A 1973-1984 cohort comparison of college students' life plans and career aspirations.

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A 1973-1984 COHORT COMPARISON OF COLLEGE STUDENTS' LIFE PLANS AND CAREER ASPIRATIONS

A Thesis Presented
by
MIRIAM A. DEFANT

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

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Psychology
A 1973-1984 COHORT COMPARISON OF COLLEGE
STUDENTS' LIFE PLANS AND CAREER
ASPIRATIONS

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DEDICATION

To my parents, Michael and Geraldine DeFant, whose love and hope have sustained me over these past three years, and especially to my mother, whose wisdom has opened my eyes to the vision of a future in which both women and men can freely fulfill their productive and nurturant capabilities.
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CHAPTER I
INTRODUCTION

It should come as no surprise that social change goes at a snail’s pace in the absence of catastrophes and revolutions. Yet gradual changes may not always be sufficient when rapid and significant changes are needed to remedy social inequalities and injustices. In such cases, it is difficult to know whether the focus of initial reforms should be aimed at attitudes or social institutions. Social arrangements are maintained homeostatically by the complex interaction of political hierarchies, social structure, resource distribution, cultural traditions, and a myriad of other often intangible factors. Lieberson and Fuguitt (1970) illustrated this case in their demonstration for the case of racial inequality, which showed that even the overnight elimination of all overt occupational discrimination against minorities would not alter their socio-economic status for years to come because of the enduring influence of past inequities. Clearly, the handicaps imposed upon minority groups by prejudice and lack of resources are subtle and not easily overcome.
This is no less true of women’s status in our society. Women, while being a statistical majority, have nevertheless suffered many of the same economic and social hardships as have certain ethnic minorities. One subgroup in the most recent Women’s Movement\(^1\) has attempted to enhance women’s opportunities and political status through what might be regarded as a Liberal, as opposed to Radical, strategy of social change (Kahn-Hut, Daniels & Colvard, 1982). Namely, Liberal Feminist ideology has focused upon women’s exclusion from the paid labor force as the key to their social inequality and a primary goal of the Women’s Movement has been to increase women’s equal participation in the labor market without questioning the fundamental values that make participation so desirable in our society (Deckard, 1979). It must also be mentioned that such change efforts have by and large focused upon the actions and choices of individual women in their private lives and as such have not required collective mobilization directed at changing major cultural and social institutions. Efforts directed at this level, however, have encountered various obstacles. Occupational discrimination and segregation of women persist despite improvements over

1. The most recent women’s movement of the late 1960’s and the 1970’s will be referred to in capitals as the Women’s Movement to distinguish it from earlier political movements.
the past two decades (U.S. Department of Labor, 1983) and many gender role\textsuperscript{2} stereotypes about women continue to affect women’s status despite the consciousness-raising efforts of the Women’s Movement.

While the inequalities evident in the labor market are certainly worthy of redress, Harmon (1981) and others have pointed out that this rather simple formulation of the problem belies more complex psychological and attitudinal issues. For example, Chodorow (1978) has argued that the social organization of family and work in our society creates a motivation on the part of women to be mothers, a motivation which is more powerful and enduring than mere ideological indoctrination. If this thesis is correct, then what appears to be attitudinal resistance to change may in reality be an expression of needs and preferences not identified by Liberal Feminist ideology.

The foregoing suggests that political change must include a self-correcting process, aiming to modify both cultural and political institutions, while also modifying its own aims continually to better reflect the true needs of the social actors involved. A dialectical approach

\\textsuperscript{2} For the purposes of the present study, the terms gender roles and sex roles will be used interchangeably. Gender roles, however, will be given preference since it highlights the social, as opposed to the biological, dimensions of behavior being investigated.
requires an ongoing analysis of the social context and of the actors involved so that the ideology of change can be consonant with their world view. Such an analysis must be regarded with some caution since the stated preferences of a social group may either reflect their own authentic feelings or else the "false ideology" of the dominant, though oppressive, social order. Still, it is potentially useful to examine the changing nature of gender role attitudes and life plans.

For the purpose of the present study, societal change is being defined as actual percentage differences in attitudes and behaviors between two time cohorts. Specifically, the present study examined changes between 1973 and 1984 in the career aspirations and gender role attitudes of white college students. The goal of this investigation was both to reveal the extent of change among this limited subpopulation and also to illuminate some of the complex issues involved in young adults' life plans.

Socio-historical Context of Women’s Career Involvement

The larger socio-historical context of gender inequality within which the present study is situated is common knowledge at this point, but brief comment is
still warranted. Huber (1982) has pointed out that industrial and post-industrial society is in larger part responsible for creating gender roles which separate work and family life. This separation became institutionalized with the rise of industrial capitalism in the West during the 19th century when labor was extracted from home-based production in order to supply factory production. During this era, women's productive capabilities in the work place came to be devalued and subordinated to their mothering and homemaking roles in the home. Men's roles, conversely, were almost exclusively defined in capitalist society in terms of status and worth in the labor market. Since their traditional role responsibilities included the financial support of their families without actual childcare responsibilities, men's social status has come to be relatively independent of their family life.

Chodorow (1978), Gilligan (1982), and others have argued that this gender-related separation of work and family results in profound psychological and attitudinal differences among men and women. Chodorow suggested that both genders develop certain characterological proclivities and limitations because mothering is an almost exclusively feminine function in our society. Namely, female children are thought to develop strong
affectional and identificatory ties with their mothers as they simultaneously develop a gender identity as caretakers. This results in their adult sense of self being embedded within a context of close personal relationships. It also results in women's greater sense of dependency and difficulty with separation in intimate relationships. Male children, in contrast, are forced to differentiate themselves from their mothers at an early age in order to develop a male gender identity. This identification process, however, is complicated since there are few available male role models in the home. For males, this process of identification with a mostly absent father results in males' greater independence, but it also leads them to have a more distant, less intimate sense of being in relationships. Gilligan (1982) has extended this formulation to encompass moral development, showing in a series of studies that women and men differ in the manner in which they evaluate and resolve moral conflicts. Women tend to rely more heavily on affective relationships to resolve moral dilemmas, while men are more apt to resort to abstract principles of justice.

The theory of mothering developed here suggests in part that there is an interaction between the arrangement of the social structure and the development of personal motivations and preferences. Women's preferences for
traditional mothering roles may reflect both an externally-imposed social status and also an internally-motivated striving. Chodorow emphasized, however, that the strict division of social and psychological roles imposed by the arrangement of family and work life is both arbitrary and deleterious at this point. Both genders are unnecessarily excluded from potentially gratifying spheres of activity because of their socialization. In their personality development as well, both men and women are precluded from developing characteristics and capacities which are commonly associated with one gender or the other.

In contemporary society, wives and mothers who also work outside the home have been expected to manage their dual roles as homemakers and labor force participants with little assistance. Women have accomplished this in various ways including delaying marriage and childrearing, working only intermittently, choosing non-demanding occupations, and delegating certain family responsibilities to childcare workers and institutions. All of these strategies, however, have placed the burden of accommodation upon individual women, while the larger social system continued to make multiple and conflicting demands upon them. This mode of individual action,
moreover, has typically failed to address the larger social issue of women’s status in the work world.

Movements aimed at changing women’s economic and social status have been a continual feature of the American political scene for the past 150 years. The most recent Women’s Movement developed in the mid-1960s as an offshoot of the anti-war and civil rights movements of that era. As the Women’s Movement has developed in the past 20 years, three distinct ideological approaches to the issue have emerged. These perspectives can be simplistically described as Radical, Socialist, and Liberal Feminism (Deckard, 1979; Neiva and Gutek, 1981; Kahn-Hut, Daniels & Colvard, 1982).

Of these three views, only one -- Liberal Feminism -- has proven to have widespread mass appeal to both men and women. This approach developed out of national women’s organizations like the National Organization of Women (N.O.W) and the Women’s Equity Action League (W.E.A.L.), which have pushed for enforcement of the sex provisions of state and federal laws such as the 1964 Civil Rights Act and the subsequent 1972 Title IX Amendment, women’s legal rights to equal employment opportunities. Liberal Feminist ideology has also focused on the importance of increasing women’s
representation in high-status positions in politics and the work force.

In contrast to this approach of working for change within the status quo structure, Radical and Socialist Feminism call for a more fundamental revolution in values and social organization. Radical Feminism views women as an oppressed class which is kept down by a male-dominated culture and society. Radical Feminism's goal is to eliminate gender distinctions on a personal as well as political level through a kind of cultural revolution. Socialist Feminism, on the other hand, links women's oppression to the more pervasive forms of oppression which socialist theory associates with capitalist society. From this perspective, economic inequalities based upon gender can only be addressed within the context of a more general socialist revolution.

As is evident from this thumbnail sketch, these different ideological strands within the Women's Movement have developed very different formulations of women's problems and different strategies for change. Liberal Feminism has perhaps had the broadest impact upon contemporary society because it has focused on the changing nature of women's work force participation. The present discussion will focus on women's work involvement because this phenomenon is such a critical
component of women's overall social and economic status as it is defined by Liberal Feminism.

The preceding discussion of gender roles and feminism points to the social reality underlying the Women's Movement's development over the past two decades. Besides having deleterious psychological and interpersonal effects, gender inequalities have also produced profound economic disparities among women and men. Despite the work proscription entailed by traditional feminine roles, women in our society choose to work in large numbers out of economic necessity and personal preference. In fact, 48 million women, or 53% of all women who are 16 years old or older worked outside the home in the United States in 1982 (U.S. Department of Labor, 1983). In that year, women comprised 43% of the civilian labor force. Despite the fact that so many women work, they are still placed at a profound economic disadvantage. In 1981, for example, 23% of the 5.9 million female heads of households were below the poverty line (U.S. Department of Labor, 1983).

The economic oppression of women can be broken down into two areas: unequal occupational distribution and unequal earnings. For a complex set of reasons, women have always tended to work in a limited number of "traditionally feminine" occupations. These occupations
include various clerical and service jobs which tend to be low paying and low status. "Pink collar ghettos" can be regarded as the result of persistent discrimination in hiring practices and of self-segregation. Women have at times opted for these often routine and unrewarding jobs because they required little previous training and could be intermittently exited and re-entered as family responsibilities permitted. These gender-segregated occupational categories have persisted for decades despite various legislative attempts to minimize discrimination. Presently, 55% of all working women fall into the two work categories mentioned above (U.S. Department of Labor, 1983). While men tend to be relatively evenly dispersed among the array of possible blue and white collar jobs, 36.4% of all working women are employed in only 10 occupations: secretary, bookkeeper, sales clerk, cashier, waitress, registered nurse, nursing aide, elementary school teacher, private household worker, and typist.

In the past decade, between 1972 and 1981, the proportion of women in clerical positions did not change according to the U.S. Department of Labor's census data (1983). The percentage of females employed as professionals and technical workers increased slightly from 14.5% in 1972 to 17.0% in 1981. There also was an
increase in the proportion of female administrators and managers, from 4.6% to 7.4%. Despite the influx of women into non-traditional occupations and the changes in hiring practices brought about by the Women's Movement, these changes must be regarded as relatively small given the fact that women continue to be concentrated in a few low-paying occupations (U.S. Department of Labor, 1983).

Wage inequities also account for a great deal of women's lower socioeconomic status. Despite small changes in the occupational distribution of women in the 1970s, there has been no change in the earning differential between women and men (U.S. Department of Labor, 1983). In fact, this earnings gap has actually increased in the past two decades. In 1981, the median earnings of fully-employed men was $20,260. Women's median earnings for that year was $12,001, or 59% of the median for men. This same ratio in 1956 was 63%, suggesting that the earnings gap for women is increasing despite the fact that more women are working now. A number of factors must be taken into account to explain this inequity. Clearly, age, training, education, job tenure, seniority, discontinuity in work experience, and type of work performed can all affect women's earnings; but according to the U.S. Department of Labor Women's Bureau, even when these issues are taken into account,
gender discrimination remains the largest single influence.

While there have been only minor improvements in the economic status of women over the past decade, there is some indication that the Women's Movement has had a definite effect upon gender role attitudes. Roper and Labeff (1977) compared gender role attitudes reflected in questionnaire data collected from college students in 1934 and 1974. The data suggested that females were more liberal than males in both 1934 and 1974, and that the 1974 students were more liberal than the 1934 students. In both times and for both genders, greater liberalism was noted in attitudes about economic and legal-political issues than attitudes about domestic and conduct-social status issues. The study also suggested that males and females were more similar in their attitudes in 1974 than in 1934. In another study, Mason and Bumpass (1980) examined the gender role attitudes of ever-married women who were involved in the 1970 National Fertility Study. They found that while almost all of these women advocated equal pay for women, a majority also advocated a traditional division of labor and believed that maternal employment hurts preschool-age children. Both of these studies suggested that while some gender role attitudes have become more liberal over time, certain attitudes
about childrearing and domestic affairs may be less amenable to rapid change.

Despite these conclusions, other studies have also indicated that women, in particular, are becoming less traditional in their views of acceptable lifestyle options. Cook, West and Hammer (1982) compared attitudes toward parenting among samples of female college students in 1972 and 1979. They found that 1979 women desired fewer children, were more accepting of non-parenting decisions, and expressed more uncertainty about desire for parenting as a factor in mate selection. Ferrell, Tolone and Walsh (1977) also noted cohort change in the permissiveness of college students' attitudes about sexual behavior between 1967 and 1974.

Women's Occupational Aspirations and Family Plans

Women's occupational choices have been of particular interest to educators and career counselors hoping to enhance women's economic status by encouraging them to pursue careers in non-traditional fields (Fogarty, Rapaport and Rapaport, 1971; Nieva and Gutek, 1981; Tittle, 1981). A large body of research has developed in the past decade which tried to tease out the various factors influencing the traditionality of women's life
plans. In general, occupational choice appears to be influenced by an interplay of personal preferences, aptitudes, opportunities, economic contingencies, and social expectations.

The factors influencing occupational and career choice for men and women have been found to be different (Angrist and Almquist, 1975; Angrist, 1974; Katz, 1979; Tittle, 1981). In general, careers may be distinguished from occupations by virtue of the amount of effort and time which must be devoted to their development. Occupational selection for men may be simplistically thought of as a process of matching individual preferences and abilities with occupational characteristics. For men, the choice between a career and an occupation is relatively uncomplicated in that they receive ample support and encouragement for pursuing careers. Career commitment in women, however, runs counter to traditional role expectations. Hence, women's occupational choices appear to have more complex determinants than those of men. For women, the choice of an occupation typically entails a resolution of value conflicts and the negotiation of multiple roles (Peterson-Hardt and Burlin, 1979). Angrist and Almquist (1975) argued that women resolve these various conflicts by remaining flexible and by subordinating occupational
aspirations to family plans. They also hypothesized that this orientation hinders women’s career development and achievement. The findings of Angrist and Almquist’s longitudinal study of college women’s career aspirations in the mid to late 1960’s indicated that women tend to choose occupations which are congruent with their broader lifestyle preferences, usually including both marriage and childrearing. It follows that women make their choices contingent upon the compatibility of occupations with a combined work-family lifestyle.

Burroughs and her colleagues (Burroughs, 1981; Burroughs, Turner and Turner, 1984) referred to this kind of contingency planning around familial priorities as Sex-Role Contingency Orientation (SRCO) and they investigated its influence upon college women’s career aspirations. They hypothesized that women with a high sex-role contingency orientation would have occupational aspirations which reflected an explicit primary commitment to childrearing and family responsibilities. They also suggested that women with only intermediate levels of SRCO would be somewhat less explicit about their contingency planning and might manifest it in the form of vague or uncertain occupational aspirations. In an interview study involving 93 white female college students, Burroughs found 47% of their sample to be
highly contingent and another 24% to be moderately contingent (see Appendix A for the SRCO coding scheme used).

Peterson-Hardt and Burlin (1979) also noted something akin to SRCO in an interview study of first-year graduate students in which subjects were asked about their career and family plans and their perceptions of familial and occupational roles. The found that their female subjects placed a lower value on high-status professional roles and instead seemed to prefer family roles and lower professional status. The authors argued that women may achieve less professionally because they fundamentally value career achievement less than men. This focus suggests that women may feel an affinity for family which overrides their desire to pursue a career as a lifestyle.

This formulation may be compatible with Chodorow's (1978) theory of how women are socialized early in their lives to define themselves in terms of mothering. One would expect that if women's sense of self is linked to the giving of care in relationships, then their attraction to mothering might not diminish with increases in opportunities and feminist awareness. One might also expect that women's values and perceived needs might change if changes occurred in the organization of family
life and socialization practices. It should be noted, however, that Peterson-Hardt and Burlin arrived at only one interpretation of these data. A different punctuation of cause and effect in this area might lead one to conclude that these women’s values were the result of perceived external barriers to career achievements rather than the result of internal needs.

Other studies have also lent support for the notion that women approach occupational and career planning with a contingency orientation. Studies of gender role ideology (Roper and Labeff, 1977; Mason and Bumpass, 1980) have suggested that women’s attitudes about feminism are not unidimensional when it comes to combining childrearing with an occupation. Women who have liberal attitudes about occupational segregation by gender may still have relatively traditional notions about the psychological needs of young children and the necessity for mothers of young children to stay at home.

Finally, Greenglass and Devins (1982) interviewed white college women and found that 85% of their sample wanted to combine a career with marriage and children. They also found, however, that only 10% of their sample expected to work fulltime with preschool-age children and another 33% expected only to work parttime. The remaining 37% indicated they would not work at all while
their children were young. When asked how they expected
to divide their time between their families and careers,
50% indicated that they would divide their time equally
and another 36% indicated that they would devote more
time to their families. Only 3% placed their careers
before their families in terms of expected time
commitments.

All of the studies mentioned above seem to suggest
women's life plans are contingent upon their primary
commitment to family roles. This commitment, one might
add, is one which appears to actively impinge upon career
aspirations and occupational involvement in a number of
ways.

The specific manner in which SRCO may shape women's
career and work choices can take different forms. On the
one hand, Huber (1982) and others have argued that women
may willingly segregate themselves into occupational
ghettos which require less commitment of time and effort
and which permit intermittent work disruptions due to
childrearing. Women who are high in SRCO may also choose
a less traditional occupation, but expect to achieve less
than what they might prefer because of the competing
demands of family life. In either of these situations,
SRCO will be most apparent in the form of discrepancies
between occupational preferences and expectations. One would expect that highly contingent women would also display a higher incidence of OP/OE discrepancies.

Turner and McAffrey (1974) pointed out that OE is more reliable than OP as a predictor of ultimate occupational behavior, but OP/OE discrepancies are also of interest since they may reveal career choice contingencies and perceived obstacles to desired goals. In their study of female college freshmen in 1970, they found that 53% of their sample of white women expected to be homemakers and only 15% expected full-time paid employment in their futures. Interestingly, 47% had congruent aspirations and 40% anticipated some amount of career frustration. Only 13% actually preferred to work less than they expected. These findings are significant in that they demonstrate the extent of SRCO-related discrepancies between OP and OE at least at the time the study was conducted.

Burroughs et al. (1984) investigated the relationship between SRCO and OP/OE discrepancies among a sample of white college students interviewed in 1973. In their study, they regarded SRCO as antecedent to both OP

3. Occupational preferences and expectations will be referred to in this study as OP and OE, respectively. Discrepancies between the two will be referred to as OP/OE discrepancies. Similarly, degree preferences and expectations will be referred to as EP and EE.
and OE and as such it was considered to be a critical intervening variable in the case of discrepancies. Their results indicated a relationship between SRCO and sex-typed discrepancies or discrepancies in which the OE is a more traditional female occupation than the OP. Twenty-four percent of their subjects had OP/OE discrepancies in which they expected more traditional occupations than they preferred. In general, SRCO was found to be associated with both congruent aspirations in traditionally female occupations and with the sex-typed discrepancies noted above. SRCO was also found to be associated with locus of control in a unique manner. Subjects with high or intermediate SRCO were predominantly internal or external while those with low SRCO tended to be intermediate in locus of control. It may be that some contingent women are motivated by an internal force while others may be more acquiescent to the demands and preferences of others. In a related study of the sample, Burroughs (1981) found that in addition to the 24% of the sample with sex-typed OP/OE discrepancies, another 25% had simple discrepancies which were not overtly related to the sex-typing of the occupational choices.

Other studies have also suggested that college women tend toward gender role conflicts or discrepancies in
their occupational aspirations. While college women's career commitments may have increased over the past two decades, their family expectations and commitments do not appear to have changed a commensurate amount. In a study of white female college students in 1978, Zuckerman (1980) found her subjects to have non-traditional education and career goals, but relatively traditional marital and family plans. In terms of educational goals, 47% of Zuckerman's sample planned to get doctorates or professional degrees and another 45% planned to get master's degrees. When asked about their career preferences and expectations, 70% of the women indicated that they expected no discrepancies. While virtually all of the women in this sample stated that they wanted careers, 75% also indicated plans to both marry and to have children. The modal probable age for marriage was 25 and for a first child, 28. The really striking aspects of this study are the high proportion of congruent career aspirants and the general expectation of these young women that they can "have it all", that is, have both a high prestige career and a family at a relatively young age. While these convictions might be construed to reflect naivete on the part of these inexperienced young women, their aspirations may also reflect other cultural influences in their lives. For
example, these women's unwillingness to entertain compromises in their family plans may have been the result of their greater liberalism or greater optimism about future opportunities.

In light of the seeming incongruity between these subjects' career and family plans, two qualifying notes should be made about the methodology of this study. First, the sample included college freshmen and sophomores who have been shown in other studies (Angrist and Almquist, 1975) to differ significantly from seniors in their career aspirations and gender role attitudes. The young women in this study may have perceived their future plans as still relatively remote and, hence, they may not have felt pressured by realities and limitations. Second, the fact that some proportion of the subjects were recruited from Women's Studies courses opens up the possibility that the study oversampled highly career-oriented, non-traditional women.

The studies discussed above are noteworthy in that they illuminate the centrality of SRCO and OP/OE in women's career aspirations, but they have certain important limitations. Specifically, the studies reviewed thus far have been for the most part non-longitudinal, single-panel analyses. The difficulty
encountered with a review of these studies is that many of them were conducted at different times over the past two decades and yielded results at variance with one another. Comparisons across studies are made problematic by the methodological and sampling differences encountered. Studies of career aspirations, moreover, lack comparisons with actual behavioral outcomes and cannot be easily related to the patterns and norms of behavior among the larger societal population.

As noted earlier, gender roles and women’s occupational behavior are undergoing an historical transformation at the present and the apparent relationships among variables in these different studies may be quite ephemeral. Consequently, both longitudinal and time lag studies are needed to better evaluate the nature of secular trends in college students’ life plans. For the purpose of this discussion, a longitudinal study will be considered one which follows a single subject cohort over time. This methodology is limited by the fact that it confounds the effects of aging within the cohort and the effects of social and historical changes which influence all members of the society. For the sake of convenience, this kind of influence will be referred to as a period effect. Period effects can better be evaluated with a time lag design which compares two
groups of subjects of the same age at two different points in time. This method of cohort comparison eliminates the aging confound, but introduces a new complication -- the effects of cohort differences in socialization. While neither of these designs are capable of separately evaluating the contributions of aging, socialization, and period effects of women's career aspirations and family plans, both still add to the general knowledge of how these effects interact.

Several longitudinal studies have attempted to relate college seniors' life plans to their ultimate career, family and lifestyle choices (Angrist and Almquist, 1974; Almquist, Angrist and Mickelsen, 1980; Harmon, 1981; Betz, 1984).

Almquist et al. (1980) conducted a 7-year follow-up on a sample of white women whom they had interviewed in their senior year of college in 1968. Assuming that women's sex-role contingencies would lead to greater OP/OE discrepancies, the researchers were interested in whether their subjects were any less contingent several years after they had completed their college degrees. They hoped to evaluate the relationship between aspirations and later actual behavior. They found a significant increase in the liberalism of their subjects' gender role attitudes and an attendant increase in their commitment
to careers over the level anticipated during their senior year in college. The majority of these women had combined marriage and childrearing with work, although not all had pursued careers per se. In college, 60% of these women had preferred homemaking, thus suggesting a significant increase in their work commitment over time. Seven years after college, these women were classified into three categories: careerists (50%), workers (27%), and familists (23%). The overall trend noted in this study was a significant increase in the emphasis placed upon work by these women and a decrease in their gender role traditionality over time. While more of the alumni than the college seniors wanted to combine careers with the rearing of preschool-age children, there was also support for the contention that women are still sex-role contingent. While 80% of these women had achieved their current marital goals and 74% their educational goals, only 59% had current congruent work aspirations. The nature of the OP/OE discrepancy, however, was related more to the choice of occupation than to the amount of work involvement. In other words, when these women were asked seven years after college whether they currently expected to be doing what they preferred, the majority expected not to have the specific occupation they would like to. One might infer from these data that these
women exhibited a contingency orientation in terms of specific aspirations, but not in terms of overall work participation. Unfortunately, since this study did not compare men and women, it is not clear whether the above noted discrepancies were unique to women.

Harmon (1981) conducted a longitudinal study of college women six years after they began college in 1968. Her findings indicated that as of 1974, only 49% had completed college and 41% were no longer pursuing a college degree. Overall, 45% were working in their chosen career. While most of the subjects in 1974 planned to combine work and childrearing, 49% planned to work only intermittently throughout their lives and another 2% planned only minimal employment. Comparisons of these outcomes with responses in 1968, when the subjects were freshmen, showed nonsignificant differences. The data here suggested only a weak tendency for women during this time period to become more oriented towards work involvement. When asked to rank order the importance of family and career, 59% rated them as equal, 35% ranked family over career, and 10% ranked career over family. On the whole, the women in this study appeared relatively traditional and sex-role contingent. The findings of this study are particularly interesting in light of the fact that a majority of the
women in the sample expressed liberal gender role attitudes, were aware of occupational discrimination, and stated that they felt personally affected by the Women's Movement. Again, this pattern suggests that contingencies in personal life decisions may not be necessarily related to more general political attitudes of gender roles.

Comparisons between Harmon's study and others mentioned here must be made with some caution, however, for two reasons. First, the women in this follow-up cohort were much younger (mean age was 23.5 years) than in other studies and some of these patterns may be vulnerable to maturational influences. Second, the sample included freshmen who dropped out of college. These women must be considered different in their values from college graduates and would be better studied as a separate group.

Betz (1984) shed some light onto the parameters of women's career patterns in a ten-year follow-up study of 1968 college graduates. Betz attempted to classify women's workstyles along two dimensions: sex-typing of occupation and span or extent of work participation. She suggested that women can be high, moderate or low in career commitment and they may choose either traditional or pioneer occupations. This latter dimension was
determined by the percentage of women in the population who were already working in that occupation. Betz found that the preponderance of the women studied in 1979 fell into the high career commitment categories, with 36% engaged in high commitment-traditional careers and 24% engaged in high-commitment pioneer careers. In sum, 60% of the sample had been continuously employed since college and the rest had exhibited an intermittent workstyle characterized by repeated exits and reentries into the work force. This study suggested that women after college tended to be relatively career-committed but a substantial proportion still interrupted a career for childrearing. The results also suggested that even highly career-committed women were more likely to choose traditional occupations, suggesting that mothering may still have played an important role in their decision-making.

The foregoing review of longitudinal studies of college women's career aspirations and later achievements presents a somewhat confusing and inconsistent picture of women's career development. On the one hand, women appear to be becoming more career-committed, but on the other hand, their participation in their careers after college appears to be strongly tempered by their family priorities. Clearly, this pattern does not fit the
definition of careers borrowed from observations of men's behavior which distinguished a career from an occupation by the higher priority which a career is given relative to other roles and demands. Cohort comparisons which examine historical trends while controlling for within-panel maturational changes can be especially helpful in understanding this pattern of women's changing career aspirations.

Despite the apparent need for cohort comparisons, few such studies are available in the literature. In a cohort comparison of college women's marriage-role expectations in 1961, 1972 and 1978, Weaks and Gage (1984) found that expectations became more liberal over time along a number of dimensions, but those concerning homemaking and childcare changed very little. In another study involving female freshmen in 1969 and 1973, Parelius (1974) found that while overall interest in motherhood was high in both cohorts, there was a time difference in subjects' career interests. Specifically, although over half of the 1969 sample wanted to combine having a family and a career, a larger proportion (63%) indicated that preference in 1973. Also, of those women who did indicate such a desire in both times, a greater number in 1973 did not expect to interrupt their careers while raising children. Taken as a whole, these two
studies might suggest that while college women have become more career-oriented and more optimistic about their aspirations over time, their fundamental expectations about family responsibilities may not have changed so dramatically. Women may now just expect to manage both careers and families without compromising one or the other.

A different approach to assessing career and family commitments among college students was used by Fogarty, Rapaport and Rapaport (1971) in an extensive analysis of women's occupational behavior in Great Britain. The researchers assumed that life achievements will be found in those areas of one's life which are most salient. In order to assess the relative salience of different life areas (e.g., career, family, leisure), college students were given a list of such areas and asked to rank order which areas they expected to give them the greatest satisfaction. Not surprisingly, their data indicated that women tended to rank family as highly salient to them, while men tended to place greater emphasis on career as a source of satisfaction. This study has been replicated in the United States in a cohort comparison of college students in 1954 and 1974 (Goldsen, Rosenberg, Williams and Suchman, 1960; Farley, Brewer and Fine, 1977). This study indicated that the salience of leisure
and religion to men had increased over the twenty-year period, while the salience of career and family had dropped. For women, an increased interest in leisure and career and a decreased interest in family were noted. Regan and Roland (1982) conducted a similar cohort comparison of college students in 1970 and 1980 using the same methodology. Their findings suggested that the salience of career for women is increasing while that of family is decreasing such that both domains were equally salient to women in 1980. Men, however, showed a decreased interest in both career and family and an increased interest in leisure and recreational pursuits. Overall changes in both genders' career and leisure interests proved to be more significant than those changes in family interests, suggesting that the salience of family may be less amenable to change. These studies, while limited in their generalizability to actual behaviors, are significant in that they point out not only gender differences in role aspirations, but also possible secular changes in the sex-role contingencies of women.
General Questions

The foregoing discussion suggests a number of hypotheses about how gender role attitudes and behaviors of both sexes may have changed during the past decade. While the bulk of extant research in this area has focused upon women's career aspirations, the interdependency of women's and men's occupational and familial roles suggests that attention should also be paid to trends in the attitudes and behavior of men as well.

The sociodemographic data available on the changing pattern of adults' work and family commitments suggest that white college students should now have more liberal attitudes about women's roles than ten years ago. This assumption is supported by popular surveys which indicate that such changes have occurred among the general public. However, the bulk of change has been associated with the Women's Movement, suggesting that women have become more liberal than men with respect to gender role issues. Similarly, various social forces have resulted in recent increases in women's labor force participation and career commitment. It seems likely that young adults are aware of these changes and attribute them to a liberalization
within the occupational opportunity structure. Again, due to recent changes in the political orientation of women, it is expected that women will be more sensitive than men to gender inequities in employment and wages.

Furthermore, ample evidence suggests that college women’s life plans now reflect a stronger commitment to career development than ten years ago, even though actual women’s career performance still appears to be significantly affected by childrearing considerations. It is not clear to what extent college women are aware of the subtle and complicated demands which are still placed upon women with careers and families. If college women are indeed aware of these difficulties, it would be expected that their career aspirations would reflect some realistic contingencies which may not be related to adherence to a feminist or traditional ideology. For example, such women might allude to problems with career advancement and child care availability when they discuss their career plans. These kinds of contingencies may be more representative of intermediate SRCO than high SRCO, which indicates a stronger personal adherence to normative gender roles. Both types of SRCO, however, involve an attitude which subordinates women’s career contributions to their family responsibilities.
The presence of contingencies in career planning usually results in anticipated discrepancies between occupational preferences and expectations. The foregoing discussion suggests that women may not have changed their orientation towards contingency planning. The basic reality of women's discrepant aspirations is not expected to change dramatically since there have been few, if any, dramatic changes in the organization of work and family life. This issue becomes more clear when one considers, for example, what changes in the opportunity structure would be necessary to allow women in most fields to pursue career advancements with a part-time or intermittent workstyle while their children are young. It is possible that women's aspirations may have become even more discrepant with time since cultural changes may have increased preferences, while economic and political realities may continue to curtail expectations.

Hypotheses

The present study tests the following hypotheses:

H1: Time and gender are significantly related to sex-role attitudes.
H2: Time and gender are significantly related to perceived occupational discrimination against women.

H3: Time is significantly related to women’s contingency orientation in career aspirations (SRCO).

H4: Time is significantly related to discrepancies in women’s occupational and educational aspirations (OP/OE and EP/EE discrepancies).
CHAPTER II

METHOD

Subjects

Respondents belonged to one of two cohorts of undergraduates interviewed at the University of Massachusetts, Amherst, in either 1973 or 1984. The sampling methods for these cohorts were not entirely comparable and will, therefore, be described separately. Specified demographic data on these cohorts illustrating their comparability is provided in Chapter III.

1973 cohort. Respondents were recruited as participants in a longitudinal study which began in the summer of 1969, just prior to these students' entry into college. The study examined the relationships between race, sex, socioeconomic status, career aspirations, and perceptions of discrimination in the United States. Respondents were selected for the 1973 study if they had participated in one of the intervening follow-up studies in 1970 and 1972. Respondents were offered a small monetary remuneration for their participation in this
study. The cohort consisted of 120 white college students, including 93 females and 27 males.

1984 cohort. Respondents were recruited from undergraduate psychology courses. Because students with psychology majors are over-represented among these classes, active recruitment focused upon courses which were not part of the required curriculum for psychology majors. Respondents were offered extra credit in their courses in exchange for their participation. The cohort consisted of 103 white students, including 77 females and 26 males.

Procedure

1973 cohort. Each respondent was interviewed individually during the spring of his/her fourth year in college. Interviews were conducted in respondents' dormitory or home and lasted for about 1 1/2 hours. Interviews were conducted by same-sex interviewers who were either the principal investigators or undergraduate research assistants. Training for interviewers involved two half-day sessions to teach interviewing skills and to acquaint interviewers with the instruments. Role playing, video-taped feedback, and individual supervision were used.
1984 cohort. Subjects were individually interviewed during the spring of 1984. Interviews were conducted in a psychology laboratory at the University of Massachusetts and lasted about one-half hour. The interviews were conducted by same-sex interviewers, including the principal investigator and six undergraduate research assistants. Training for the research assistants closely approximated the procedure used in 1973, with the exception that video-taping was not used.

Instruments

1973 cohort. Demographic data were collected from interviews in 1969, 1970 and 1972. Other data were collected from structured interviews and self-administered questionnaires. Females only were asked how they planned to combine work and family in the future. The original instrument also included additional items which are not of interest in the present study.

1984 cohort. An abbreviated form of the earlier instrument was used which included items assessing demographic variables and the pertinent dependent variables. The interviews followed approximately the same sequence of questioning as the 1973 interviews.
Questions which were not asked of males in 1973 were similarly omitted from the interview schedules for male respondents in this cohort. See Appendix B for the complete interview schedule.

Hypotheses

The following explains how the instruments were used to test specific hypotheses.

Hypothesis 1. Two questionnaires were used to assess attitudes about women's roles in society. The first questionnaire (Lipman-Blumen, 1972) consisted of two sets of six statements about women's roles in the family and the work place. Respondents were asked to rate the first set, using a 7-point Likert scale, indicating how popular these statements were among most opposite-sex persons of their own age and education. This scale yielded a summary score, ranging from 6 to 42, of how liberal/conservative respondents believed their opposite-sex peers were. For the second part of this questionnaire, respondents were instructed to use the same scale to indicate their own reactions to the same six statements. Since these two scores were based upon the same numerical scale, it was possible to calculate a difference score to contrast self-attitudes with
perceptions of the opposite sex attitudes. The second questionnaire tapped attitudes about childrearing, sexuality, marriage, and achievement among women. This scale consisted of 27 agree-disagree items which yielded a summary score, ranging from 27 to 54. Some of these items (13-27, 29, 30 and 31) come from a questionnaire developed by Rossi (see Note 1). To update the scale, an additional nine items (28, 32-39) were included from a questionnaire developed by Huyck (see Note 2). Higher scores on this scale presumably reflect greater liberalism about gender roles. It should be noted that this scale is considerably more heterogeneous than the other scales. In addition to covering a broader domain of attitudes than the 6-item scales, this scale included items which were phrased inconsistently in such a way as to make some items sound more descriptive and others more prescriptive. See Table 1 for a comparison of the Alpha reliability coefficients for the two 6-item scales and the 27-item scale of gender-role attitudes.

**Hypothesis 2:** Perceptions of gender inequities in the occupational opportunity structure were assessed by a Discrimination Against Women Scale and by specific single items. For the Discrimination Scale, respondents were asked to estimate the amount of perceived discrimination against women in 21 occupations using a 3-point Likert
Table 1
Standardized Chronbach Alpha Reliability Coefficients

<table>
<thead>
<tr>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>Gender Role Attitudes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6-Item Opposite Sex</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All respondents</td>
<td>.365</td>
<td>.897</td>
<td>.861</td>
</tr>
<tr>
<td>Males</td>
<td>.821</td>
<td>.830</td>
<td>.852</td>
</tr>
<tr>
<td>Females</td>
<td>.865</td>
<td>.865</td>
<td>.848</td>
</tr>
<tr>
<td>6-Item Self</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Respondents</td>
<td>.842</td>
<td>.842</td>
<td>.829</td>
</tr>
<tr>
<td>Males</td>
<td>.869</td>
<td>.862</td>
<td>.880</td>
</tr>
<tr>
<td>Females</td>
<td>.795</td>
<td>.810</td>
<td>.709</td>
</tr>
<tr>
<td>27-Item Self</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All respondents</td>
<td>.791</td>
<td>.827</td>
<td>.725</td>
</tr>
<tr>
<td>Males</td>
<td>.862</td>
<td>.899</td>
<td>.732</td>
</tr>
<tr>
<td>Females</td>
<td>.716</td>
<td>.709</td>
<td>.735</td>
</tr>
<tr>
<td>Discrimination Scale</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All Respondents</td>
<td>.868</td>
<td>.875</td>
<td>.832</td>
</tr>
<tr>
<td>Males</td>
<td>.869</td>
<td>.888</td>
<td>.760</td>
</tr>
<tr>
<td>Females</td>
<td>.869</td>
<td>.873</td>
<td>.847</td>
</tr>
</tbody>
</table>
scale (see Appendix B). This scale was first used by Turner and Turner (1975) in a study of perceptions of occupational opportunities for blacks and women among college students. The 21 items included 17 relatively prestigious occupations used by Fichter (1966) in an earlier study of perceived discrimination and an additional 4 occupations (owner of small business, skilled blue collar trade, personal manager, postal worker) which were thought to be also relevant to the opportunity structure for blacks. Summary scores could range from 21 to 63, with a high score indicating greater perceived discrimination. See Table 1 for a reliability analysis of the Discrimination Scale.

Respondents were also asked whether or not they agreed with the following statements:

Women are an oppressed group in the United States.

I feel personally affected by sexism.

Hypothesis 3. Sex Role Contingency Orientation (SRCO) was scored for all females using a coding scheme devised by Burroughs (1981; see Appendix A). The rating scheme assessed SRCO on a 3-point scale from high to
Burroughs describes these scores in the following way:

High SRCO refers to attitudes and explanations for occupational choices which reflect a primary and explicit concern about marriage and family. A woman was assessed as demonstrating high SRCO if she expected an occupation because she believed it would be congruent with the demands of childrearing or her husband’s career ambition and/or his attitude toward his wife’s working. Intermediate SRCO was rated when a woman’s concern for the needs of family was implicit rather than explicit, i.e., when she referred to a lack of time and energy or a lack of adequate child care as the contingency which influenced her occupational expectations. A rating of no SRCO was assigned if a woman expected an occupation because of its intrinsic appeal to her regardless of the demands her career involvement might place on future family life, or if she referred to contingencies which are unrelated to sex-role
SRCO was scored using verbal responses to four interview items relating to occupational aspirations (13, 15, 17, and 35 of Appendix B). Most of the responses which identified SRCO were to item 17 which probed for the reasons for discrepancies in occupational aspirations. SRCO scores derived in this manner were compared with the respondents' work expectations indicated in item 35. Where differences were noted, scores were adjusted in the following manner. If a respondent made no reference to family-related contingencies during the open interviewing, but indicated an expectation in item 35 of less than steady full-time work, they were assigned an intermediate SRCO score. High SRCO scores were not assigned in this fashion because of the lack of explicit justification for such a score in the interview record. In cases in which a respondent expressed some level of SRCO during the interviewing, but endorsed a full-time work expectation in item 35, the SRCO score was based only upon the verbal response to item 17 which was thought to be the more valid measure of the construct.

For the 1973 cohort, interviewers only probed in item 17 when a discrepancy between preferences and
expectations was identified. This procedure resulted in 26 cases for which no explicit verbal statements about SRCO were available. SRCO scores for those cases were then inferred from the workstyle expectations indicated in item 35. Respondents in the 1984 cohort were probed for contingencies more consistently than those in 1973, and only 13 of the total of 77 generated interview records from which SRCO could not be directly coded. In those instances, SRCO was again inferred from the responses to item 35.

Item 35 was used to infer SRCO in the following manner. If no verbal statement was reported in item 17, respondents' SRCO scores were generated from their workstyle expectations. Expectations of 1, 2, or 3 were coded as high SRCO. Expectations of 4 or 5 were intermediate, and those greater than 5 were considered to be low in SRCO.

Pearson product-moment correlations of SRCO and item 35 were calculated to verify the validity of item 35's use in scoring SRCO. Workstyle expectations appeared to be highly correlated with SRCO for both of the time cohorts (1973: $r = .81$, $p < .001$; 1984: $r = .46$, $p < .001$).

To establish inter-rater reliability for SRCO scores for the 1973 cohort, 34 cases (28% of the total) were
given to a second rater. Exact agreement appeared in 91% of the 34 cases, indicating an acceptable level of inter-judge reliability. For the 1984 cohort, 20 cases (26% of the total) were given to a second rater. Exact agreement appeared in 94% of the 20 cases, again indicating an acceptable level of reliability.

Hypothesis 4. Occupational preferences and expectations were assessed with items 13-25 of the interview schedule (see Appendix B). These items covered both occupational and educational aspirations, and also the reasons for any discrepant aspirations. Interviewers were instructed to probe for specifics, including occupational titles, status and settings. This was particularly important since an anticipated discrepancy might conceivably consist only of a difference in work setting or job title. It should be noted that in some instances, 1984 interviewers probed directly about the role of family considerations in occupational aspirations. This probing was not consistent across interviewers, however, and it could not be controlled for in the coding of responses.

Female respondents who mentioned some kind of discrepancy in their career aspirations were identified as having a simple discrepancy. Although no written coding scheme was available for the 1973 data, the coding
of the two charts was considered to be generally comparable. For the 1984 cohort, simple discrepancies were coded in the following manner. Respondents were coded as discrepant if they indicated in their responses to items 13 and 15 any kind of substantial discrepancy between their occupational preferences and expectations. The probing involved with these items explored discrepancies along a number of dimensions, including job titles, job responsibilities, work settings, amount of work involvement, and subjectively perceived prestige of the work. Because of the lack of systematic probing, the amount of information about these dimensions varied as a function of differences among both respondents and interviewers. Coding for a simple discrepancy, therefore, was based upon a conglomeration of different kinds of information.

Generally, a respondent was coded as congruent if her occupational aspirations met all of the following criteria:

1. No discrepancy in occupational field.
2. No discrepancy in job title or duties.
3. No discrepancy in subjectively perceived prestige of occupation.
4. No discrepancy in the amount of work involvement (e.g., full-time vs. part-time).

Conversely, a respondent was coded as discrepant if she failed to meet any one of these criteria. Respondents were not coded as discrepant if they mentioned minor discrepancies which did not appear to significantly alter their aspirations. For example, a respondent who preferred to be a physician in private practice but expected to work in a hospital was coded as congruent. Similarly, a respondent who preferred to own a business, but expected a corporate position of comparable status, was also coded as congruent. If, however, the same respondent had stated that she expected a less prestigious position, she would have been coded as discrepant. For example, a respondent was coded as discrepant if she preferred to own a clothing retail store, but expected to be a store clerk. Respondents who preferred to work full-time, but expected to work part-time while their children were young, were coded as discrepant unless they specifically stated that they expected to work part-time for only very short periods of time (e.g., less than one year).

In addition to the simple discrepancies score, two other indices of discrepancies were developed.
Educational and workstyle aspirations were derived from items 20, 21 and 35. Workstyle aspirations are defined in this study as preferences and expectations for a particular kind of work involvement as opposed to a particular occupation. Figure 1 shows item 35 which was used to identify workstyle aspirations.
Fig. 1. Workstyle preferences and expectations.
35. WHICH OF THE FOLLOWING SITUATIONS DO YOU REALLY PREFER AND WHICH DO YOU REALISTICALLY EXPECT?

<table>
<thead>
<tr>
<th></th>
<th>I PREFER</th>
<th>I EXPECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>HOUSEWIFE ONLY</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>EMPLOYED ONLY BEFORE CHILDREN ARE BORN, THEN HOUSEWIFE</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>EMPLOYED BEFORE AND ONLY AFTER CHILDREN ARE GROWN</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>OCCASIONALLY EMPLOYED (EVERY NOW AND THEN) THROUGHOUT MARRIAGE AND CHILD-REARING</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>COMBINING MARRIAGE AND CHILD-REARING WITH STEADY PART-TIME WORK</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>COMBINING MARRIAGE AND CHILD-REARING WITH A FULL-TIME CAREER</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>MARRIAGE AND CAREER, WITHOUT CHILDREN</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>NOT MARRIED; CAREER ONLY</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>
CH A P T E R  I I I
RESULTS

Description of Time Cohorts

1973 cohort. This cohort consisted of 93 females and 27 males. Table 2 summarizes selected demographic characteristics of this cohort such as marital status. Table 3 shows the distribution of academic majors among these respondents. The majority of these respondents were in their senior year at the time of the interviews and were expecting to graduate that same year. As indicated in Table 3, the modal choice of major was education. It should be noted, however, that many of these respondents were actually majoring in Human Development, a social science program housed in the School of Education.

1984 cohort. This cohort consisted of 77 female and 26 male students. Tables 2 and 3 summarize selected demographic characteristics of the cohort and the distribution of majors in the groups. It should be noted that only 49.5% of these respondents were seniors at the time of the interviews and that 54.4% of them were either
Table 2
Summary of Cohort Demographic Characteristics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Time (n = 223)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1973</td>
</tr>
<tr>
<td>Marital Status</td>
<td></td>
</tr>
<tr>
<td>Single</td>
<td>83.3%</td>
</tr>
<tr>
<td>Engaged</td>
<td>10.0%</td>
</tr>
<tr>
<td>Married</td>
<td>6.7%</td>
</tr>
<tr>
<td>Number of Children Expected</td>
<td></td>
</tr>
<tr>
<td>One or less</td>
<td>18.6%</td>
</tr>
<tr>
<td>Two</td>
<td>52.1%</td>
</tr>
<tr>
<td>More than two</td>
<td>29.3%</td>
</tr>
<tr>
<td>Expects to Marry</td>
<td></td>
</tr>
<tr>
<td>Within next year</td>
<td>10.0%</td>
</tr>
<tr>
<td>1-2 Yrs after graduation</td>
<td>16.7%</td>
</tr>
<tr>
<td>3-4 Yrs after graduation</td>
<td>32.5%</td>
</tr>
<tr>
<td>5+ Yrs after graduation</td>
<td>28.3%</td>
</tr>
<tr>
<td>Possibly never</td>
<td>5.6%</td>
</tr>
<tr>
<td>Presently is a senior</td>
<td>96.7%</td>
</tr>
<tr>
<td>Expects to graduate in coming June</td>
<td>81.7%</td>
</tr>
<tr>
<td>Grade Point Average</td>
<td></td>
</tr>
<tr>
<td>3.5 or above</td>
<td>7.5%</td>
</tr>
<tr>
<td>3.49-2.50</td>
<td>80.0%</td>
</tr>
<tr>
<td>2.49 or below</td>
<td>12.5%</td>
</tr>
<tr>
<td>Median Age</td>
<td>Not available</td>
</tr>
<tr>
<td>Modal Age</td>
<td>Not available</td>
</tr>
</tbody>
</table>
Table 3
Chi-Square Summary of the Relationship Between Academic Majors and Time

<table>
<thead>
<tr>
<th>Major</th>
<th>1973</th>
<th>1984</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences</td>
<td>22.7%</td>
<td>51.5%</td>
</tr>
<tr>
<td></td>
<td>(27)</td>
<td>(53)</td>
</tr>
<tr>
<td>Humanities</td>
<td>12.6%</td>
<td>4.9%</td>
</tr>
<tr>
<td></td>
<td>(15)</td>
<td>(5)</td>
</tr>
<tr>
<td>Physical/Biological Sciences</td>
<td>15.2%</td>
<td>13.6%</td>
</tr>
<tr>
<td></td>
<td>(18)</td>
<td>(14)</td>
</tr>
<tr>
<td>Education, Physical Education</td>
<td>26.1%</td>
<td>2.9%</td>
</tr>
<tr>
<td></td>
<td>(31)</td>
<td>(3)</td>
</tr>
<tr>
<td>Professional (i.e., Engineering, Business, Nursing, Agriculture)</td>
<td>22.7%</td>
<td>24.3%</td>
</tr>
<tr>
<td></td>
<td>(27)</td>
<td>(25)</td>
</tr>
<tr>
<td>Other</td>
<td>.8%</td>
<td>2.9%</td>
</tr>
<tr>
<td></td>
<td>(1)</td>
<td>(3)</td>
</tr>
</tbody>
</table>

$\chi^2 = 37.13$, df = 5, $p = < .000$
social science or education majors. Five female students spontaneously described themselves as lesbians.

Comparison of Time Cohorts

Statistical contrasts of the variables discussed above were conducted in order to ascertain the homogeneity of the two time cohorts with respect to critical variables which might influence the testing of hypotheses. A chi-square analysis of the composition of the cohorts with respect to academic majors revealed no significant difference in the combined proportion of education and social science majors. Similarly, there was no difference among mean grade point averages of the two cohorts. There was a greater proportion of seniors in the 1973 cohort, but the 1984 median age was 21, thus suggesting little difference in the actual level of maturity in the two cohorts. In terms of marital status, the 1973 cohort had a significantly greater number of engaged and married students than did the 1984 cohort (corrected $\chi^2 = 4.49, df = 1, p < .03$). The cohorts did not differ either in the expected number of children or in the anticipated age of marriage. For both cohorts, the mean expected number of children was two and $2/3$ of
the respondents expected to marry at least three years after graduation.

A comparison of the social class backgrounds of the two cohorts was made using data on parental education and occupational status. Occupational status was rated using Warner et al.'s (1960) Revised Scale of Occupational Status (see Appendix C). Tables 4 and 5 summarize the data available on parental occupational and educational status, respectively. T-tests of mothers' and fathers' occupational status showed significant differences, with the 1984 cohort being more affluent than the 1973 cohort (see Table 4). A similar difference was found in parental educational status, as Table 5 indicates. A chi-square test of association found no cohort different in the proportion of mothers who were housewives. The proportion in 1973 was 35.3% and in 1984, it was 35.0%.

From this analysis, it appears that the major areas of difference between these two cohorts were choice of academic major, marital status, and social class background. While these differences may have been due to sampling errors, they may have also reflected historical changes among the white college student population in the 1980s. With respect to social class, data from the annual ACE surveys conducted nationwide with college freshmen (Timko, 1984) corroborate the finding that at
Table 4
Summary of Parental Occupational Status by Time

<table>
<thead>
<tr>
<th>Occupation Status(^a)</th>
<th>Mother(^b) 1973 (N=119)</th>
<th>Mother(^b) 1984 (N=103)</th>
<th>Father(^c) 1973 (N=116)</th>
<th>Father(^c) 1984 (N=103)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1.9%</td>
<td>3.9%</td>
<td>20.7%</td>
<td>32.0%</td>
</tr>
<tr>
<td>2</td>
<td>6.5%</td>
<td>15.5%</td>
<td>21.6%</td>
<td>24.3%</td>
</tr>
<tr>
<td>3</td>
<td>13.1%</td>
<td>22.3%</td>
<td>14.7%</td>
<td>16.5%</td>
</tr>
<tr>
<td>4</td>
<td>17.8%</td>
<td>12.6%</td>
<td>11.2%</td>
<td>9.7%</td>
</tr>
<tr>
<td>5</td>
<td>10.3%</td>
<td>6.8%</td>
<td>14.6%</td>
<td>14.6%</td>
</tr>
<tr>
<td>6</td>
<td>10.3%</td>
<td>3.9%</td>
<td>11.2%</td>
<td>1.9%</td>
</tr>
<tr>
<td>7</td>
<td>.9%</td>
<td>0.0%</td>
<td>6.0%</td>
<td>1.0%</td>
</tr>
<tr>
<td>Housewife</td>
<td>39.3%</td>
<td>35.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\(^a\)Occupational status levels are based on Warner et al.'s (1960) scale of Occupational Status (See Appendix C).

\(^b\)T-tests of group differences, using separate variance estimates, showed the 1984 cohorts' mothers had higher status occupations than the 1973 cohorts' mothers (t=2.54, df=127.21, p< .012).

\(^c\)T-tests of group differences, using separate variance estimates, showed the 1984 cohorts' fathers had higher status occupations than the 1973 cohorts' fathers (t=2.84, df=218.42, p< .005).
### Table 5
Summary of Parental Educational Status by Time

<table>
<thead>
<tr>
<th>Educational Status</th>
<th>Mother 1973 (N=120)</th>
<th>Mother 1984 (N=103)</th>
<th>Father 1973 (N=120)</th>
<th>Father 1984 (N=103)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate or Professional Degree</td>
<td>3.3%</td>
<td>13.6%</td>
<td>6.7%</td>
<td>34.0%</td>
</tr>
<tr>
<td>College Graduate</td>
<td>5.0%</td>
<td>17.5%</td>
<td>19.2%</td>
<td>20.4%</td>
</tr>
<tr>
<td>Some College</td>
<td>35.0%</td>
<td>27.2%</td>
<td>26.7%</td>
<td>17.5%</td>
</tr>
<tr>
<td>High School Graduate</td>
<td>32.5%</td>
<td>35.9%</td>
<td>20.0%</td>
<td>23.3%</td>
</tr>
<tr>
<td>9-11 Grade Completed</td>
<td>20.8%</td>
<td>3.9%</td>
<td>15.7%</td>
<td>2.9%</td>
</tr>
<tr>
<td>8th Grade or Less Completed</td>
<td>3.3%</td>
<td>1.9%</td>
<td>11.7%</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

χ² = 29.16  df = 5  p < .000  
χ² = 40.54  df = 5  p < .000
least parental educational levels have increased over the past decade. Keeping these differences in mind, however, the two time cohorts appear to have been comparable for the practical purposes of this study.

Hypothesis 1: Gender Role Attitudes by Time and Gender

Two-way analyses of variance were used to assess the presence of main and interaction effects for the two 6-item and the 27-item measures of gender-role attitudes. An analysis of variance was also conducted for the difference score of the summary scores of the two 6-item scales. Where interaction effects appeared, t-test analyses, using separate variance estimates, were used to evaluate the direction and meaning of the effects. T-test comparisons of individual items were also made.

The analysis of the 27-item scale yielded a statistically significant main effect for Gender ($F = 10.295$, d.f. = 1, $p < .002$) and a statistically non-significant effect for Time ($F = 3.647$, d.f. = 1, $p < .057$). A Gender x Time interactional tendency was also noted ($F = 2.941$, d.f. = 1, $p < .088$). A comparison of the group means indicated that females responded more liberally than males in both times ($\bar{X}_f = 22.529$, $\bar{X}_m = 20.698$, and the 1984 respondents responded slightly more
liberally than 1973 respondents. Figure 2 shows the mean responses to the 27-item scale by gender and time. Item 23 was deleted from the analysis because the entire 1984 cohort gave the liberal response to this item.

As noted in Table 1, the standardized Cronbach Alpha reliability coefficient for the 27-item scale was just below a criterion .80 level for all respondents and somewhat lower for the female respondents. The largest gender gap in the consistency of this scale was among the 1973 students. Tables 6 and 7 show the item-scale correlations for 1973 males and females, respectively. An attempt was made to interpret this lack of consistency using a factor analysis with varimax rotation. This analysis, however, was not successful in delineating any obviously meaningful subscales with higher reliability and it was not used in subsequent analyses.

In an effort to further refine the 27-item scale, individual items were deleted if their corrected item-scale correlation coefficients were less than .30. Using this criterion, the following items were excluded from the scale: 14, 16, 17, 18, 19, 26, 34, 35, 37, and 38. The Cronbach Alpha coefficient for this revised scale was .774, or slightly lower than the coefficient for the larger scale. Despite this, the individual items on the revised scale were, on the average, more highly
Fig. 2. Mean responses to 27-item gender role attitudes scale by gender and time.
Figure 2

Note: Higher scores denote greater liberalism.
Table 6
Item Scale Correlation Coefficients for the 27-Item Scale of Gender Role Attitudes
- Females Only

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale mean if item is deleted</th>
<th>Correlated item-scale correlation</th>
<th>Alpha if item is deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>47.67</td>
<td>.346</td>
<td>.687</td>
</tr>
<tr>
<td>2</td>
<td>47.63</td>
<td>.191</td>
<td>.699</td>
</tr>
<tr>
<td>3</td>
<td>47.68</td>
<td>.300</td>
<td>.691</td>
</tr>
<tr>
<td>4</td>
<td>48.21</td>
<td>.243</td>
<td>.697</td>
</tr>
<tr>
<td>5</td>
<td>47.69</td>
<td>.132</td>
<td>.705</td>
</tr>
<tr>
<td>6</td>
<td>47.55</td>
<td>.156</td>
<td>.701</td>
</tr>
<tr>
<td>7</td>
<td>48.09</td>
<td>.133</td>
<td>.709</td>
</tr>
<tr>
<td>8</td>
<td>47.60</td>
<td>.195</td>
<td>.699</td>
</tr>
<tr>
<td>9</td>
<td>47.88</td>
<td>.236</td>
<td>.698</td>
</tr>
<tr>
<td>10</td>
<td>47.68</td>
<td>.317</td>
<td>.689</td>
</tr>
<tr>
<td>11</td>
<td>47.53</td>
<td>.038</td>
<td>.705</td>
</tr>
<tr>
<td>12</td>
<td>47.71</td>
<td>.246</td>
<td>.695</td>
</tr>
<tr>
<td>13</td>
<td>47.82</td>
<td>.239</td>
<td>.697</td>
</tr>
<tr>
<td>14</td>
<td>47.55</td>
<td>.154</td>
<td>.701</td>
</tr>
<tr>
<td>15</td>
<td>47.68</td>
<td>.437</td>
<td>.679</td>
</tr>
<tr>
<td>16</td>
<td>47.58</td>
<td>.146</td>
<td>.701</td>
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<td>17</td>
<td>47.68</td>
<td>.369</td>
<td>.685</td>
</tr>
<tr>
<td>18</td>
<td>47.70</td>
<td>.378</td>
<td>.684</td>
</tr>
<tr>
<td>19</td>
<td>47.55</td>
<td>.283</td>
<td>.696</td>
</tr>
<tr>
<td>20</td>
<td>47.73</td>
<td>.349</td>
<td>.686</td>
</tr>
<tr>
<td>21</td>
<td>47.62</td>
<td>.484</td>
<td>.680</td>
</tr>
<tr>
<td>22</td>
<td>47.69</td>
<td>.175</td>
<td>.701</td>
</tr>
<tr>
<td>23</td>
<td>47.57</td>
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<td>.695</td>
</tr>
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<td>24</td>
<td>47.54</td>
<td>.250</td>
<td>.700</td>
</tr>
<tr>
<td>25</td>
<td>47.60</td>
<td>.153</td>
<td>.701</td>
</tr>
<tr>
<td>26</td>
<td>47.73</td>
<td>.089</td>
<td>.709</td>
</tr>
<tr>
<td>27</td>
<td>47.67</td>
<td>.268</td>
<td>.692</td>
</tr>
</tbody>
</table>
Table 7
Item-Scale Correlation Coefficients for the 27-item Scale of Gender Role Attitudes
-- Males Only

<table>
<thead>
<tr>
<th>Scale</th>
<th>Scale Mean if item is deleted</th>
<th>Corrected item scale correlation</th>
<th>Alpha if item is deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>45.81</td>
<td>.257</td>
<td>.841</td>
</tr>
<tr>
<td>2</td>
<td>45.79</td>
<td>.248</td>
<td>.841</td>
</tr>
<tr>
<td>3</td>
<td>45.93</td>
<td>.289</td>
<td>.840</td>
</tr>
<tr>
<td>4</td>
<td>46.28</td>
<td>.250</td>
<td>.843</td>
</tr>
<tr>
<td>5</td>
<td>46.04</td>
<td>.306</td>
<td>.840</td>
</tr>
<tr>
<td>6</td>
<td>45.85</td>
<td>.249</td>
<td>.842</td>
</tr>
<tr>
<td>7</td>
<td>46.32</td>
<td>.290</td>
<td>.841</td>
</tr>
<tr>
<td>8</td>
<td>45.79</td>
<td>.561</td>
<td>.832</td>
</tr>
<tr>
<td>9</td>
<td>46.04</td>
<td>.504</td>
<td>.832</td>
</tr>
<tr>
<td>10</td>
<td>46.08</td>
<td>.414</td>
<td>.836</td>
</tr>
<tr>
<td>11</td>
<td>45.88</td>
<td>.467</td>
<td>.839</td>
</tr>
<tr>
<td>12</td>
<td>45.89</td>
<td>.529</td>
<td>.831</td>
</tr>
<tr>
<td>13</td>
<td>46.08</td>
<td>.495</td>
<td>.832</td>
</tr>
<tr>
<td>14</td>
<td>45.83</td>
<td>.167</td>
<td>.844</td>
</tr>
<tr>
<td>15</td>
<td>45.87</td>
<td>.699</td>
<td>.825</td>
</tr>
<tr>
<td>16</td>
<td>45.77</td>
<td>.560</td>
<td>.832</td>
</tr>
<tr>
<td>17</td>
<td>46.00</td>
<td>.370</td>
<td>.837</td>
</tr>
<tr>
<td>18</td>
<td>46.02</td>
<td>.306</td>
<td>.840</td>
</tr>
<tr>
<td>19</td>
<td>45.79</td>
<td>.421</td>
<td>.836</td>
</tr>
<tr>
<td>20</td>
<td>45.72</td>
<td>.572</td>
<td>.834</td>
</tr>
<tr>
<td>21</td>
<td>45.77</td>
<td>.600</td>
<td>.831</td>
</tr>
<tr>
<td>22</td>
<td>45.76</td>
<td>.347</td>
<td>.838</td>
</tr>
<tr>
<td>23</td>
<td>45.76</td>
<td>.177</td>
<td>.842</td>
</tr>
<tr>
<td>24</td>
<td>45.70</td>
<td>.611</td>
<td>.835</td>
</tr>
<tr>
<td>25</td>
<td>45.79</td>
<td>.409</td>
<td>.836</td>
</tr>
<tr>
<td>26</td>
<td>45.87</td>
<td>.105</td>
<td>.846</td>
</tr>
<tr>
<td>27</td>
<td>45.96</td>
<td>.500</td>
<td>.832</td>
</tr>
</tbody>
</table>
correlated with the total score. This 17-item scale was also found to be highly correlated with the larger 27-item scale (r = .94, df = 223, p < .001). The analysis of variance was repeated and the results were still consistent with those for the larger scale (Main Gender Effect: F = 7.601, df = 1, p < .006); Main Time Effect: F = 3.520, d.f. = 1, p < .072; Gender x Time Interactions: n.s.).

Since the 27-item scale surveys a variety of attitudes about gender role issues (i.e., femininity and assertiveness, sexual ethics, childrearing roles, women’s career aspirations, and interpersonal relationships), individual item analyses were conducted in order to illuminate the relationship between these issues and the analysis of variance results. Items 22, 25, 26, 27, 29, and 30 were of particular interest because they reflect attitudes about childrearing roles which are conceivably related to SRCO. All possible time, gender, and time by gender contrasts were made. Tables 8 and 9 show only the significant results from these six sets of t-tests. In general, these contrasts were consistent with the analysis of variance results, but a few variations were worthy of notice.

From the time comparisons, the 1984 cohort responded more liberally than the 1973 cohort to three items, 15,
Table 8
Summary of Single Item t Tests of 27-Item
Gender Role Attitude Scale by Time

<table>
<thead>
<tr>
<th>Item</th>
<th>Significance Level of Contrasts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>73 vs. 74</td>
</tr>
<tr>
<td>13</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
</tr>
<tr>
<td>26</td>
<td></td>
</tr>
<tr>
<td>28</td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>.090b</td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>.000a</td>
</tr>
<tr>
<td>35</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td>.038a</td>
</tr>
<tr>
<td>39</td>
<td></td>
</tr>
</tbody>
</table>

a1984 was more liberal than 1973.
b1973 was more liberal than 1984.

Note. All t-tests used separate variance estimates.
Table 9
Summary of Single Item t-Tests of 27-Item
Gender Role Attitude Scale by Gender

<table>
<thead>
<tr>
<th>Item</th>
<th>Significance Level of Contrasts</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M vs. F</td>
</tr>
<tr>
<td>13</td>
<td>.005a</td>
</tr>
<tr>
<td>15</td>
<td>.013a</td>
</tr>
<tr>
<td>17</td>
<td>.001a</td>
</tr>
<tr>
<td>18</td>
<td>.008a</td>
</tr>
<tr>
<td>19</td>
<td>.011ab</td>
</tr>
<tr>
<td>22</td>
<td>.015a</td>
</tr>
<tr>
<td>25</td>
<td>.039a</td>
</tr>
<tr>
<td>26</td>
<td>.001a</td>
</tr>
<tr>
<td>28</td>
<td>.028a</td>
</tr>
<tr>
<td>29</td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
</tr>
<tr>
<td>31</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
</tr>
<tr>
<td>36</td>
<td></td>
</tr>
<tr>
<td>37</td>
<td></td>
</tr>
</tbody>
</table>

*aFemales were more liberal than males.
*bMales were more liberal than females.

Note. All t-tests used separate variance estimates.
19 and 32. Two of these items make statements about women's independence and career aspirations and one refers to women's assertiveness in asking men for dates. The 1973 cohort responded more liberally than did the 1984 cohort to a statement about the appropriateness of occupational segregation of women into helping fields and to a statement about the permissibility of premarital sex. From the time- within-gender contrasts, one test was statistically significant for males and four for females. For males, the 1984 cohort responded more liberally to one item, 25, about the appropriateness of women working outside the home. For females, the 1984 cohort responded more liberally to four items (15, 29, 32, 37) relating to women's assertiveness and independence, specifically in work situations, and to one possibly SRCO-related item, 29, about women's contributions in helping and teaching occupations. All in all, the time contrasts did not indicate any substantial differences in responses to childrearing-related items.

In general, the gender contrasts yielded the largest number of significant differences. Females responded more liberally overall to a total of nine items (17, 18, 22, 26, 29, 30, 31, 32, and 39.) About half of these items related to childrearing themes and the other half to women's assertiveness. From the gender-within-time
contrasts, it was apparent that much of this gender difference could be accounted for by the 1973 cohort's responses. In 1973, females responded more liberally to six items (18, 22, 25, 26, 29, and 31) and males, interestingly enough, responded more liberally to item 32. This item has to do with the acceptability of women asking men for dates. The reasons for the gender difference in responses to this item are unclear. Possibly, females may regard assertiveness in heterosexual relationships differently than in other contexts. Conversely, males may be more willing to entertain female assertiveness in this sphere than in others. The 1973 females appeared to hold more liberal attitudes about childrearing and sexuality than did their male counterparts. Within the 1984 cohort, significant differences were found for only one item, 17. This item related to the appropriateness of women working in non-traditional fields.

The analysis of variance for the 6-item scale of gender role attitudes yielded distinct time and gender main effects (Gender Main Effect: $F = 30.731$, df = 1, $p < .001$; Time Main Effect: $F = 14.975$, df = 1, $p < .001$; Gender x Time Interaction: n.s.). Figure 3 shows the means responses to this scale by gender and time. Inspection of the group means indicated that females
Fig. 3. Mean responses to 6-item gender role attitudes scale by gender and time.
Figure 3

Note: Lower scores denote greater liberalism.
responded more liberally than males and 1984 students responded more liberally than 1973 students.

The overall reliability of the 6-item scale was quite good and the broader range of scores allowed by the scale suggest that this scale may be psychometrically superior to the 27-item scale. The reliability, however, was somewhat lower for the 1984 female respondents (see Table 1).

While the specific reasons for this decrease are unknown, an inspection of the item-scale correlations for the individual items of the scale suggest that there was greater variability among the means of the individual items for this subcohort. Tables 10 and 11 show the item-scale correlations of the 6-item scale for 1973 and 1984 females, respectively.

T-tests of individual items by gender and time were conducted. All possible time, gender, and time by gender contrasts were made. Table 12 shows the significant results from these six sets of t-tests. While the majority of these comparisons showed significant differences in the mean responses of both cohorts and between genders, there were fewer differences between 1973 and 1984 males and between the 1973 males and females.
<table>
<thead>
<tr>
<th>Item</th>
<th>Scale mean if item is deleted</th>
<th>Corrected item-scale correlation</th>
<th>Alpha if item is deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10.04</td>
<td>.577</td>
<td>.735</td>
</tr>
<tr>
<td>2</td>
<td>10.50</td>
<td>.629</td>
<td>.713</td>
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<td>.728</td>
</tr>
<tr>
<td>4</td>
<td>10.82</td>
<td>.403</td>
<td>.768</td>
</tr>
<tr>
<td>5</td>
<td>11.04</td>
<td>.533</td>
<td>.751</td>
</tr>
<tr>
<td>6</td>
<td>11.08</td>
<td>.625</td>
<td>.743</td>
</tr>
</tbody>
</table>
Table 11
Item-Scale Correlation Coefficients for the 6-Item Scale of Gender Role Attitudes
-- 1984 Females Only

<table>
<thead>
<tr>
<th>Item</th>
<th>Scale mean if item is deleted</th>
<th>Corrected item-scale correlation</th>
<th>Alpha if item is deleted</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>7.44</td>
<td>.309</td>
<td>.559</td>
</tr>
<tr>
<td>2</td>
<td>8.01</td>
<td>.577</td>
<td>.476</td>
</tr>
<tr>
<td>3</td>
<td>6.75</td>
<td>.342</td>
<td>.610</td>
</tr>
<tr>
<td>4</td>
<td>8.14</td>
<td>.324</td>
<td>.565</td>
</tr>
<tr>
<td>5</td>
<td>8.05</td>
<td>.546</td>
<td>.514</td>
</tr>
<tr>
<td>6</td>
<td>8.09</td>
<td>.345</td>
<td>.547</td>
</tr>
<tr>
<td>Item</td>
<td>73v84</td>
<td>73Fv84F</td>
<td>73Mv84M</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>1</td>
<td>.013a</td>
<td>.024a</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>.000a</td>
<td>.000a</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>.000a</td>
<td>.001a</td>
<td>.045a</td>
</tr>
<tr>
<td>4</td>
<td>.008a</td>
<td>.000a</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>.030a</td>
<td>.041a</td>
<td>.000b</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td>.000b</td>
</tr>
</tbody>
</table>

a 1984 was more liberal than 1973
b Females were more liberal than males
Note. All t-tests used separate variance estimates.
As these correlations show, the scale was relatively homogeneous in all cases except for item 3, which appeared to inflate the scale mean for the 1984 female subcohort. Item 3 refers to the issue of working mothers with preschool-age children. This item was thought possibly to tap SRCO-related attitudes. To aid in the interpretation of the greater scale variance produced by item 3, a two-way analysis of variance of this item was conducted which assessed differences due to time and SRCO. For the purposes of the analysis, high and intermediate SRCO respondents were grouped together. The results yielded significant main effects and no interaction (Time Main Effect: $F = 9.79$, $df = 1$, $p < .002$; SRCO Main Effect: $F = 5.60$, $df = 1$, $p < .019$; Time x SRCO Interaction: n.s.). Inspection of the group means indicated that 1984 respondents gave more liberal responses than 1973 respondents, and sex-role contingent respondents gave less liberal responses than non-contingent ones.

The analysis of variance of the 6-item scale of perceived attitudes of the opposite sex yielded both main and interaction effects (Gender Main Effect: $F = 60.53$, $df = 1$, $p < .001$; Time Main Effect: $F = 7.39$, $df = 1$, $p < .001$; Gender x Time Interaction: $F = 4.934$, $df = 1$, $p < .027$). Figure 4 shows the mean responses to this scale.
Fig. 4. Mean responses to 6-item perceived gender role attitudes of the opposite sex by gender and time.
Figure 4

Note: Lower scores denote greater liberalism.
by gender and time. From an inspection of these means, it was apparent that females in 1984 perceived males as being more liberal in their gender role attitudes than females had in 1973. The tendency, however, was reversed for the males. Males in 1973 perceived their female peers as being relatively liberal. In contrast, males in 1984 rated females as being slightly more conservative than males had in 1973. While the 1984 males and females perceptions of each other are more similar than those in the 1973 cohort, females still rated males as being more conservative than males rated females.

Comparisons between self-attitudes and the perceived attitudes of the opposite sex were also made using a difference score of the two 6-item scale summary scores for each respondent. The analysis of variance yielded a significant main effect and an interaction effect (Gender Main Effect: $F = 107.82$, df = 1, $p < .001$; Main Time Effect: n.s.; Gender x Time Interaction: $F = 5.19$, df = 1, $p < .024$). Figure 5 shows the means for these difference scores by time and gender. All of the t-test contrasts of means were statistically significant except for the comparison of times among the female respondents. From this analysis, it was apparent that the females had not changed significantly in their comparisons of themselves with their male peers. In 1984, females
Fig. 5. Mean difference scores of perceived gender role attitudes of the opposite sex and self by gender and time.
Note: Scores greater than zero indicate that the opposite sex is perceived as more traditional than self. Higher scores denote greater opposite sex - self discrepancy.
continued to rate themselves as considerably more liberal than males. The male respondents, however, did substantially change their appraisals. In 1973, males rated themselves as slightly more conservative than females. In 1984, however, they rated themselves as being more liberal than females by an average margin of almost 4 points. In 1973, the males rated themselves as more conservative by an average margin of only 1.3 points.

Hypothesis 2: Perceptions of Occupational Discrimination Against Women by Time and Gender

A two-way analysis of variance was used to assess the presence of main and interaction effects for the Discrimination Against Women Scale. Where interaction effects appeared, t-test analyses, using separate variance estimates, were used to evaluate the direction and meaning of the effects. Chi-square tests of association were conducted to explore the relationships between time, gender and the statements about oppression of women and sexism.

The analysis of variance of the Discrimination Scale yielded a statistically significant effect for Time ($F = 20.958$, $df = 1$, $p < .001$) and a Gender x Time
interactional tendency ($F = 3.13$, $df = 1$, $p < .078$). No main effect for gender was noted. A comparison of the group means indicated that the 1984 cohort generally perceived less discrimination ($\bar{X} = 30.16$) than did the 1973 cohort ($\bar{X} = 34.01$). Figure 6 shows the mean responses to this scale by time and gender. Although the gender contrasts were not statistically significant, an inspection of Figure 6 indicates that while 1973 male respondents appeared to be more aware of discrimination than their female counterparts, 1984 male respondents appeared to be less aware of discrimination.

The chi-square contingency table for the association between the "women as an oppressed group" statement and time is shown in Table 13. The pattern depicted there suggests a decrease in perceptions of women as an oppressed group. The percentage of respondents who agreed that women were an oppressed group decreased from 1973 (81%) to 1984 (67%). When this contingency table was broken down by gender (Table 14), female respondents' perceptions also appeared to decrease over time. Male respondents, however, tended to agree in both 1973 and 1984 that women were an oppressed group.

Inspection of the chi-square test of association between the "I feel personally affected by sexism" statement and time (Table 15) indicated that fewer
Fig. 6. Mean responses to Discrimination Against Women Scale by gender and time.
Figure 6

Note: Higher scores denote greater perceived discrimination.
Table 13
Chi-Square Summary of Responses to the Item "Women are an Oppressed Group in the United States" by Time

<table>
<thead>
<tr>
<th>Time</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>31.4% (96)</td>
<td>18.6% (22)</td>
</tr>
<tr>
<td>1984</td>
<td>67.0% (69)</td>
<td>33.0% (34)</td>
</tr>
</tbody>
</table>

Corrected $\chi^2 = 5.26$
$df = 1$
$p < .022$
Table 14
Chi-Square Summary of Responses to the Item "Women are an Oppressed Group in the United States" by Time for Females and Males

<table>
<thead>
<tr>
<th>Gender</th>
<th>Time</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>&quot;Women are Oppressed&quot; (N=170)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agree</td>
<td>Disagree</td>
</tr>
<tr>
<td>Females</td>
<td>1973</td>
<td>81.7%</td>
<td>18.3%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(76)</td>
<td>(17)</td>
</tr>
<tr>
<td></td>
<td>1984</td>
<td>63.6%</td>
<td>36.4%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(49)</td>
<td>(23)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Corrected $\chi^2 = 6.18; df = 1; P &lt; .013$</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Males</td>
<td>1973</td>
<td>80.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(20)</td>
<td>(5)</td>
</tr>
<tr>
<td></td>
<td>1984</td>
<td>76.9%</td>
<td>23.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(20)</td>
<td>(6)</td>
</tr>
<tr>
<td></td>
<td>Corrected $\chi^2 = 0; df = 1; n.s.$</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 15
Chi-Square Summary of Responses to the Item
"I Feel Personally Affected by Sexism" by
Time -- Females Only

<table>
<thead>
<tr>
<th>Time</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>65.2%</td>
<td>34.8%</td>
</tr>
<tr>
<td></td>
<td>(60)</td>
<td>(32)</td>
</tr>
<tr>
<td>1984</td>
<td>45.5%</td>
<td>54.5%</td>
</tr>
<tr>
<td></td>
<td>(35)</td>
<td>(42)</td>
</tr>
</tbody>
</table>

Corrected $\chi^2 = 5.87$; df = 1; $p < .015$
females felt affected personally by sexism in 1984 (45%) than in 1973 (65%). Males’ responses to this item were not analyzed because it was believed that some males might interpret the statement differently and these differences would not be discernible from the data.

Hypothesis 3: Women’s Sex-Role Contingency Orientation by Time

Chi-square tests of association were conducted to evaluate cohort differences in SRCO. Because the SRCO variable, as it is defined in this study, is not clearly continuous, a test of association was also conducted with high and intermediate SRCO scores being collapsed into a single SRCO category. This resulted in a contingent/non-contingent dichotomy for the test of association. Since the intermediate SRCO construct is less distinct from high SRCO than from the low/none category, this revised test of association was considered to be a more robust test of the hypothesis.

The chi-square contingency table for the association between SRCO and time is shown in Table 16. The pattern depicted there suggests a statistically significant difference in the distribution of SRCO scores among the two time cohorts. Most notably, while 47.3% of the 1973
Table 16
Chi-Square Summary of the Relationship Between Sex Role Contingency Orientation (SRCO) and Time — Females Only

<table>
<thead>
<tr>
<th>Time</th>
<th>High</th>
<th>Intermediate</th>
<th>Low/None</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>47.3%</td>
<td>23.7%</td>
<td>29.0%</td>
</tr>
<tr>
<td></td>
<td>(44)</td>
<td>(22)</td>
<td>(27)</td>
</tr>
<tr>
<td>1984</td>
<td>11.8%</td>
<td>50.0%</td>
<td>38.2%</td>
</tr>
<tr>
<td></td>
<td>(9)</td>
<td>(38)</td>
<td>(29)</td>
</tr>
</tbody>
</table>

$\chi^2 = 26.00; df = 2; p < .000$
respondents appeared to be highly contingent, only 11.8% of the 1984 cohort appeared so. The proportion of intermediate SRCO scores in 1984 doubled so that a total of 50% of that group appeared to be moderately contingent. The proportion of non-contingent scores in the 1984 cohort appeared to be only slightly greater than in 1973. The condensed 2 x 2 test of association revealed no significant relationship between SRCO and time. In this case, the proportion of contingent (high or intermediate SRCO) scores was 71% in 1973 and 61.8% in 1984. A comparison of these two chi-square tests suggests that although the distribution of high and intermediate SRCO scores appears to have changed with time, the combined proportion of high and intermediate scores does not appear to have changed.

To aid in the interpretation of the SRCO variable, Pearson product-moment correlation coefficients were calculated to assess the relationship between SRCO and the proportion of workstyle discrepancies identified in item 35. SRCO was found to be positively correlated with workstyle discrepancies (1973: \( r = .37, df = 93, \ p < .001 \); 1984: \( r = .16, df = 77, \ p < .082 \)), suggesting that contingent females tended also to anticipate greater discrepancies between their workstyle preferences and expectations than noncontingent females.
Hypothesis 4: Discrepancies in Women's Occupational and Educational Aspirations by Time

Chi-square tests of association were conducted to explore the cohort differences in workstyle and educational preferences, expectations, and discrepancies; simple discrepancies were also analyzed despite the difficulties encountered in coding. For statistical purposes, workstyle and degree preferences and expectations were converted into 3-point scales before further analyses were conducted. This meant that for workstyle preferences and expectations, scores of 1, 2, or 3 were recoded as 1 because they all implied less than steady part-time work. Scores of 4 or 5 were recoded as 2 because they both reflected a steady part-time workstyle and scores of 6, 7, or 8 were recorded as 3 because they involved a steady full-time workstyle. For degree preferences and expectations, scores of 4 or more were collapsed into a single category since they all involved advanced degrees beyond the master's degree.

Tables 17 and 18 show the contingency tables for workstyle preferences and expectations. It should be noted that the chi-square tests of association for both of these tables were statistically non-significant. The
Table 17
Chi-Square Summary of the Relationship Between Workstyle Preferences and Time -- Females Only

<table>
<thead>
<tr>
<th>Time</th>
<th>Full-time (N = 170)</th>
<th>Part-time</th>
<th>Intermittent Part-time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>career</td>
<td>work</td>
<td>work</td>
</tr>
<tr>
<td>1973</td>
<td>48.4%</td>
<td>32.2%</td>
<td>19.4%</td>
</tr>
<tr>
<td></td>
<td>(45)</td>
<td>(30)</td>
<td>(18)</td>
</tr>
<tr>
<td>1984</td>
<td>57.1%</td>
<td>24.7%</td>
<td>18.2%</td>
</tr>
<tr>
<td></td>
<td>(44)</td>
<td>(19)</td>
<td>(14)</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 1.89; \text{df} = 2; \text{n.s.} \]
Table 18
Chi-Square Summary of the Relationship Between Workstyle Expectations and Time — Females Only

<table>
<thead>
<tr>
<th>Time</th>
<th>Full-time career</th>
<th>Part-time work (N = 170)</th>
<th>Intermittent Part-time work</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>33.3%</td>
<td>38.7%</td>
<td>28.0%</td>
</tr>
<tr>
<td></td>
<td>(31)</td>
<td>(36)</td>
<td>(26)</td>
</tr>
<tr>
<td>1984</td>
<td>42.0%</td>
<td>33.8%</td>
<td>23.3%</td>
</tr>
<tr>
<td></td>
<td>(33)</td>
<td>(26)</td>
<td>(18)</td>
</tr>
</tbody>
</table>

$\chi^2 = 1.64; \text{ df } = 2; \text{ n.s.}$
pattern depicted in Table 17 suggests that the majority of female respondents in both 1973 and 1984 preferred a steady full-time workstyle. A somewhat larger proportion of respondents in 1984 fell into this category. Table 18 depicts a relatively even distribution of work expectations across the three categories for both time cohorts. While a slightly larger proportion of 1984 respondents expected full-time careers, the difference was not statistically significant.

The chi-square (Table 19) used to test the association between workstyle discrepancies and time was also not statistically significant. The majority of respondents in both time cohorts were congruent along this dimension, that is, had no differences between their workstyle preferences and expectations.

The chi-square test of association between simple discrepancies and time is shown in Table 20. The pattern depicted there suggests a trend towards an increase in the occupational discrepancies in 1984 over 1973. Namely, while 35.8% of the 1973 respondents were found to be discrepant, a total of 51.9% of the 1984 respondents were identified as discrepant by this measure. No information was available on the specific kinds of discrepancies which contributed to this cohort difference.
Table 19  
Chi-Square Summary of the Discrepancy Between  
Workstyle Preferences and Expectations by  
Time — Females Only

<table>
<thead>
<tr>
<th>Time</th>
<th>Preference is greater than expectation</th>
<th>Preference is equal to expectation</th>
<th>Preference is less than expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>10.7% (10)</td>
<td>55.9% (52)</td>
<td>33.4% (31)</td>
</tr>
<tr>
<td>1984</td>
<td>11.7% (9)</td>
<td>59.7% (46)</td>
<td>28.6% (22)</td>
</tr>
</tbody>
</table>

$\chi^2 = .45; \ df = 2; \ n.s.$
Table 20
Chi-Square Summary of Congruent vs. Discrepant Career Aspirations by Time -- Females Only

<table>
<thead>
<tr>
<th>Time</th>
<th>Congruent</th>
<th>Discrepant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>64.2%</td>
<td>35.8%</td>
</tr>
<tr>
<td></td>
<td>(43)</td>
<td>(24)</td>
</tr>
<tr>
<td>1984</td>
<td>48.1%</td>
<td>51.9%</td>
</tr>
<tr>
<td></td>
<td>(37)</td>
<td>(40)</td>
</tr>
</tbody>
</table>

\( \chi^2 = 3.15; \, \text{df} = 1; \, p < .076 \)

\( a \) Twenty-six cases in the 1973 cohort were missing.
Tables 21 and 22 show the chi-square contingency tables for degree preferences and expectations. Neither of these tests of association were statistically significant. Virtually all female respondents in both times expected to complete their college degrees. The modal preference and expectation was to get a master's degree.

The chi-square contingency table for discrepancies in degree aspirations is shown in Table 23. Again, no statistically significant relationship was found between time and discrepancies in degree aspirations. The distribution of scores suggests that roughly 2/3 of the female respondents had congruent degree aspirations and the other 1/3 had preferences which exceeded their expectations.
<table>
<thead>
<tr>
<th>Time</th>
<th>Degree Preference</th>
<th>B.A.</th>
<th>M.A.</th>
<th>Doctorate/equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1973</td>
<td>1984</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(%)</td>
<td>(%)</td>
<td>(%)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>16.1</td>
<td>49.5</td>
<td>34.4</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(15)</td>
<td>(46)</td>
<td>(32)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>11.7</td>
<td>44.2</td>
<td>44.2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(9)</td>
<td>(34)</td>
<td>(34)</td>
</tr>
</tbody>
</table>

$\chi^2 = 2.40; \text{ df } = 2; \text{ n.s.}$
Table 22
Chi-Square Summary of the Relationship Between Degree Expectations and Time --- Females Only

<table>
<thead>
<tr>
<th>Time</th>
<th>Degree Expectation</th>
<th>B.A.</th>
<th>M.A.</th>
<th>Doctorate/equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1973</td>
<td>1984</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>32.3%</td>
<td>19.5%</td>
<td>17.2%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(30)</td>
<td>(15)</td>
<td>(16)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>50.5%</td>
<td>58.4%</td>
<td>22.1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(47)</td>
<td>(45)</td>
<td>(17)</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 4.20; \text{df} = 2; \text{n.s.} \]
Table 23
Chi-Square Summary of the Discrepancy Between Degree Preferences and Expectations by Time -- Females Only

<table>
<thead>
<tr>
<th>Time</th>
<th>Preference is greater than expectation</th>
<th>Preference is equal to expectation</th>
<th>Preference is less than expectation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1973</td>
<td>1.1% (0)</td>
<td>66.7% (62)</td>
<td>32.2% (30)</td>
</tr>
<tr>
<td>1984</td>
<td>0.0% (0)</td>
<td>92.2% (71)</td>
<td>7.8% (6)</td>
</tr>
</tbody>
</table>

χ² = 2.56; df = 2; n.s.
Comparability of Time Cohorts

The major differences found between the 1973 and 1984 cohorts involved year in college, choice of academic major, marital status, and social class background.

Before discussing the meaning of the findings, some comment on the methodology of this study is warranted. The sampling process used for the two cohorts were quite different and could have conceivably affected the variables being considered. While the 1973 cohort was not a random sample of students in their senior year, it did draw from a relatively diverse cross-section of students. In contrast, the 1984 cohort over-sampled psychology majors and included a larger proportion of juniors. Counter-balancing the argument for sampling error, however, is the evidence both that the 1973 cohort did in fact include many social science majors and that the 1984 cohort mean age was somewhat older than would be expected for a group of juniors.
A number of possible interpretations can be made of the significant differences which did arise in the analysis. The noted shift in the distribution of majors might have been due to sampling error or it might reflect a general decrease in the number of education majors in the University as a whole. This interpretation is in fact consistent with observations made within the School of Education that the number of undergraduate education majors has dwindled (Turner, 1985). Similarly, the marital status difference found in the analysis might have been due to the disproportionate number of juniors in the 1984 cohort or it might have been a reflection of a true cohort difference in the age of marriage which has been noted in other studies. Interestingly, although the cohorts differed in the number of married and engaged respondents, there were no other significant differences on related variables such as the date of anticipated marriage for the single students or the number of children expected.

The cohort differences in parents' occupational and educational status are somewhat more difficult to interpret. These differences might conceivably be due to a period effect in the social class backgrounds of college students at state universities. Whereas in the past, the children of more affluent, well-educated
parents might have gone to private colleges and universities, the rising costs of college education may be forcing more upper-middle class students to attend public universities. The only available data for making this interpretation comes from an annual ACE survey of incoming college freshmen conducted nationwide and at the University of Massachusetts (Timko, 1984). The ACE data do suggest that the average freshman in 1983 was from a more affluent background than in 1973. What is impossible to determine in the present study is the impact of this cohort difference on the variables of interest. Possibly, the greater affluence of the 1984 respondents' families might have contributed to the career commitments and/or gender role attitudes of that cohort. Specifically, children from upper-middle class families may be socialized in a way in which affirms both liberal views of women's roles and academic/career achievements for both genders. Again, the present study does not permit a separate evaluation of a social class effect, although the findings do raise the question of how social class, socialization, and period effects may interact.
Gender Role Attitudes

The results partially supported the hypothesis that both gender and time are significantly related to gender role attitudes.

The analysis of the 27-item and 6-item scales indicated that the largest and most consistent difference was between genders, with females being more liberal than males in both 1973 and 1984. These findings were consistent with other studies (Roper and Labeff, 1977) which indicated that women tend to be more liberal than men.

Evidence of cohort differences was less clear, however. On the 6-item scale, 1984 students were clearly more liberal than the 1973 students, but only a trend towards a cohort difference was evident on the 27-item scale. The interaction effect of gender and time upon gender role attitudes was also unclear, with the 6-item scale yielding no interaction effect and the 27-item scale yielding an interactional tendency. The relatively low reliability of the 27-item scale in this study further suggests that the interaction effect should be interpreted cautiously. In sum, the analysis of these scales did not yield a cohort difference that could be attributed to either period or socialization effects.
The analysis of the 6-item scale of the perceived attitudes of the opposite sex and the comparison of this scale with the complementary self-attitudes scale yielded some interesting highlights on the issue of time-gender interaction effects on gender role attitudes. Females in both times appeared to perceive males as more traditional than themselves, but 1984 females saw males as more liberal than did 1973 females. These perceptions were consistent with the actual behavior of male respondents in this study, despite the fact that the females in both times consistently over-rated the males' traditionality.

Interestingly enough, however, male respondents' perceptions of females did not mirror this pattern. In 1973, males accurately predicted that females were more liberal than themselves, but this relationship reversed itself in 1984. In the later time cohort, males perceived themselves as being more liberal, even though they were in fact more traditional than females. The reasons for this inaccuracy in the perceptions of the 1984 male respondents are not clear. Given the small number of males used in this study, sampling error could possibly account for the findings. Another possible interpretation of the data is that the males in the 1984 cohort exhibited defensiveness in their response set which then led them to distort their perceptions of
themselves and others. These males' desires to be seen as more liberal may be seen as an attempt to defend themselves from criticism aimed at males by parts of the Women's Movement.

The various attempts to explicate the varying reliability of the attitude scales in this study raise some important questions about the nature of gender role ideology. The significant SRCO effect found in the analysis of variance of item 3 of the 6-item scale suggested that at least some aspects of gender role ideology may be correlated with SRCO. The individual item contrasts suggested that the greatest gender and time differences were in attitudes regarding women's assertiveness and occupational behavior. Attitudes about childrearing did not appear to differ dramatically across cohorts. On the 27-item scale, there were also fewer gender differences on individual items about childrearing in 1984 than in 1973. These findings were consistent with the conclusion drawn by Mason and Bumpass (1980) that women's gender role ideology is multidimensional, consisting of a feminist affirmation of economic equity for women, but also a "core ideology" advocating gender segregation because of the deleterious effects of maternal employment on children's development.
A comparison of the gender contrasts in 1973 and 1984 showed fewer significant gender differences in 1984. These findings were consistent with Mason and Bumpass' findings that males and females in 1974 were more alike in their gender role attitudes than in 1934. These similarities in both genders' responses to questionnaires, however, must not be confused with actual behaviors regarding gender roles, career plans, etc. Significant differences may still exist in these other more personally relevant areas.

Perceptions of Occupational Discrimination Against Women

The results partially supported the hypothesis that gender and time are significantly related to perceptions of occupational discrimination against women.

The analysis of the Occupational Discrimination Scale revealed a cohort difference, but no gender difference. In this case, less discrimination was perceived in 1984 than in 1973. Interestingly enough, fewer females in 1984 regarded women as an oppressed group or felt affected by sexism than in 1973. Even more surprisingly, there was no cohort difference in males' views of women as an oppressed group. Paradoxically, the males, who held more traditional gender role attitudes,
were in stronger agreement about women's oppressed status than the females. These findings run counter to the assumption that greater liberalism is related to greater awareness of discrimination.

The meaning of these results is difficult to discern. First of all, it must be noted that the respondents in this study, and especially those in the 1984 cohort, were young, white, middle class students who had probably been well sheltered from many economic and political realities up to the point when they were interviewed. Most of them were single, had no children, and had not yet begun their careers. Findings of longitudinal studies of college graduates have indicated that they tend to become more work-oriented and more realistic in their expectations as they move through their 20's and face the conflicts which they can only fantasize about at age 21. Also, women tend to develop a more feminist perspective as they encounter frustrations and obstacles in the work world. Possibly, female respondents in this study would have given very different responses if they had been interviewed ten years after their graduation. On the other hand, respondents in both cohorts were exposed to many of the same historical and political influences. The Women's Movement had substantial visibility on college campuses in the early
1970's and one can assume that both cohorts were aware of
the issue of occupational discrimination. Perhaps the
1984 respondents developed a more sanguine view of
women's social status by observing the recent increases
in women's work participation. It is also possible that
these respondents had been socialized to believe that
women can pursue any career and their perceptions of the
job market may have been colored by that perspective.

Women's Sex-Role Contingency Orientation

The results partially supported the hypothesis that
time is significantly related to women's SRCO.

Although fewer females in 1984 were high in SRCO
than in 1973, a majority in both cohorts were at least
intermediate in SRCO. These data suggest that there may
have been a shift in the modal distribution of SRCO among
college women in the past decade, but there is still
support for the contention that women continue to be
contingent even if they are more career-oriented. The
overall validity of SRCO construct was supported by its
positive correlations with endorsements of item 3 of the
6-item attitude scale and with discrepant workstyle
aspirations.
These findings provide validation for the contention that the psychological cornerstone of SRCO now is a perceived personal responsibility for the care of young children. Although the 1984 females showed a greater interest in careers, they still exhibited SRCO in their future plans to the extent that they perceived a conflict between their children's needs and the demands of the workplace. The inconsistency of responses to the two gender role attitudes scales may also be considered support for the conclusion that women's attitudes about gender roles in the workplace may be orthogonal to their attitudes about mothering roles. On the other hand, the relatively low reliability of the attitude scales possibly may have itself attenuated the relationship between these two attitudes.

The fact that only 11.8% of the 1984 females were found to be high in SRCO deserves special notice. The interviewers in 1984 were instructed to probe directly for sex role contingencies and this strategy might be expected to bias responses in the direction of high SRCO. In light of this consideration, it is particularly surprising that so few females gave high SRCO responses. The use of the probing, in fact, provided a conservative test of the cohort difference hypothesis. The significant difference between cohorts in the proportion
of high SRCO scores may be regarded as a fundamental change in the gender role orientation of the white college women studied.

Given the limitations of the present study, however, it is not clear what accounts for this change. On the one hand, one might conclude that the shift is due to either changes in the socialization of gender roles among college females or the historical period effects of the past decade. If either of these hypotheses were true, one might expect even further decreases in the amount of SRCO found among college females ten years from now. On the other hand, one could regard the fact that the proportion of contingent females remained constant over time as indication of some pervasive element of women's aspirations which has not been displaced by an increase in women's gender role liberalism. If this interpretation is accurate, one might expect that superficial cultural and political changes could decrease the proportion of high SRCO women, but not affect the overall proportion of intermediate and high SRCO women.
Discriminations in Women's Aspirations

The results partially supported the hypothesis that time is significantly related to discrepancies in women's occupational and educational aspirations.

In general, females in both cohorts appeared to be relatively career and work oriented. The modal preference was to have careers and expected to work while raising children. Over 2/3 of each cohort also expected to complete graduate work. These findings were consistent with studies conducted by Parelius (1974), Zuckerman (1980), and Betz (1984) which concluded that college women now tend to expect continuous career involvement.

A clear increase in the proportion of simple discrepancies over time was evident, suggesting that women may now be intending to pursue careers, but expect to make compromises in their specific choices about occupations. These findings were consistent with the census data discussed in Chapter I which indicated that women who work and have careers also tend to work in gender-segregated occupations. Also, as Parelius (1974) found in her study, discrepancies in type of work may be more prevalent than in amount of work. The present study did not analyze the sex-typing of women's occupational
choices, per se, but the findings do lend support for the contention that college women generally anticipate some compromises and career frustration.

An important limitation in the present study is the lack of comparison data on males' aspirations. Without such data, the present analysis cannot identify secular trends in career aspirations which are not gender-specific. The discrepancies noted could have been due to perceptions about job availabilities and general economic hardships. Given the fact that a large proportion of the 1984 respondents wanted to pursue mental health careers, which have been recently hard-hit by economic contingencies, it is not surprising that so many were discrepant.

This trend noted in simple discrepancies must be regarded with some caution for methodological reasons as well. The coding of the discrepancy variable in both times was not identical. Also, the 1984 interviewers were instructed to probe directly for family-related contingencies and they may have incidentally elicited more discrepancies in the probing process. The possibilities of those two kinds of experimenter errors confound these results and limit their generalizability.

In terms of workstyle aspirations, no cohort differences in the proportion of discrepancies or level
of aspirations were evident. The preponderance of females in both cohorts preferred and expected full-time careers and had congruent aspirations across workstyle categories. These findings were consistent with the workstyle pattern depicted in the census data over the past decade which indicated that most college educated women are now working regardless of their marital and parental status. Similarly, the majority of respondents expected to attend graduate school.

The reason for the discrepancy between the data on choice of occupation and the other measures of aspirations is not readily apparent. Choice of occupation may have succumbed to contingency planning more readily for the respondents in this study than did preferences for graduate study and full-time careers. These females certainly expected to have careers, but they showed flexibility in the particular kind of career they anticipated.

**Summary and Conclusions**

Taken as a whole, the results suggest that minimal historical changes have taken place among the larger population of white college students from which the two cohorts were sampled. Despite cohort differences in
social class, academic major and marital status, little support was found for the hypothesis of cohort differences in career aspirations and life plans. Greater cohort differences, and gender differences as well, were noted in respondents' attitudes about gender roles and the occupational opportunity structure for women.

Females were consistently found to be more liberal than males in their attitudes, suggesting that females may be more sympathetic to the idea of greater gender role flexibility. Both genders appeared to be somewhat more liberal and more similar in their attitudes in 1984 than in 1973, suggesting some possible period or socialization effect at work. Attitudes about women's mothering roles did not change as much as did attitudes about women's occupational behavior. This finding was consistent with the initial hypothesis that women's desire to mother may not be vulnerable to minimal social changes, such as have occurred recently. Both genders perceived less discrimination against women in 1984 than in 1973, suggesting that college students may now perceive women as having been successful in achieving their goals in the workworld.

With respect to their life plans, female respondents in 1984 were quite career-committed, as were the females
in 1973, but they continued to articulate sex role contingencies in their planning, albeit somewhat less strongly in 1984. The 1984 females did not differ from the 1973 respondents in their educational and workstyle aspirations, but they did show a non significant tendency to be more discrepant in their choices of occupations.

These findings raise numerous questions about the futures of the young adults studied. The data neither confirm nor disconfirm the original hypotheses, but rather point out certain areas deserving further investigation and discussion. Unfortunately, due to the relatively short historical period covered by the cohorts in this study, it is difficult to assess true period or historical effects. To some extent, it can be assumed that both cohorts had had some exposure to the values advocated by Liberal Feminism and the Women's Movement. The effects of this exposure may have been visible in the females high educational and career aspirations in both times. This presumed exposure may have also been responsible for the smaller proportion of high SRCO females in the 1984 cohort. Yet, a decreased sensitivity to feminist issues accompanied these changes as was evident in both the 1984 respondents' optimistic
perceptions of women's current occupational opportunities and in their lesser sense of being affected by sexism.

What can account for these apparent incongruities? Perhaps social changes influenced the career and achievement socialization of these young women without concurrently increasing their awareness of the political and economic inequities still present in our society. If the results reported here are accurate, however, it appears that the 1984 females were actually less aware of gender inequities than those in 1973. If the social changes mentioned in Chapter I were responsible for increasing the achievement horizons of young women, they do not appear to have been as successful in politicizing their attitudes. Perhaps here lies one of the limitations of Liberal Feminism: its emphasis on changing individual behavior within the status quo stops short of fundamentally challenging the status quo.

The persistent SRCO found in both cohorts also raises important questions which need to be addressed in future research. The fact that the two cohorts differed in the emphasis placed upon high SRCO certainly verifies that SRCO is a psychosocial phenomenon which is not biologically fixed. But more investigation is needed into the phenomenological meaning of SRCO to the women being studied. Feminists might do well to address SRCO
in their strategies for change, but a better understanding is still needed as to why women are contingent in the domains of mothering and childrearing. It is not sufficient to simply say that being contingent is bad for women, that it is a mark of their oppression which must be eradicated. While that may be a more radical position, it also subtly devalues women's experience. It can also be argued that contemporary society does not accommodate itself to personal needs and relationships, and that perhaps it is this social intransigency which should be addressed rather than the relational contingencies by which women construct their lives.

Women will continue to enter the work world and the career world in even greater numbers. As they do so, the conflicts between the realms of work and family will become even more keenly felt by both women and men. The tendency of many researchers and activists alike is to ask why women cannot adapt more contentedly to a masculine work world. Perhaps more research is needed to identify those aspects of the work world which limit and impinge upon both women's and men's parenting aspirations.
REFERENCES


REFERENCE NOTES


APPENDIX
APPENDIX A
SEX ROLE CONTINGENCY ORIENTATION CODING SCHEME

TO SCORE:

I. Examine questions 13, 15 and 17 in the questionnaire.

A. High SRCO = 1 if

   i. R both prefers and expects homemaking/childcare

   ii. R prefers work but expects homemaking because of childcare, marriage, as seen in such statements as: "I want to stay home if I have children," "I would hate to leave the children," "I will stay home if I can't find someone good to care for the children." In other words, rate R as high SRCO if she emphasizes her desire to take care of her children because of personal preference or because she feels that she is the best at caring for them. R might emphasize the importance of good, versus adequate, childcare.

   iii. R expresses that the feelings or needs of others are paramount, e.g., working is unfair to the children.

   iv. R prefers to work for pay, but expects (or both prefers and expects) volunteer work, thus implying that someone else will support her.

   v. R expresses the expectation that decisions about her life will be made by her husband.

NOTE: Score HIGH SRCO = 1 even if R mentions reasons which are not sex-role contingent in addition to one of the reasons listed above.

B. Intermediate SRCO = 2 if

   i. R prefers and expects part-time work

   ii. R's reasons for discrepancy are vague, reflecting possible change of interests (not any case of possible change—only change in relation to vague reasons).
iii. R hasn't the energy or time to do both (homemaking and working) or to do both well or imagines that she will not be able to do both well or imagines that she will not be able to find adequate as opposed to "good" childcare or will not be able to find a part-time job that will enable her to care for her children.

iv. The need for money is a priority over full time care for the children or self-fulfillment is a priority and therefore the desire for full-time or part-time work.

v. R has no idea, leaving her open for family or work.

C. Low/No SRCO = 3 if

i. R's expected job is different from preferred job but the reason does not reflect sex-role contingency, e.g., competition is intense and/or jobs are extremely rare in the preferred field, discrimination against women, "it's hard to get back to school when you're settled in a job," short of time or money (with no reference or implication of family demands/needs).

ii. R prefers less work for reasons of self-fulfillment, time for outside activities, unrelated to family time constraints.

iii. There is no discrepancy between R's preferred and expected job and the job is apparently full-time and paid.

II. Examine question 55 in the green questionnaire. If there is a reason for a discrepancy between one's preferred and one's expected home-career pattern, code that reason for SRCO as above.

NOTE: If several statements are made and there is vagueness, code for the clearest statement.
APPENDIX B

INTERVIEW SCHEDULE

FIRST, I HAVE SOME QUESTIONS ABOUT SCHOOL.

1. WHAT YEAR ARE YOU NOW IN AT UMASS? (CIRCLE ONE)
   1. FRESHMAN
   2. SOPHOMORE
   3. JUNIOR
   4. SENIOR
   5. GRADUATE STUDENT

2. HOW MANY SEMESTER CREDIT HOURS HAVE YOU ACCUMULATED TOWARD GRADUATION AS OF THE END OF LAST SEMESTER?
   1. UNDER 60
   2. 60-74
   3. 75-89
   4. 90-99
   5. 100-106
   6. 107 OR MORE

3. HOW CERTAIN DO YOU FEEL ABOUT COMPLETING YOUR COURSE OF STUDIES---COMPLETING YOUR BACHELOR'S? WOULD YOU SAY YOU ARE...
   1. VERY CERTAIN
   2. BETTER THAN 50/50 CHANCE
   3. LESS THAN 50/50 CHANCE
   4. VERY UNLIKELY

4. WHEN DO YOU EXPECT TO RECEIVE YOUR BACHELOR'S DEGREE?
   1. ALREADY RECEIVED IT
   2. JUNE, 1984
   3. SEPTEMBER, 1984
   4. JANUARY, 1985
   5. DEFINITE LATER DATE
   6. NOT SURE

5. WHAT IS YOUR MAJOR FIELD IN SCHOOL? (MAJOR IN WHICH YOU'RE OFFICIALLY REGISTERED.) CIRCLE CODE, THEN WRITE IN EXACT FIELD. IF IN DOUBT ABOUT CODE, WRITE IN FIELD & DEPARTMENT.
   1. SOCIAL SCIENCES
   2. HUMANITIES
   3. PHYSICAL/BIOLOGICAL SCIENCES
   4. EDUCATION, PHYSICAL EDUCATION
   5. PROFESSIONAL (I.E., ENGINEERING, HOME EC, NURSING,
6. WHAT IS YOUR TOTAL GRADE POINT AVERAGE (YOUR CUM) SO FAR AT UMASS? (WRITE DOWN EXACTLY WHAT IT IS, THEN CIRCLE)

1. 3.5 & ABOVE
2. 3.4-3.0
3. 2.9-2.5
4. 2.4-2.0
5. 1.9-1.5
6. LESS THAN 1.5

NOW, I HAVE SOME QUESTIONS ABOUT YOUR BACKGROUND.

7. WHAT IS YOUR MARITAL STATUS? ARE YOU . . . (READ THE FIRST 5 ALTERNATIVES) . . . OR WHAT?

1. SINGLE, NOT DATING
2. SINGLE AND DATING, NO ROMANTIC INVOLVEMENT
3. INVOLVED ROMANTICALLY WITH SOMEONE
4. ENGAGED
5. MARRIED (IF SO, ASK: IS THIS YOUR 1ST MARRIAGE?)
6. DIVORCED OR SEPARATED
7. WIDOWED

IF ROMANTIC INVOLVEMENT, ASK

8. HOW LIKELY IS IT THAT YOU AND YOUR CURRENT PARTNER WILL EVENTUALLY GET MARRIED? WOULD YOU SAY IT IS . . .

1. VERY LIKELY
2. SOMewhat LIKELY
3. SOMEWHAT UNLIKELY
4. VERY UNLIKELY

IF EVER MARRIED, ASK

9. HOW MANY CHILDREN DO YOU HAVE (COUNT OBVIOUS CURRENT PREGNANCY AS 1 CHILD.)

1. NONE
2. ONE
3. TWO
4. THREE OR MORE
10. HOW OLD WERE YOU WHEN YOU FIRST MARRIED?

1. 18 OR LESS
2. 19
3. 20
4. 21-22
5. 23-24
6. 25 OR MORE

ASK EVERYONE

11. WHAT IS THE TOTAL NUMBER OF CHILDREN YOU PLAN TO HAVE EVENTUALLY (EITHER BORN TO YOU OR ADOPTED)?

1. NONE
2. ONE
3. TWO
4. THREE
5. FOUR
6. FIVE OR MORE

IF NOT NOW MARRIED, ASK

12. WHEN DO YOU EXPECT TO MARRY (REMARRY)? (WELL, WHAT'S YOUR BEST GUESS?)

1. BEFORE JUNE, 1984 (IF SENIOR, BEFORE GRADUATION)
2. IMMEDIATELY AFTER GRADUATION FROM COLLEGE
3. 1-2 YEARS AFTER GRADUATION FROM COLLEGE
4. 3-4 YEARS AFTER
5. 5 OR MORE YEARS AFTER
6. POSSIBLY NEVER

NOW LET'S TALK ABOUT YOUR FUTURE.

13. FIFTEEN OR TWENTY YEARS FROM NOW, WHEN YOU'RE 35 OR 40, WHAT KIND OF WORK WOULD YOU MOST LIKE TO BE DOING? TRY TO BE AS SPECIFIC AS YOU CAN. (PROBE TO GET AS SPECIFIC A RESPONSE AS POSSIBLEJO E TITLE, DUTIES, SETTING)

OCCUPATION
14. How certain are you that (READ OCCUPATION LISTED IN 13) or a job very much like it is the kind of work that you would most like?

1. Just about positive
2. Fairly sure, or
3. Not too sure at all?

15. Of course there can be a big difference between anybody's dream job what she/he realistically expects to do. When you're around 35 or 40, WHAT KIND OF WORK DO YOU REALLY EXPECT TO BE DOING? (GET IT AS SPECIFIC AS POSSIBLE.)

OCCUPATION

16. How certain are you that you can expect to wind up in this kind of work? WOULD YOU SAY YOU ARE . . .

1. Just about positive
2. Fairly sure, or that it's
3. Not much more than a guess?

IF HIS/HER JOB EXPECTATION IS DIFFERENT FROM HIS/HER JOB PREFERENCE, ASK THE FOLLOWING 17. IF EXPECTATION AND PREFERENCE ARE THE SAME, SKIP TO 16.

17. THE KIND OF WORK YOU REALLY EXPECT TO DO IS DIFFERENT FROM THE KIND OF WORK YOU WOULD MOST PREFER. WHY IS IT THAT YOU DON'T REALLY EXPECT TO BE A (READ PREFERRED JOB TITLE IN 13)?

(RECORD VERBATIM. PROBE TO GET A COMPLETE ANSWER. POSSIBLE PROBES ANYTHING ELSE? . . . ANY OTHER REASON? . . . COULD YOU TELL ME MORE ABOUT THAT?)
18. Think back to the summer of 1980, just before you entered UMass. Regardless of your career plans now, what was your career preference in the summer of 1980? IF VAGUE OR 'NONE', ADD (Give your single strongest career preference then, even if it was vague or if there were several alternatives.)

IF R HAD ABSOLUTELY NO CAREER PREFERENCE AT THAT TIME, CIRCLE 9

OCCUPATION

IF R 'S PREFERENCE IN 1980 IS DIFFERENT FROM HIS/HER CAREER EXPECTATION NOW, ASK THE FOLLOWING 19. IF THEY ARE THE SAME, OR IF SHE/HE HAD NO PLANS IN 1980, SKIP TO 20.

19. THE CAREER YOU NOW EXPECT IS DIFFERENT FROM THE ONE YOU WERE THINKING ABOUT JUST BEFORE YOU ENTERED UMASS. HOW IS IT THAT THE CHANGE OCCURRED? (RECORD VERBATIM, AND PROBE. VERY IMPORTANT QUESTION. TAKE YOUR TIME. WHAT ARE THE IMPORTANT INFLUENCES, REASONS ACCOUNTING FOR THE CHANGE?)
20. What is the highest degree you would like to receive? (CIRCLE CODE & ALSO WRITE IN THE EXACT DEGREE DESIRED, e.g., M.D.)

1. None (less than 4 years of college)
2. Bachelor's (BA, BS, B ENG., ETC.)
3. Master's (MA, MS, MSW, MPH, MBA, ETC.)
4. Professional (MD, DDS, DVM, LLD, ETC.)
5. Doctorate (PH.D., ED.D., JSD., PSY.D., ETC.)

21. What is the highest degree that you eventually expect to receive? (CIRCLE CODE & ALSO WRITE DOWN THE EXACT DEGREE, e.g., MSW)

1. None
2. Bachelor's ____________________________
3. Master's ____________________________
4. Professional ____________________________
5. Doctorate ____________________________

IF DEGREE EXPECTATION IS DIFFERENT FROM DEGREE PREFERENCE, ASK THE FOLLOWING 22. IF EXPECTATION AND PREFERENCE ARE THE SAME, SKIP TO 23.

22. HOW IS IT THAT THE HIGHEST DEGREE YOU EXPECT IS DIFFERENT FROM THE ONE YOU PREFER? (RECORD VERBATIM & PROBE TO GET COMPLETE RESPONSE.)

23. AGAIN, THINK BACK TO THE SUMMER OF 1980, JUST BEFORE YOU ENTERED UMASS. REGARDLESS OF THE HIGHEST DEGREE YOU EXPECT NOW, WHAT WAS THE HIGHEST DEGREE YOU EXPECTED IN THE SUMMER OF 1980? (GIVE A MOMENT TO THINK.)
WRITE EXACT DEGREE.)

1. None
2. Bachelor's _____________________________
3. Master's ________________________________
4. Professional _____________________________
5. Doctorate _________________________________

24. INTERVIEWER CODE R 'S DEGREE EXPECTATION IN 1980 AND NOW ARE ...

1. Degree expectation now is lower
2. Degree expectation is the same -- SKIP TO 26
3. DEGREE EXPECTATION NOW IS HIGHER

25. How is it that the highest degree you now expect to receive is different from what you expected to receive just before you entered UMass? (RECORD VERBATIM. PROBE FOR A CLEAR, COMPLETE RESPONSE.)

Now I've got some questions about your attitudes and opinions.

Women meet discrimination more often in some career fields than in others. Here is a question about discrimination against women in employment and advancement in some occupations. Please give an answer for each field.

DO YOU THINK THIS FIELD IS OPEN TO WOMEN ...

(1) On the same basis as to men
(2) Open only to exceptional women or only on a segregated basis
(3) Not open to women

answer. Your opinion is important. Do not linger over your answers.
1. Accountant  
2. Advertising  
3. Business executive  
4. Career in military service  
5. College teaching  
6. Creative artist and writer  
7. Elementary school teacher  
8. Engineering  
9. Executive in federal government  
10. Executive in state government  
11. High school teacher  
12. Law  
13. Medicine  
14. Owner of a small business  
15. Personnel manager  
16. Postal worker  
17. Research in physical/biological sciences  
18. Research in social sciences  
19. Salesperson  
20. Skilled blue-collar trade  
21. Social work  

WOMEN ONLY   MEN GO TO NEXT QUESTION

27. Since June of 1983, have you belonged to or participated in any of these women's groups?

SMALL WOMEN'S SUPPORT GROUP OR CONSCIOUSNESS-RAISING GROUP
UMASS WOMEN'S LIBERATION GROUP (E.G., EVERYWOMAN'S CENTER)
LOCAL OFF-CAMPUS WOMEN'S LIBERATION GROUP (E.G., VALLEY WOMEN'S CENTER)
NATIONAL WOMEN'S LIBERATION GROUP (E.G., N.O.W., W.E.A.L.)
UMASS WOMEN'S STUDIES COURSES

A) YES   B) NO

28. FOR EACH OF THE FOLLOWING STATEMENTS, I'D LIKE YOU TO TELL ME WHETHER YOU STRONGLY AGREE, AGREE, DISAGREE, OR STRONGLY DISAGREE?

WOMEN ARE AN OPPRESSED GROUP IN THE UNITED STATES

1 2 3 4
I FEEL PERSONALLY AFFECTED BY SEXISM

29. WHEN YOU HEAR ABOUT A WOMAN BEING DISCRIMINATED AGAINST, DOES IT BOTHER YOU?
   1. YES
   2. NO
   3. NEVER HEAR OF SUCH INCIDENTS

30. WHEN YOU HEAR ABOUT A WOMAN BEING DISCRIMINATED AGAINST, DO YOU FEEL ANGRY, OR DO YOU USUALLY FEEL SAD AND DEPRESSED ABOUT IT?
   1. ANGRY
   2. SAD AND DEPRESSED
   3. DON'T REACT IN EITHER DIRECTION

26. NOW, I HAVE A FEW QUESTIONS ABOUT YOUR FAMILY BACKGROUND.

31. WHAT IS THE HIGHEST LEVEL OF EDUCATION ATTAINED BY YOUR FATHER?
   1. NO FORMAL EDUCATION
   2. SOME ELEMENTARY EDUCATION
   3. SOME SECONDARY EDUCATION
   4. GRADUATION FROM HIGH SCHOOL
   5. TECHNICAL TRAINING WITHOUT COLLEGE
   6. SOME COLLEGE (E.G., ASSOCIATE DEGREE, ETC.)
   7. GRADUATION FROM COLLEGE
   8. PROFESSIONAL TRAINING AFTER COLLEGE

32. WHAT IS THE HIGHEST LEVEL OF EDUCATION ATTAINED BY YOUR MOTHER?
   1. NO FORMAL EDUCATION
   2. SOME ELEMENTARY EDUCATION
   3. SOME SECONDARY EDUCATION
   4. GRADUATION FROM HIGH SCHOOL
   5. TECHNICAL TRAINING WITHOUT COLLEGE
   6. SOME COLLEGE
   7. GRADUATION FROM COLLEGE
   8. PROFESSIONAL TRAINING AFTER COLLEGE

33. HOW WOULD YOU DESCRIBE THE USUAL OCCUPATION OF
YOUR FATHER? (FATHER MOST RECENTLY LIVED WITH)
(RECORD VERBATIM AND CIRCLE)

1. EXECUTIVE OR PROFESSIONAL
2. BUSINESS MANAGER
3. ADMINISTRATIVE PERSONNEL, SMALL BUSINESS OWNER
4. CLERICAL, SALES WORKER
5. SKILLED MANUAL (E.G. CARPENTER, MECHANIC)
6. SEMI-SKILLED (E.G. MACHINE OPERATOR, TRUCK DRIVER)
7. UNSKILLED WORKER

PROBE PARTICULARLY FOR TYPE OF MACHINE OPERATED, WHAT COMPANY,
FURTHER EXPLANATION OF "SALESMAN" OR "ENGINEER". IF SELF-EMPLOYED,
HOW MANY EMPLOYEES?

34. HOW WOULD YOU DESCRIBE YOUR MOTHER'S USUAL OCCUPATION, IF EMPLOYED?
(FULL OR PART TIME)

1. EXECUTIVE OR PROFESSIONAL
2. BUSINESS MANAGER
3. ADMINISTRATIVE PERSONNEL
4. CLERICAL, SALES WORKER
5. SKILLED MANUAL (E.G. CARPENTER, MECHANIC)
6. SEMI-SKILLED (E.G. MACHINE OPERATOR, TRUCK DRIVER)
7. UNSKILLED WORKER
8. HOUSEWIFE ONLY

PROBE FOR PARTICULARS, GET DESCRIPTION OF JOB AND EMPLOYER.
PINK FORM—GIVE TO EVERYONE
WOMEN'S ROLE HANDOUT. GIVE FORM TO R BUT READ INSTRUCTIONS
ALOUD WHILE R READS THEM. LET R FILL OUT ALL 4
PAGES. CHECK TO MAKE SURE ALL ANSWERS ARE FILLED IN.

THANK R FOR HER/HIS PARTICIPATION! BE SURE TO GIVE OUT
A DEBRIEFING FORM AND TO SIGN THE EXPERIMENTAL CREDIT SLIP.
HAND 3 CARD 1.  (CHOOSE ONE IN EACH COLUMN)

A. Which of the following situations do you really prefer, and which do you 
really expect? (READ THE WHOLE SENTENCE ALL AT ONCE. THAT IS, 
DO NOT HAVE 1 ChoOSe HER PREFERENCE BEFORE YOU ASK HER REALISTIC EXPECTATION).

B. Which of the following do you think most men you know would prefer for their 
wives?

C. IF H IS MARRIED, ENGAGED, OR EXPECTS TO MARRY HER CURRENT BOYFRIEND, ASK:

Which of these situations does your husband/fiancé/boyfriend prefer for you?

D. ASK EVERYONE: Which of the following does your mother think that you can 
realistically expect?

E. Which of these situations does your mother prefer for you?

F. Which of these situations does your father prefer for you?

<table>
<thead>
<tr>
<th>I really prefer</th>
<th>I realistically expect</th>
<th>Most men</th>
<th>My man would prefer for wives</th>
<th>My man prefers for me</th>
<th>My mother expects</th>
<th>My mother prefers for me</th>
<th>My father prefers for me</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housewife only</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed only before children are born, then housewife</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Employed before children are born &amp; only after children are grown</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Occasionally employed (every now and then) throughout marriage &amp; child-rearing</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Combining marriage &amp; child-rearing with steady part-time work</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Combining marriage &amp; child-rearing with a full-time career</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Marriage &amp; career, without children</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>Not married; career only</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
<td>8</td>
</tr>
</tbody>
</table>
Which of the following do you expect to give you the most satisfaction in your life?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Most Satisfaction (Circle One)</th>
<th>Next Most Satisfaction (Circle One)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leisure-time recreational activities</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Your career or occupation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3. Family relationships</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4. Volunteer participation in community organizations</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5. Volunteer participation in local, national, or international political activities or organizations</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Which of the following do you expect to spend the most time at in your life?

<table>
<thead>
<tr>
<th>Activity</th>
<th>Most Time (circle one)</th>
<th>Next Most Time (circle one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leisure-time recreational activities</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2. Your career or occupation</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>3. Family relationships</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>4. Volunteer participation in community organizations</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>5. Volunteer participation in local, national, or international political activities or organizations</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

If you could have a choice, would you choose to have a career at all? (By 'career' we mean following an occupation as one's lifework.)

1. Yes  
2. No

Whatever your anticipated career field, is it important to you to reach the top of your field?

1. Very important  
2. Important  
3. Not very important  
4. Not important at all

So you think that in your field . . . (Circle one)

a) Both qualified men and women can reach the top  
b) Women must be more qualified than men to reach the top  
c) Even highly qualified women stand little chance of reaching the top
First,

We are interested in what you think are the popular ideas of today, among most men of your age and education, concerning the woman's role. There are no right or wrong answers. Please indicate whether you think the statement is (+3) very popular; (+2) moderately popular; (+1) slightly popular; (0) neutral; (-1) slightly unpopular; (-2) moderately unpopular; (-3) very unpopular; among most men of your age and education.

1. Except in emergencies, the physical care of children should be very largely the mother's, rather than the father's job.
   +3  +2  +1  0  -1  -2  -3

2. Except in special cases or situations, the wife should do all the cooking and housecleaning, and the husband should provide the financial income.
   +3  +2  +1  0  -1  -2  -3

3. Except in cases of great financial need, mothers with preschool or young school-age children should not work outside the home.
   +3  +2  +1  0  -1  -2  -3

4. It is not as necessary for women as for men to go to college and/or graduate school.
   +3  +2  +1  0  -1  -2  -3

5. If a wife goes to school or works for reasons other than actual financial necessity, she should not expect her husband to share in the household tasks.
   +3  +2  +1  0  -1  -2  -3

6. Married women, particularly if they have children, should not expect to have any kind of a career.
   +3  +2  +1  0  -1  -2  -3
We are interested in your reaction to the following statements about the woman's role. There are no right or wrong answers. Please indicate your agreement or disagreement with each of the following statements by circling the number that comes closest to your feelings. (+3) strong agreement, (+2) moderate agreement, (+1) slight agreement, (0) neutral, (-1) slight disagreement, (-2) moderate disagreement, (-3) strong disagreement.

7. Except in emergencies, the physical care of children should be very largely the mother's, rather than the father's job.

8. Except in special cases or situations, the wife should do all the cooking and housecleaning, and the husband should provide the financial income.

9. Except in cases of great financial need, mothers with preschool or young school-age children should not work outside the home.

10. It is not as necessary for women as for men to go to college and/or graduate school.

11. If a wife goes to school or works for reasons other than actual financial necessity, she should not expect her husband to share in the household tasks.

12. Married women, particularly if they have children, should not expect to have any kind of a career.
Now, I'd like to talk about women's place in society. For each of the following statements, decide whether you generally agree or generally disagree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>13. A man can make long-range plans for his life, but a woman has to take things as they come</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>14. A single woman who gets an advanced degree will have a hard time finding a husband</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>15. It doesn't pay for a woman to turn in a better job performance than the men she works with because they will resent her for it</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>16. It is as important for a married woman to help her husband get ahead in his career as to have a career herself</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>17. A woman who enters a field made up mostly of men will be seen as masculine</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>18. If a young woman wants to marry, she should be careful not to sound too intellectual on a date</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>19. A married woman can make long-range plans for her own career independent of her husband's plans for his</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>20. One of the most important things to a happy marriage is for the man to be somewhat more intelligent than the woman</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>21. It is as important for a woman to marry a man with a really good job as to have such a good job herself</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>22. Even if a woman has the ability and the interest she should not choose an occupation that would be difficult to combine with child-rearing</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>23. It is only fair for women to be paid less than men who do the same work because the man will be the bread winner</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>24. If a woman makes more money than her husband, the marriage is headed for trouble</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Agree</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>-------</td>
</tr>
<tr>
<td>25.</td>
<td>It is a fact of life that women can work only when their family duties permit</td>
<td>1</td>
</tr>
<tr>
<td>26.</td>
<td>Husbands and wives should take turns caring for young children</td>
<td>1</td>
</tr>
<tr>
<td>27.</td>
<td>A woman's true happiness lies in being a wife and mother</td>
<td>1</td>
</tr>
<tr>
<td>28.</td>
<td>The husband of a career woman must be ready to make his career decisions jointly with her</td>
<td>1</td>
</tr>
<tr>
<td>29.</td>
<td>Women can make their greatest contribution in fields allied with their natural interests - caring for others, helping, and teaching</td>
<td>1</td>
</tr>
<tr>
<td>30.</td>
<td>A pre-school child is likely to suffer emotional damage if his mother works</td>
<td>1</td>
</tr>
<tr>
<td>31.</td>
<td>Parents should encourage just as much independence in their daughters as in their sons</td>
<td>1</td>
</tr>
<tr>
<td>32.</td>
<td>If a woman is attracted to a man she should feel free to ask him for a date</td>
<td>1</td>
</tr>
<tr>
<td>33.</td>
<td>Women should feel free to initiate sexual activity</td>
<td>1</td>
</tr>
<tr>
<td>34.</td>
<td>Pre-marital sexual relations often equip men and women for more stable and happier marriages</td>
<td>1</td>
</tr>
<tr>
<td>35.</td>
<td>Women do not enjoy sex as much as men</td>
<td>1</td>
</tr>
<tr>
<td>36.</td>
<td>Women should not engage in either pre-marital or extramarital intercourse, but men may</td>
<td>1</td>
</tr>
<tr>
<td>37.</td>
<td>Pre-marital sexual relations are permissible for either sex</td>
<td>1</td>
</tr>
<tr>
<td>38.</td>
<td>Men but not women may engage in pre-marital sex relations, but neither extramarital</td>
<td>1</td>
</tr>
<tr>
<td>39.</td>
<td>A man's true happiness lies in being a husband and father</td>
<td>1</td>
</tr>
</tbody>
</table>
### APPENDIX C

**Warner's Social-Class Revised Scale for Rating Occupations**

<table>
<thead>
<tr>
<th>Rating Assigned to Occupation</th>
<th>Professionals</th>
<th>Proprietors/Managers</th>
<th>Businessmen</th>
<th>Clerks and Kindred Workers</th>
<th>Manual Workers</th>
<th>Projective and Social Workers</th>
<th>Farmers</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Lawyers, doctors, dentists, engineers, judges, high-school superintendents, veterinarians, ministers (graduated from divinity school), chemists, etc. with post-graduate training, architects</td>
<td>Businesses valued at $75,000 and over</td>
<td>Regional and divisional managers of large financial and industrial enterprises</td>
<td>Certified Public Accountants</td>
<td></td>
<td></td>
<td>Gentlemen Farmers</td>
</tr>
<tr>
<td>2</td>
<td>High school teachers, trained nurses, chiropractors, clergymen, railroad ticket agents, newspaper editors, librarians (graduate)</td>
<td>Businesses valued at $50,000 to $75,000</td>
<td>Assistant managers and office and department managers of large businesses, assistants to executives, etc.</td>
<td>Accountants, salesmen of real estate, managers of insurance, postmasters</td>
<td></td>
<td></td>
<td>Large farm owners Farm owners</td>
</tr>
<tr>
<td>3</td>
<td>Social workers, grade-school teachers, statisticians, librarians (not graduate) undertake’s assistant, ministers (no training)</td>
<td>Businesses valued at $5,000 to $20,000</td>
<td>All minor officials of businesses</td>
<td>Auto salesmen, bank clerks and cashiers, postal clerks, secretaries to executives, supervisors of railroad, telephone, etc.</td>
<td></td>
<td></td>
<td>Contractors</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td>Businesses valued at $2,000 to $5,000</td>
<td>Stenographers, bookkeepers, rural mail clerks, railroad ticket agents, sales people in dry goods store, etc.</td>
<td>Factory force workers, electricians, plumbers, carpenters, watchmakers, etc.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td></td>
<td>Business valued at $500 to $2,000</td>
<td>Dime store clerks, hardware salesmen, beauty operators, telephone</td>
<td>Barbers, firemen, butchers, etc.</td>
<td></td>
<td></td>
<td>Tenant Farmers</td>
</tr>
<tr>
<td>6</td>
<td></td>
<td>Businesses valued at less than $500</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Small tenant Farmers</td>
</tr>
<tr>
<td>7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Migrant farm laborers</td>
</tr>
</tbody>
</table>

*Note: The table continues with specific occupations for each rating.*