Counseling Psychology, 1964, 11, 375-384.

149. McKee, J. P. and Sherriffs, A. C. Men's and women's beliefs, ideals, and self-concepts. American Journal of Sociology, 1959, 64, 356-363.

150. McKenzie, S. P. A comparative study of feminine role perceptions, selected personality characteristics, and traditional attitudes. Dissertation Abstracts International, 1972, 32-A, 5615.

151. McLaughlin, D. H. and Tiedeman, D. V. Eleven-year career stability and change as reflected in Project TALENT data through the Flanagan, Holland, and Roe occupational classifications. Journal of Vocational Behavior, 1974, 5, 177-196.

152. Mednick, M. T. Motivational and personality factors related to the career goals of black college women. Final report. Howard University, Washington, D. C. 1973, ERIC ED 081 408.

153. Metzger, S. M., Bollaman, S. R., Hoeflin, R. M., and Schmalzried, B. A. Comparison of life styles of honors, non-honors women. Personnel and Guidance Journal, 1969, 47, 671-674.

154. Miller, T. W. Male self-esteem and attitudes toward women's role. Journal of College Student Personnel, 1973, 14, 402-406.

155. Mintz, R. and Patterson, C. H. Marriage and career attitudes of women in selected college curriculums. Vocational Guidance Quarterly, 1969, 17, 213-217.

156. Mitchell, J. Women's estate. New York: Pantheon Books, 1971.

157. Moore, K. M. and Veres, H. C. A study of two-year college women in central New York state: Characteristics, career determinants, and perceptions. State University of New York, Ithaca, 1975, ERIC ED 103 069.

158. Morris, E. F. The personality traits and psychological needs of educated homemakers and career women. Dissertation Abstracts International, 1974, 34-A, 6934.

159. Moynihan, P. D. Employment, income, and the ordeal of the Negro family. Daedalus, 1965, 94, 745-770.

160. Muhlenkamp, A. F. and Parsons, J. L. Characteristics of nurses: An overview of recent research published in a nursing research periodical. Journal of Vocational Behavior, 1972, 2, 261-273.

161. Mulvey, M. Psychological and social factors in prediction of career patterns in women. Genetic Psychology Monographs, 1963, 68, 309-386.

162. Munley, P. H. Interests of career and homemaking oriented women. Journal of Vocational Behavior, 1974, 4, 43-47.

163. Nagely, D. L. A comparison of college educated working mothers in traditional and non-traditional occupations. Journal of Vocational Behavior, 1971, 1, 331-341.

164. Nelson, D. D. A study of personality and adjustment among adolescents children with working and nonworking mothers. Journal of Educational Research, 1971, 64, 328-330.

165. Nolan, F. L. Effects on rural children. In F. I. Nye and Hoffman, L. W. The employed mother in America. Chicago: Rand McNally, 1963.

166. Norfleet, M. A. Personality characteristics of achieving and underachieving high ability senior women. Personnal and Guidance Journal, 1968, 46, 976-980.

167. Nuzum, R. E. Inferred parental identification and perceived parental relationship as related to career and homemaking orientation in in above average ability college women. Dissertation Abstracts International, 1970, 31-A, 2689-90.

168. Nye, F. I. The adjustment of adolescent children. In F. I. Nye and L. W. Hoffman, The employed mother in America. Chicago: Rand McNally, 1963.

169. Nye, F. I. and Hoffman, L. W. The employed mother in America, Chicago: Rand McNally, 1963.

170. O'Hara, R. P. The roots of careers. Elementary School Journal, 1962, 62, 277-280.

171. Okun, B. F. Later careers of women college graduates. Journal of the National Association of Women Deans and Counselors, 1972, 35, 83-89.

172. O'Leary, V. E. and Braun, J. S. Antecedents and personality correlates of academic career choice in women. Paper presented at the American Psychological Association annual convention, 1972.

173. Oliver, L. W. Achievement and affiliation motivation in career-oriented and homemaking-oriented college women. Journal of Vocational Behavior, 1974, 4, 275-280.

174. Oliver, L. W. The relationship of parental attitudes and parent identification to career and homemaking orientation in college women. Journal of Vocational Behavior, 1975, 7, 1-12.

175. O'Neil, H. F., Teague, M., Lushene, R. F., and Davenport, S. Personality characteristics of Women's Liberation activities as measured by the MMPI. Psychological Reports, 1975, 35, 355-361.

176. Osipow, S. H. Emerging woman: Career analysis and outlooks. Columbus, Ohio: Charles E. Merrill, 1975.

177. Osipow, S. H. and Gold, J. A. Personal adjustment and career development. Journal of Counseling Psychology, 1968, 15, 439-443.

178. Parker, A. W. Career and marriage orientation in the vocational development of college women. Journal of Applied Psychology, 1966, 50, 232-235.

179. Parnes, H. S. and Nestel, G. Factors in career orientation and occupational status. In H.S. Parnes, C. L. Jusenius, F. Blau, G. Nestel, R. Shortlidege, and S. Sandell, Dual careers: A longitudinal analysis of the labor market experience of women. Vol. 4. Columbus, Ohio: Center for Human Resaource Research, College of Administrative Science, The Ohio State University, December 1975.

180. Pawlicki, R. E. and Almquist, C. Authoritarianism, locus of control, and tolerance of ambiguity as reflected in membership and nonmembership in a Women's Liberation group. Psychological Reports, 1973, 32, 1331-1337.

181. Peterson, C. and Peterson, J. Issues concerning collaborating careers. Journal of Vocational Behavior, 1975, 7, 173-180.

182. Pheterson, G. I., Kiesler, S. B., and Goldberg, P. A. Evaluation of the performance of women as a function of their sex, achievement, and personal history. Journal of Personality and Social Psychology, 1971, [illegible], 114-118.

183 Plost, M. and Rosen, M. J. Effect of sex of career models on occupational preferences of adolescents. Audio-Visual Communications Review, 1974, 22, 41-50.

184. Powell, K. S. Personalities of children and child-rearing attitudes of mothers. In F. I. Nye and L. W. Hoffman, The employed mother in America. Chicago: Rand McNally, 1963.

185. Powell, M. and Bloom, V. Development of and reasons for vocational choices of adolescents through the high school years. Journal of Educational Research, 1962, 56, 126-133.

186. Putnam, B. A. and Hansen, J. C. Relationship of self-concept and feminine role concept to vocational maturity in young women. Journal of Counseling Psychology, 1972, 19, 436-440.

187. Rand, L. M. Masculinity or femininity? Differentiating career oriented and homemaking oriented college freshmen women. Journal of Counseling Psychology, 1968, 15, 444-450.

188. Regan, C. A. Attitudes toward parents and achievement motivation of freshmen women in a selective urban university in relation to mother's career orientation. Dissertation Abstracts International, 1973, 33-A, 6738-6739.

189. Resnick, H., Fauble, M. L., and Osipow, S. H. Vocational crystallization and self-esteem in college students. Journal of Counseling Psychology, 1970, 17, 465-467.

190. Rezler, A. G. Characteristics of high school girls choosing traditional or pioneer vocations. Personnel and Guidance Journal, 1967, 45, 659-665.

191. Richardson, M. S. Self-concepts and role concepts in career orientation of college women. Journal of Counseling Psychology, 1975, 22, 122-126.

192. Riley, M., Johnson, M., and Boocock, S. Women's changing occupational role: A research report. The American Behavioral Scientist, 1963, 6, 33-37.

193. Rose, A. The adequacy of women's expectations for adult roles. Social Forces, 1951, 30, 69-77.

194. Rosenkrantz, P. S., Vogel, S. R., Bee, H., Broverman, I. K., and Broverman, D. M. Sex-role stereotypes and self-concepts in college students. Journal of Consulting and Clinical Psychology, 1968, 32, 287-295.

195. Rossi, A. S. Barriers to the career choice of engineering, medicine, or science among American women. In J. A. Mattfield and C. G. VanAken, eds., Women and the scientific professions: The M.I.T. symposium on American women in science and engineering. Cambridge, Mass: The M.I.T. Press, 1965. (a)

196. Rossi, A. S. Naming children in middle-class families. American Sociological Review, 1965, 30, 499-513. (b)

197. Rossi, A. S. Women in science: Why so few. Science, 1965, 148, 1196-1202. (c)

198. Rychlak, J. F. and Legerski, A. T. A sociocultural theory of appropriate sexual role identification and level of personal adjustment. Journal of Personality, 1967, 35, 31-49.

199. Ryckman, R. M., Martens, J. L., Rodda, W. C., and Sherman, M. F. Locus of control and attitudes toward Women's Liberation in a college population. Journal of Social Psychology, 1972, 87, 157-158.

200. Schiffler, R. J. Demographic and social factors in women's work lives. In S. H. Osipow, ed., Emerging woman: Career analysis and outlooks. Columbus, Ohio: Charles Merrill, 1975.

201. Schissel, R. F. Development of a career orientation scale for women. Journal of Counseling Psychology, 1968, 15, 257-262.

202. Schlossberg, N. K. and Goodman, J. A. Woman's place: Children's sex stereotyping of occupations. Vocational Guidance Quarterly, 1972, 20, 266-270.

203. Schuck, R. F. Attitudes of guidance counselors in Western Pennsylvania high schools toward medicine as a career choice for women. Pittsburg University, Pennslyvania Division of Research in Medical Education, 1974, ERIC ED 103 728.

204. Sedney, M. A. and Turner, B. F. Test of causal sequences in two models for the development of career orientation in women. Journal of Vocational Behavior, 1975, 6, 281-291.

205. Seward, G. H. Cultural conflict and the feminine role: An experimental study. Journal of Social Psychology, 1945, 22, 177-194.

206. Shapiro, B. A. Effects of race and sex role stereotyping on acceptance of and learning from occupational role models. Dissertation Abstracts International, 1973, 33-A, 7022.

207 Sharp, L. J. and Nye, F. I. Maternal mental health. In F. I. Nye and L. W. Hoffman, eds., The employed mother in America. Chicago: Rand McNally, 1963.

208. Shepard, W. O. and Hess, D. T. Attitudes in four age groups toward sex role division in adult occupations and activities. Journal of Vocational Behavior, 1975, 6, 27-39.

209 Siegel, A. and Curtis, E. Family correlates of orientation toward future employment among college women. Journal of Educational Psychology, 1963, 54, 33-37.

210 Siegel, A., Stolz, L. M., Hitchcock, E. A., and Adamson, J. Dependence and independence in children. In F. I. Nye and L. W. Hoffman, eds., The employed mother in America. Chicago: Rand McNally, 1963.

211. Siegel, C. L. F. Sex differences in the occupational choices of second graders. Journal of Vocational Behavior, 1973, 3, 15-19.

212. Silber, E. and Tippet, J. S. Self-esteem; clinical assessment and measurement validation. Psychological Reports, 1965, 16, 1017.

213. Simon, R. J., Clark, S. M., and Galway, K. The woman Ph.D.: A recent profile. Social Problems, 1967, 15, 221-236.

214. Simpson, R. L. and Simpson, I. H. Occupational choice among career oriented college women. Marriage and Family Living, 1961, 23, 377-383.

215. Smith, H. C. An investigation of the attitudes of adolescent girls toward combining marriage, motherhood, and a career. Dissertation Abstracts International, 1969, 29-A, 3883.

216. [illegible]el, M. G. Commitment to work. In F. I. Nye and L. W. Hoffman, eds., The employed mother in America. Chicago: Rand McNally, 1963.

217. Standley, K. and Soule, B. Women in male-dominated professions: Contrasts in their personal and vocational histories. Journal of Vocational Behavior, 1974, 4, 245-258.

218. Stein, A. H. and Bailey, M. M. The socialization of achievement orientation in females. Psychological Bulletin, 1973, 80, 345-366.

219. Stein, R. F. The student nurse: A study of needs, roles, and conflicts, Parts One and Two. Nursing Research, 1969, 18, 308-315; 433-440.

220. Stoloff, C. Who joins Women's Liberation? Psychiatry, 1973, 36, 325-340.

221. Straus, M. A., Sewell, W. H., and Haller, A. O. Social status and educational and occupational aspiration. In R. M. Roth, D. B. Hershenson, and T. Hilliard, eds., The psychology of vocational development. Boston: Allyn and Bacon, 1970.

222. Strober, M. H. Women economists: Career aspirations, education, and training. American Economic Review, 1975, 65, 92-99.

223. Strutz, S. A. Career-homemaking orientation: A unitary dimension? Dissertation Abstracts International, 1972, 32-B, 4196.

224. Sundheim, B. J. M. The relationships among n achievement and n affiliation, sex-role concepts, academic grades, and curricular choice. Dissertation Abstracts, 1963, 23-A, 3471.

225. Tangri, S. S. Occupational aspirations and experiences of college women. Paper presented at the American Psychological Association annual convention, Washington, D.C., 1971.

226. Tangri, S. S. Determinants of occupational role innovation among college women. Journal of Social Issues, 1972, 28, 177-199.

227. Tavris, C. A. The unliberated liberals: Attitudes toward the issues of Women's Liberation. Dissertation Abstracts International, 1972, 32-A, 6542.

228. Tavris, C. A. Who likes Women's Liberation and why: The case of the unliberated liberals. Journal of Social Issues, 1973, 29, 175-198.

229. Terman, L. M. and Oden, M. H. The gifted child grows up. Stanford: Stanford University Press, 1947.

230. Tidball, M. E. Perspective on academic women and affirmative action. Educational Record, 1973, 54, 130-135.

231. Tinsley, D. E. J. Characteristics of women with different patterns of career orientation. Dissertation Abstracts International, 1972, 33-B, 2797.

232. Tucker, B. Z. Feminine sex-role and occupational choice: A study of self and intergroup perceptions of three groups of women. Dissertation Abstracts International, 1971, 31-A, 5783-5784.

233. Turner, B. F. and McCaffrey, J. H. Socialization and career orientation among black and white college women. Journal of Vocational Behavior, 1974, 5, 307-319.

234. Turner, C. B. and Turner, B. F. Perception of the Occupational opportunity structure, socialization to acheivement and career orientation as related to sex and race. Proceedings of the American Psychological Association annual convention, 1971.

235. Turner, R. H. Some aspects of women's ambition. American Journal of Sociology, 1964, 70, 271-285.

236. Tyler, L. E. Development of career interest in girls. Genetic Psychology Monographs, 1964, 70, 203-212.

237. Useem, R. H. Changing cultural concepts of women's lives. Journal of the National Association of Women Deans and Counselors, 1969, 24, 29-34.

238. Valentine, D., Ellinger, L. and Williams, M. Sex-role attitudes and career choices of male and female graduate students. Vocational Guidance Quarterly, 1975, 24, 48-53.

239. Veres, H. C. and Moore, K. M. Career innovative and non-innovative women in the two-year college: Implications for counseling. State University of New York, Ithica, 1974, ERIC ED 104 474.

240. Vetter, L. and Lewis, E. C. Some correlates of homemaking vs. career preference among college home economics students. Personnel and Guidance Journal, 1964, 42, 593-598.

241. Vogel, S. R., Broverman, I. K., Broverman, D. M., Clarkson, F. E., and Rosenkrantz, P. S. Maternal employment and perception of sex roles among college students. Developmental Psychology, 1970, 3, 384-391.

242. Vondracek, S. I. and Kirchner, E. P. Vocational development in early childhood: An examination of young children's expressions of vocational aspirations. Journal of Vocational Behavior, 1974, 5, 251-260.

243. Waxman, H. Interests and values of career and homemaking oriented women. Personnel and Guidance Journal, 1966, 44, 794-801.

244. Waldman, E. Marital and family characteristics of workers, March 1966. Special Labor Force Report No. 80. Monthly Labor Review, April 1967, Bureau of Labor Statistics.

245. Watley, D. L. and Kaplan, R. Career or marriage? Aspirations and achievements of able young women. Journal of Vocational Behavior, 1974, 1, 29-43.

246. Weil, M. W. A study of the factors affecting the role and role expectations of women participating or planning to participate in the labor force. Dissertation Abstracts International, 1966, 27-A, 1135.

247. Werts, C. E. Social class and career choice of college freshmen. National Merit Scholarship Corporation Research Reports 1, 1965, No. 8.

248. Werts, C. E. A comparison of male vs. female college attendance probabilities. Sociology of Education, 1968, 41, 103-110.

249. White, B. J. The relationship of self-concept and parental identification to women's vocational interests. Journal of Counseling Psychology, 1959, 6, 202-206.

250. White, K. Social background variables related to career commitment of women teachers. Personnel and Guidance Journal, 1967, 45, 648-652.

251. Williams, J. H. Sexual role identification and personality functioning in girls: A theory revisited. Journal of Personality, 1972, 41, 1-9.

252. Willmarth, J. G. Factors affecting the vocational choice of women of different ages selecting clerical and secretarial occupations. Dissertation Abstracts International, 1969, 30-A, 991.

253. Wilson, K. M. Black students entering college research center cneter colleges: Their characteristics and their first year academic performance. Research Memorandum 69-1, College Research Center, Vassar College, Poughkeepsie, N. Y., 1969.

254. Wolfe, H. B. An analysis of the work values of women: Implications for counseling. Journal of the National Association of College Deans and Counselors, 1969, 32, 13-18.

255. Wolkon, K. A. Pioneer vs. traditional: Two distinct vocational patterns of college alumnae. Journal of Vocational Behavior, 1972, 2, 275-282.

256. Zissis, C. A study of the life planning of 550 freshmen women at Purdue University. Journal of the National Association of College Deans and Counselors, 1964, 27, 153-159.