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ABSTRACT

A study examined college students' attitudes about career and family roles for men and women and investigated the potential effect on these attitudes of specially designed interactive curricular materials. A total of 377 students (152 males and 225 females) from six diverse college campuses located throughout the country voluntarily participated in a field study of a newly developed set of curriculum materials focusing on career and family values. Pre- and posttests were used to gather demographic, evaluative, and attitudinal data. The students' initial attitudes about such issues as career motivation, parenthood, the difficulties experienced by working couples, and plans to take parental leave indicated that the students of both sexes "wanted it all." Students of both sexes originally had a somewhat narrow view of the problems involved in developing and maintaining careers, and their initial recognition of the trade-offs involved in combining work and family was rather limited. The responses obtained after exposure to the interventional curriculum materials showed an increased awareness of workplace realities (in particular, the fact that getting ahead depends not only on high performance but also on awareness of office culture variables), and it appeared that some basic assumptions about male and female roles had been challenged. (Appendixes include supplementary information on the study's design and methodology; supplemental demographics, expectations, and evaluations; a sample syllabus; and a sample Catalyst exercise on values, goals, and priorities.) (MN)

New Roles for Men and Women

A Report on an Educational Intervention With College Students

By the Staff of Catalyst

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Summary

A study was conducted by Catalyst's Campus Resource to explore college students' attitudes about career and family roles for women and men, and to investigate the potential effect on these attitudes of specially designed interactive curricular materials. Students (152 males and 225 females) from six diverse campuses across the country participated voluntarily in the field study by using the materials in classrooms (in various disciplines and course types, including those focusing on sex roles, career planning, family relations, counseling, and newly developed curricula on career and family values) and by completing pre- and postquestionnaires containing demographic, evaluative, and attitudinal questions.

Results show that the demographics of the sample are similar to the current postsecondary student population in general, except that this sample contains an overrepresentation of women. Findings indicate that the Catalyst materials and course designs were favorably evaluated by students, faculty, and staff who used them.

Students' initial attitudes about such issues as career motivation, salary expectations, parenthood, the difficulties experienced by working couples, and plans to take parental leave indicate that students "want it all"; both males and females want satisfying careers and meaningful family lives. Many students originally revealed a somewhat narrow view of how to "get ahead," and of the problems involved in developing and maintaining careers. Analyses suggest that students' initial recognition of the tradeoffs involved in combining work and family was rather limited. While there were some male/female differences in attitudes, there was agreement about basic goals and desires for the future.

Responses to the same attitudinal questions at the end of the courses suggest that, for these students, there was an increased awareness of workplace realities, and that some basic assumptions about male and female roles had been challenged. For example, males indicated a desire to take a longer parental leave at the birth of their first child. And a striking lack of relationship between career and salary expectations, and plans to leave work when children are born was replaced by a recognition that prolonged absence from the workplace can affect career development. On the posttest, both males and females indicated that "getting ahead" depends not only on high performance (their original contention) but on an awareness of office culture variables.

Based on these findings and on Catalyst's history of interaction with college students, we conclude that further research seems warranted on the potentiality of educational interventions designed to inform students about work and family issues.

Introduction

Statement of the Problem

Rarely does one pick up a newspaper, magazine, or journal today without finding a statistic on the changing family or the changing workplace. Most frequently, these changes are attributed to the massive influx of women into the work force. This phenomenon has had a powerful and possibly permanent impact on our central social institutions. With more than half of all women now working, personal relationships and even social structures may need redefinition.

Although women have been in the labor force in this country since the industrial revolution, many employed women prior to 1945 were single. And, though all data are not available, it is likely that before 1955, a sizable proportion of married women who worked were not mothers of young children (Hoffman & Nye, 1974). Traditionally, it was assumed that the proper place for married women with children was in the home, not in the workplace. Today, however, young women plan to have a career after high school, college, or graduate school, and many remain in the work force all through their childbearing years. In fact, half of all mothers with children under age three are currently working outside the home (Bureau of Labor Statistics [BLS], 1986).

The phenomenon of women's changing roles is no longer simply a "women's issue"; it has implications for men, children, and all the institutions within which they operate. The family, for example, is changing rapidly. Now that six out of every 10 mothers are in the work force (Staff, National Commission on Working Women, 1986), the "traditional" family, consisting of a married

couple with children under age 18 and a husband as the sole wage earner, comprises less than 10% of all U.S. families. Where single-parent and two-earner families were once considered exceptions, today the majority of American families fall into one of these two categories (BLS, 1986).

In addition, although many female-dominated occupational fields (e.g., typists, nurses, elementary school teachers) have remained predominantly female, nearly every previously male-dominated field--including medicine, engineering, law, and accounting--has seen dramatic changes in the composition of its work force. Overall, in 1985, women comprised 45% of the labor force--as compared to 29% in 1948 (Bloom, 1986)--and that figure is expected to rise to 48.2% by 1995 (BLS, 1984). Already, employees are reporting to female supervisors; some male employees may be reluctant to accept a relocation offer because of a spouse's career commitment (Catalyst, 1983); and male and female employees are requesting help from their employers for their child care needs (Catalyst, in press).

In spite of all these changes, we are still in a period of transition, and people are conflicted in their attitudes about what's "fair" for men and women to do (Major, 1987; Sekaran, 1986; Skolnick & Skolnick, 1983; Voydanoff, 1984). In the family, for example, although men and women believe that women's roles should continue to change, many also think that a woman should quit her job if her husband is offered a transfer (Van Lenten, 1985). While a majority of people strongly support the idea that fathers should have an equal role in childrearing, most still believe that a mother with young children should not work unless it is financially necessary (The Ethan Allen Report, 1986).

In the workplace, although men and women are now employed alongside one another in a number of fields, some men still see women as performing best in

secondary roles or as objects of sexual attraction; they have not yet learned to relate comfortably and effectively to women as colleagues (Catalyst, 1986a). Moreover, many women, due to their traditional training and socialization, have difficulty perceiving themselves as competent enough to perform well in their positions, and some have trouble asserting themselves as leaders, especially when managing men (Catalyst, 1986a). According to a recent special supplement of The Wall Street Journal (Hymowitz & Schellhardt, 1986), one outcome of these conflicts is that some women, particularly those in corporations, feel they may face an invisible barrier or "glass ceiling" when they aspire to top executive-level positions. In fact, a major survey of senior-level executives in the nation's largest corporations found that the female respondents had increased only from 1% in 1979 to 2% in 1986 (Korn/Ferry, 1986).

Although the popular press reports on men who are attempting to combine their careers with home and family responsibilities, many men still have employers who expect from them a traditional, all-encompassing work commitment. Some men are coping with the conflict by changing jobs or employers; others are opting to stay home with their children on a long-term, full-time basis (Gregg, 1986). But regardless of men's involvement with their families, it is women, in general, who continue to perform a majority of the household chores (Ross, 1986), and most people still place a high value on the mother as the crucial child care provider.

Clearly, the problems described above that face individuals in their personal lives and in their work, as in all periods of rapid social transition, are intertwined with and are a reflection of conflicts in the society at large. The civil rights and women's movement of the 1960s helped to move society away from a fixed set of social norms that once divided people more strictly along

the lines of race and gender. But with new options and choices, people may become initially conflicted, and today that conflict may lead to phenomena such as divorce, concerns about parenthood (Basler, 1986), bitterness over unrealized expectations, and tensions in the workplace that hamper individual well-being and productivity.

Conflict over new options, however, need not be taken only as a negative experience. It may also promote growth and the development of new horizons. Divorce, for example, though frequently a painful experience, may indicate an increase in choices open to women rather than simply a loss of stability. For women, especially, it is difficult to know to what extent there was always inner conflict when choices were limited; but one possibility is that the women's movement helped women to express and act on those conflicts. (1) Today, assuming multiple roles (employee, spouse, mother) may actually enhance a woman's sense of well-being, in spite of the stress brought on by conflict among roles (Baruch, Barnett, & Rivers, 1983; Pietromonaco, Manis, & Frohardt-Lane, 1986).

In any event, the story does not end with the conflict experienced by individuals. While men and women are trying to redefine their roles in the family and workplace, employers, educators, and legislators are attempting to become responsive to emerging needs. Movement is complicated and outcomes uncertain. Although the final word is not in, it is clear that the resolutions will have to accommodate a greater variety of work patterns and personal relationships than has ever been known before.

What are the implications of all this for young adults? Will today's college students be prepared to face the challenge of combining work and family life? Once they take on adult responsibilities, how will they deal with the

many new choices that are now available? Most likely, decision making will not be easy for women and men. And with indecision comes anxiety. There are few role models to provide direction; while the media, schools, and other institutions give lip-service to changing roles, they also disseminate messages that show men and women in traditional, stereotypical ways (Brinn, Kraemer, Warm, & Paludi, 1984; Cowan and Hoffman, 1986). As a result, many young people report feeling pulled back and forth between traditional and nontraditional values (Catalyst, 1982).

Student Attitudes Toward Sex Roles and Combining Work and Family

The literature related to postsecondary students' attitudes toward sex roles and sex role stereotypes provides little consensus on the "average" student's attitudes toward sex roles. (2) Many questions come to mind. For example, do students today approve or disapprove of women pursuing careers? How do they feel about fathers participating in childrearing? What are students' plans for their own futures in terms of family and workplace roles? Some studies indicate that students may be moving away from a belief in traditionally defined roles for men and women, while others find that students hold conventional attitudes on some issues related to appropriate behavior for men and women.

The largest and most comprehensive study of students is the annual survey of college freshmen conducted by the Higher Education Research Institute at UCLA in cooperation with the American Council on Education in Washington, D.C. Over 290,000 students answer questions about their family background, current activities, and attitudes toward social and political issues.

The latest survey indicates that both men and women have the desire to be

fully involved in their careers as well as with their families (Astin, Green, Korn, & Schalit, 1986). Included in the survey are several questions that elicit sex role attitudes. For example, students were asked if they agreed that "the activities of married women are best confined to home and family." (3) In 1986, a large majority of freshmen (80%) responded "no" to this question--a major contrast to the 57% of freshmen in 1967 who expressed agreement (Panos, Astin, & Creager, 1967; Astin et al., 1986). Additionally, in 1986, 92% of freshmen agreed that women should receive the same salary and opportunities as men in comparable positions--an increase of 11 percentage points over the number who agreed with the statement in 1970 (Staff of the Office of Research, American Council on Education, 1970; Astin, et al., 1986).

Students' opinions on these questions may vary, however, when certain demographic differences are taken into account. For example, a survey of high school students found that men, whites, and those who didn't have working mothers tended to express slightly more conservative opinions about women working outside the home. The same survey noted that when a question implies the presence of children, such as, "It is usually better for everyone involved if the man is the achiever outside the home and the woman takes care of the home and the family," students tend to respond more traditionally than if there is no implication that the woman has children (Herzog, Bachman, & Johnston, 1983).

The overall picture obtained from much of the research on student attitudes is one that suggests growing support for women's roles as workers. This support extends to students' plans for their own futures. Perhaps the most interesting repeated finding regarding young people's attitudes today is that both men and women "want it all." They want to participate fully in their

careers and play active roles in their families (Catalyst, 1982; Geber, 1987; Komarovsky, 1985; Zuckerman, 1985). In fact, a majority of male and female respondents on the latest ACE/UCLA survey rank both "raising a family" and "becoming an authority in my field" as very important objectives (Astin et al., 1986). And a third of the men in one survey on selected campuses expressed a preference not to work full time or not to work at all when their children are under six years old (Zuckerman, 1985).

Rather than prioritizing one goal over another, students today put equal emphasis on the place of career and family in their lives (Phillips & Johnston, 1985). And a large majority of respondents to a recent survey of college women agreed with the statement, "I want it all, to be a parent, spouse, and career person, and am determined to manage it all and do it well" (Baber & Monaghan, 1986). Interestingly, one study of undergraduate students at an all-women's college indicated that this desire to "have it all" may actually increase as students go through college (Komarovsky, 1985).

Students' plans to "have it all," however, represent a source of potential conflict. When pressed to talk about how they will combine work with family life, for example, male and female students are often unaware of the paradoxes contained in their expectations. They say that they or their partners will interrupt their careers for childbearing, but seem unaware of the financial or career problems that might result (Phillips & Johnston, 1985; Zuckerman, 1985); some have not planned a specific strategy for combining work with childbearing, and very few have thought about alternatives in case their plans do not work out (Granrose, 1985).

Although students of both sexes plan to combine work with family, some differences between men and women have been found. More women than men

indicate a desire for equality in their work and family relationships (Machung, 1986). And several studies suggest that many men have traditional expectations of their dating relationships and future partners (Komarovsky, 1985; Phillips & Johnston, 1985) and may be even more committed to career values than ever (Regan & Roland, 1985). Potential conflict exists not only between men and women; it has also been found to exist within individuals. Some young women who espouse egalitarian views about men and women also have conventional feelings toward the men they date, such as a desire to be "protected" (Komarovsky, 1985). And some young men plan to give a higher priority to their children than to their careers, yet do not think that having children will interfere with their career goals (Catalyst, 1982). It seems possible that these mixed findings represent real confusion in the minds of young adults rather than simply artifacts of individual studies.

Conclusion. The research cited above provides compelling evidence that college students today, who form the first generation where comparable numbers of men and women are represented across most educational disciplines, are in conflict. While many students support the idea of women's choice to pursue a career, and a large majority want to "have it all"--career, marriage, and parenthood--they are uneducated about and unprepared for the realities of combining work and family life.

Interventions. The need for guidance has been expressed by students, researchers, and practitioners. Diana Zuckerman (1986), who surveyed students on seven selected campuses about their work and family plans, reported that many students wrote in the margins of their questionnaires comments such as "I wish someone had done something like this [i.e., asked me questions or interviewed me] earlier in my education, so I could have thought about these

issues." (4) Phillips and Johnston (1985) propose that by giving students more information about the consequences of making particular career and family tradeoffs, they may be able to clarify some of their plans. After conducting a major study on work and family, the Economic Policy Council of the United Nations Association-USA (1986, p.23) recommended that "business school curriculum and textbooks should be revised to address work and family issues."

Some career development counselors on college campuses have begun to discuss the issue of potential conflict between work and family roles with students who voluntarily seek out their advice. In addition, a few faculty members, particularly those who teach about sex roles, have already begun to integrate these issues into their courses. (5) Several noncampus-based agencies and organizations are also helping individuals and employees cope with changing work and family roles by producing materials, working directly with clients and employees, and consulting with corporations. (6) However, Catalyst is not aware of any current campus-wide interventions aimed at increasing students' ability to integrate career and personal life plans.

Most important seems to be the need to help students confront the issue of what constitutes appropriate sex role behavior and how sex role stereotypes affect their thinking, since it seems clear that here is where some of the major confusion exists. Whether it is "acceptable" for a young woman to set her sights on a graduate engineering program, whether a young man can comfortably turn down a relocation offer because it will have an adverse impact on his partner's career opportunities, whether a couple can agree on their plans to have or not to have children--these are the kinds of questions that Catalyst representatives hear each time they have a dialogue with college students. But today, most students do not have an opportunity to give focused

and disciplined thought to these concerns. Thus, it seems probable that many students will leave college campuses with as little preparation as their parents had for living in a world where the "rules" and the "roles" are constantly changing.

Purpose of the Catalyst Study

Development of the Campus Resource. Founded in 1962 by Felice Schwartz, Catalyst's first goal was to help women prepare to return to the work force, at least on a part-time basis, when their children no longer required their full attention. In 1964, a program called Catalyst on Campus looked at ways to help train these women. Once it became clear that many women were going to work their entire adult lives, Catalyst shifted its focus to examine the family/workplace interaction, particularly the policies and practices that affect women's entrance to and mobility in the workplace.

In 1980, we conducted a large-scale survey of corporations and two-career couples to identify current needs and attitudes as well as policies affecting working couples, and, with a grant from the W.K. Kellogg Foundation, founded Catalyst's Career and Family Center. The activities of the Center included in-depth research of corporate policies, and development of special programs to help individuals resolve work and family conflicts.

The Campus Resource at Catalyst was created as part of that Center and has focused its attention on one of the findings of the 1980 study mentioned above. Many of the two-career couples surveyed in that study expressed a need for "information and education" on work and family (Catalyst, 1981). The overall thrust of the Campus Resource program has been to help students integrate their career and personal life plans, and thereby become more

informed decision makers. To this end, we have investigated how to promote the issue of combining work and family life as a subject deserving widespread academic attention--especially among professors of social science, business, education, and the humanities--so that students could be exposed to the information as a natural part of their postsecondary education.

In 1982 and 1983, armed with eight exercises (described more fully in the methods section below) designed to help students openly discuss sex role stereotypes, values and conflicts about work and family life, and their own career plans, Catalyst developed an innovative syllabus for a full credit course that included, in addition to readings (both theoretical and empirical), and a demanding term project, unusual features such as several sessions where invited panelists (professional couples living in the area) presented their views to the students in the classroom, a visit to a local daycare center, and the showing of a number of documentary films produced by social scientists on topics like sex role socialization, the stigma of "minority" status at work, and the rewards and problems of men choosing a nontraditional approach to career and family life. Catalyst then co-taught (with campus professionals) an interterm course based on this syllabus at three campuses: The College of St. Thomas, Southern Methodist University, and Smith College. The goal was to involve students in serious discussion of the issues through the use of a highly interactive and dynamic course design. Students' responses were unanimously positive, and the publicity surrounding these events brought inquiries to Catalyst from academics, staff, and students across the country.

Initiation of the study. In 1984, with the advice of a consulting committee of campus professionals, Catalyst developed plans to conduct a campus-based national educational experiment, the results of which will be

reported here. (7) The 18-month field study was initiated in the spring semester of 1985, when Catalyst arranged to distribute a set of experimental materials including exercises, fact sheets, sample syllabi, and bibliographies to a carefully selected sample of postsecondary institutions.

Catalyst created the materials because, although there are books available that focus on sex roles, others that stress marriage and family concerns, and some that address career planning issues, we know of no text that integrates these three concept areas, providing both a theoretical perspective and interactive exercises. When Catalyst staff representatives co-taught courses on career and family at the three college campuses mentioned above, an integrated set of materials such as the ones we provided were found to be a useful tool for curriculum development.

Catalyst researchers hoped to determine through the current study whether campus professionals would be able and willing to use these materials in their classrooms, to find out how well informed students were about issues related to combining work and family life, and to discover whether faculty and staff would engage in joint efforts to explore these issues, using Catalyst materials as a guide. Specifically, the study was designed to examine how classroom/curricular activities focusing on career and personal life planning (while addressing changing sex roles) would interact with students' expectations, evaluations, and attitudes--and whether effects would vary by sex, socioeconomic background, or geographic location. The campuses involved were expected to gather data from students participating in both curricular and extracurricular activities where Catalyst materials were used. While no specific hypotheses were formulated at the outset, we were interested in students' career expectations (e.g., their motivation, hopes for salary, ideas

for achieving success), their personal plans (e.g., intentions about marriage, having or not having children, division of chores, and knowledge of two-career couples), and their understanding of the interaction between the two (e.g., the relationship between their plans for parental leave, career motivation, and salary expectations).

Of 1,148 students who used Catalyst materials during the 18-month experimental period, 377 participated in credit courses and completed pre/postquestionnaires. (8) The results section will focus exclusively on this subsample because the findings are most comprehensive--they include pre- and post-attitude measures--whereas data from the rest of the sample provide some demographic and evaluative information only. For a description of the overall design of the field study, see Appendix 1. Appendix 2 contains supplementary demographic information and evaluations gathered from subjects participating in extracurricular or short-term events. Appendix 3 provides a sample syllabus and an example of a Catalyst exercise.

Methods

Overview

Eight colleges and universities differing in size and background of student body, highest level of degree conferred, type of surrounding community (i.e., rural, suburban, urban), funding structure (i.e., public, private), and location by region of the country were chosen to participate in the study. Six campuses provided data from pre/postquestionnaires. (See Appendix 1 and 2 for information on other questionnaires used.) Instructors, who participated voluntarily, were professors or staff members, mostly from undergraduate divisions, representing such diverse disciplines and offices as: psychology, sociology, social work, education, management, industrial relations, women's studies, counseling and psychological services, personal and student development, leadership development, and career development and placement services.

Subjects

Subjects were 152 males and 225 females, all college students, who enrolled in credit courses for which their instructors had access to and would use Catalyst materials. While students were unaware at the time of registration that they would be "subjects" in an experiment, each one agreed to participate voluntarily upon reviewing a letter from Catalyst during the first session of the course. Six of the participating campuses provided data as follows: Campus 1 = 32 subjects, Campus 2 = 47 subjects, Campus 3 = 148 subjects, Campus 4 = 35 subjects, Campus 5 = 72 subjects, Campus 6 = 43 subjects.

Catalyst Materials

The experimental materials were distributed to each participating campus in the form of a comprehensive, two-volume, 400-page manual. Volume 1 contains 25 exercises, bibliographies, fact sheets, lecture guidelines, and discussion questions. Volume 2 contains information to help instructors design new curriculum and organize special educational events. For example, there are model syllabi, instructions for planning and implementing panel discussions, resources for using audiovisual materials, and guidelines for creating publicity to promote the events. The exercises contained in Volume 1 focus on three major subjects: career planning, sex roles, and marriage and family. Many actually integrate the subjects (e.g., a set of 11 scenarios and questions about work and family values and conflicts) and are designed specifically to foster provocative classroom discussion. It is during these discussions, Catalyst has learned, that implicit assumptions about appropriate sex role behavior emerge, and the motivation and involvement of students is highest.

Other exercises related to personal expectations help open up the subject of sex role socialization and stereotypes (e.g., the student is asked to write a paragraph about his/her "ideal" spouse/partner; papers are exchanged anonymously and the instructor facilitates classroom discussion using a study guide). Also included is a card-sort exercise in which students order 32 "needs" according to importance, and arrange them in various categories that define strategies to fulfill the needs.

There are also exercises highlighting workplace issues, which are designed to help students make career decisions and learn how to conduct a job search. Here, too, stereotypes are examined. In one exercise, for example, students

are asked to make a hiring decision based on a hypothetical individual's resume, cover letter, and an interviewer's notes. There are actually three versions of the resume distributed in the classroom, all identical except for the name of the job candidate--in one case it is a female name, in another it is a male name and in the third it is a set of initials. This fact is "discovered" in the course of the ensuing discussion, and students' gender-linked judgments about the candidate are addressed. In another exercise, students are asked to practice handling sensitive job interview questions (e.g., Do you think your spouse would be willing to relocate?) with a classmate or with a recruiter invited to attend the class.

While these examples may provide the flavor of the experimental materials, it is important to remember that Catalyst considers the materials a resource, not a prescription. Campus professionals were expected to choose those exercises that most accurately reflect the primary subject being taught and that best suit the format being used. (9)

Instruments

A 12-page, 41-question pretest and a 13-page, 34-question posttest were administered in credit courses where many different Catalyst exercises and materials were employed and where there was opportunity for possible change to be observed in students' attitudes. Items regarding demographics, course expectations, and attitudes about work and family appear on the pretest. Questions about students' evaluations of particular Catalyst materials and of the course in general, plus an exact repetition of 20 attitude questions, comprise the posttest. (10)

Professional Evaluation Form (PEF). At the end of each course,

instructors and group leaders completed a nine-page questionnaire containing 28 questions about course structure and evaluations of all Catalyst materials.

Procedures

Instructors of credit courses received Catalyst materials and questionnaires (to be replicated by the instructor as required) from a principal contact person on campus with whom Catalyst interacted regularly throughout the experimental period (January, 1985 through June, 1986). This three-semester experimental period provided the lead time necessary to initiate and develop courses using Catalyst materials. All questionnaires included a letter from Catalyst indicating how the data would be used. Confidentiality and anonymity of both individual participants and campuses was guaranteed.

Individual instructors chose which materials to use in their courses and orchestrated the manner in which they would be used. They were instructed to administer the Catalyst prequestionnaire at the beginning of the first session of the course. The postquestionnaire was administered on the last day of class. Students were free to decline to participate if they so wished. All questionnaires were returned to Catalyst for analysis. Professional Evaluation Forms (PEFs) were sent to Catalyst by instructors and, when applicable, by group leaders willing to complete the forms at the end of the course.

Two examples may serve to illustrate the diversity of experience. At one campus, a variety of Catalyst exercises on sex roles and work/family conflicts were incorporated into a course designed originally to help students with career planning, resume writing, and developing interviewing skills. At another campus, a new course on combining career and family was developed and taught in the residence halls (for half credit). Students in this course were

asked to record in notebooks their feelings and experiences as they completed their reading and writing projects. In each of these courses, there were demanding academic assignments, including readings and term projects, while regular small group discussions in the classroom helped personalize and "bring the issues home" to the students.

Data Analyses

Coding. Pre- and postquestionnaires were matched by an identification number. Responses in the evaluative sections of postquestionnaires were considered valid when they corresponded to the Catalyst materials and exercises actually used in a particular course. A codebook was developed for the student questionnaires. Coding categories for write-in answers were determined. Three open-ended evaluative questions appearing on the postquestionnaire were coded and tallied by hand according to a category system devised by Catalyst staff. (11)

Coders and reliability. Coding of the pre- and postquestionnaires was completed primarily by three social science student interns trained by Catalyst's data manager. Intercoder reliability for all responses requiring subject-by-subject coding was determined by sampling a random subset of approximately six percent of the total number of pre- and postquestionnaires (base n=602) available in January, 1986. The three coders agreed on coding categories 98.8% of the time. One of the student interns was trained to code the items relating to subjects' socioeconomic class (SEC). (See below for further details on the SEC procedure.) Finally, a Catalyst staff member coded the three open-ended evaluative questions and all items on the PEF. Reliability tests were not conducted on these findings, and they are reported

descriptively in the results section below.

Coding socioeconomic class (SEC). The measure of subjects' socioeconomic background was developed using a two-factor, modified Hollingshead technique (Hollingshead, 1975). A manual for categorizing occupation and educational level is provided by the Hollingshead team. Parents' scores were weighted, summed, and averaged, according to the manual to produce a single measure (on a five-point scale where one equals "lower class" and five equals "upper class") for each subject who provided data.

Analysis plan. Since this study was exploratory and empirically rather than theoretically driven, the analysis plan proceeded by stages, and descriptive statistics are frequently used. Independent t-tests were conducted when variables such as sex or SEC were involved and dependent t-tests were used to examine pre and post, within-subject differences. Correlation analyses were conducted to determine whether there was a potential relationship between specific measures; for example, between subjects' career motivation and their salary expectations.

Caveat on Results

While a great deal of effort went into choosing a representative sample of campuses, the generalization of these results may be limited by several factors. The sample of college students and other participants was self-selected and there were no control groups to permit comparisons. Moreover, little control was exerted over the actual procedures, the choice and use of Catalyst materials, or the administration of the questionnaires on any campus. Even so, some inferential statistics were used to explore potential relationships between variables and to examine the possibility that pre/post

attitude changes did occur. However, as with all exploratory field studies where random sampling is not possible and where a sizable number of inferential statistical tests are performed, there may be inaccuracies in the significance level reported. Thus, while we only include below findings that reached at least a standard confidence level (alpha <.05), in a random sample of college students, the results might be statistically significant at a different level. For these reasons, it would be best to consider the findings reported here as suggestive of what might occur if a more rigorous experiment were conducted using a larger sample of college campuses and students assigned randomly to experimental and control conditions.

In concluding this caveat, it seems worth noting that the purpose of the study and of the Campus Resource program in general is to learn more about how to help students increase their awareness and develop a framework for thinking about combining career with family life. Working with these eight campuses over the 18-month period gave Catalyst staff representatives the opportunity to further that goal. Given the diversity of educational experiences provided, we did not expect to find a great deal of change in attitude across campuses from the beginning of the courses to the end, nor did we wish to have students "change their mind" from holding attitude A to holding attitude B. The aim was, rather, to see if interactive materials used in academic settings could "stir up the waters" by getting students to challenge their own and each others' implicit assumptions, and examine them in light of new information and experience. That measurable attitude change did occur in some cases suggests only that for these students the challenge may have been met. The study, then, should set the stage for more experimental and innovative approaches, as well as for further research.

Results

Demographics: Pretest Results

Subjects (152 males and 225 females) ranged in age from "under 18" to "51+" years, with a mean of 21 (sd=.99), and a median and mode of 22 years, indicating that the majority were students of traditional college age. Of interest is the fact that 60% of the subjects were women and only 40% were men. (12) While caution is warranted in interpreting this overrepresentation, one potential explanation is that women, more than men, on campus feel concerned about career and, in some cases, family life, and so seek information to help them make career or life planning decisions.

In terms of their stated religious preference, the measured sample (n=364) was predominantly Protestant (53%). (13) About one-third of the subjects described themselves as Catholic (31%) and the rest fell into other categories including Jewish (5%) and nonreligious (10%).

As for subjects' socioeconomic background (henceforth referred to as SEC), Table 3.1 shows that on a five-point scale where one is "lower class" and five is "upper class," the mean was 3.86 (sd=.93). The table makes it clear that the subjects came largely from a middle-class to an upper-middle-class background. While the range was small, there were significant differences between campuses, and more than a full point difference between the average SEC at Campus 5 and Campus 2. (14)

Interestingly, only 21% of the subjects (n=375) depended solely on their parents to pay for their education, which suggests that despite their relative affluence, many of these families cannot afford to cover the entire cost of their children's postsecondary education. The rest either received no parental

Table 3.1

SUBJECTS' SOCIOECONOMIC CLASS			
	Mean*	sd	n
All	3.86	0.93	369
Campus 1	4.12	0.95	31
Campus 2	4.54	0.52	47
Campus 3	3.95	0.84	147
Campus 4	4.02	0.71	34
Campus 5	3.30	0.93	70
Campus 6	3.39	1.02	40

$F=15.95$, $df=5,363$, $p<.001$, $\eta^2=.1802$

*Scale=1-5 where 1=lower class and 5=upper class

support (42%) or paid for their education through a combination of methods including some parental support (37%). Not unexpectedly, then, more than half the subjects (57%) were attending classes as well as working at some kind of paid job (n=375). Forty-nine percent held part-time jobs, and 8% held full-time jobs.

Subjects' living arrangements were typical of the general college population (n=373). Many were living alone either in apartments or dorms (67%). The remainder were living at home with parents (20%) or living with their own spouse/partner and/or their children (13%).

Table 3.2 reveals the most popular academic majors among the subjects (n=372). Business/computer science ranked highest which, while somewhat higher than the national norm, mirrors its predominance on campuses across the country. In fact, it is the most popular proposed major among freshman and far exceeds all other majors (Astin et al., 1986). The social sciences ranked second, and the arts and humanities third.

Overall, the students' demographic characteristics described so far, apart from the proportion of participating males and females, reflect distributions and trends quite similar but not identical to the norms for entering freshmen reported in the ACE/UCLA studies (see Astin et al., 1986).

Since one goal of the experiment was to discover what college students know about the problems of combining work and family life, subjects were asked how many two-career couples they were acquainted with. Over half (52%) indicated that they knew a large number of working couples. About a third (36%) said they knew some. Only 11% said they knew very few, and one percent said they knew no such couples (n=375).

But results indicate that, although subjects knew many two-career couples,

Table 3.2

SUBJECTS' MAJOR FIELDS OF STUDY

Major	% of Students	# of Students
Business/Computer Science	46	172
Social Sciences	16	59
Arts and Humanities	9	35
All Pre-Professionals (e.g., Law, Medicine)	8	31
Undecided	7	25
Nonbusiness double majors	5	19
Science/Engineering/Architecture	5	17
Education	4	14

Total n=372.

they had not spent much time talking or thinking "about the problems faced by couples when both members work". A startling 42% reported giving very little thought to these problems and 12% admitted to having done no thinking about them. Only 13% indicated that they had thought or talked a lot about the problems two-career couples face wh. . 33% said they had thought a moderate amount about the issues (n=372). It appears that although the majority of subjects know a substantial number of couples where both members work, more than half have yet to consider seriously the implications of this life choice for their own futures.

Expectations for This Educational Experience: Pretest Results

As discussed in the Methods section, the disciplines of participating instructors ranged from the social sciences, education, and business, to the humanities. All courses were offered for credit, and required readings, examinations, term projects, etc. as in standard undergraduate curricula. In an effort to understand what motivated students to sign up for these particular courses, a series of questions about expectations and hopes for the course were included in the prequestionnaire. While there is no simple way to summarize all the responses, one of the most intriguing findings is that students appear to take this kind of course, in part, on the basis of word-of-mouth recommendations.

When students were asked how they (n=376) heard about the course (through a question where subjects could choose as many items as they wished), the most frequently chosen response was "friends talked about it" (43%). In addition, 36% of the respondents said the course was suggested by an advisor, and some said they saw it in a "catalog description" (42%). When asked "why they

registered for the course" (n=373), apart from indicating that it was of "general interest" (87%) and that the "subject applies to me" (84%), subjects responded that their "friends took/were taking it" (22%). It should be noted that one other somewhat more pragmatic reason entered the picture--subjects "needed credit" (39%).

Students were also asked what they hoped to gain from the course. Here they were given the option of choosing three from a list of 10 responses, including two write-in "other" columns. The four most popular items on the average across campuses were: "career planning information" (78%), "ways to combine a satisfying work and personal life" (50%), "how to be a 'good' job applicant" (48%), and "how to understand myself better" (39%).

In summary, a picture emerges of a national sample of college students whose demographic profile reflects the trends in national norms for age, religion, preferred major, living arrangements, source of income, and socioeconomic status. However, it is important to remember that the courses in which Catalyst materials were used are not necessarily taken by large proportions of college students, and that more women than men registered for these courses in which most subjects hoped they would learn something about career and personal life planning. Nonetheless, the profile of these students is typical enough to make information about their attitudes toward work and family of general interest.

Student Attitude Profile: Pretest Results

Since the Catalyst materials used in this study focused exclusively on students' attitudes regarding career and work life on the one hand and personal relationships and family structure on the other, these topics formed the core

of the questions on the pre- and postquestionnaires. Moreover, questions about the interaction between these two major concerns in most people's lives were included because the potential conflict between the two is the key issue. The attitude profile presented below of the 377 subjects who completed the prequestionnaire is followed by a discussion of changes in these subjects' attitudes on the postquestionnaire, as well as some areas where change did not occur. (15) Significant sex differences will be reported throughout. While few SEC differences were found, those that occurred will be included here.

Career motivation. Subjects' career motivation was high as one might expect in any postsecondary student sample. Fifty-one percent reported being "highly career oriented," 42% said they were "moderately career oriented," and only 7% indicated that they were "slightly" or "not at all career oriented" (n=377). When asked whether they "plan to work full time most of their adult lives," a very high percentage of both men (95%, n=150) and women (91%, n=208) reported plans to do so. Conforming with the above results is the fact that most subjects expect to work either for a large (38%) or medium-sized organization (37%). Very few plan to be self-employed (9%) or to work for small organizations (8%) (n=373). There were no major differences in any of these findings based on subjects' sex, socioeconomic background, or campus attended.

Salary expectations. When subjects' salary expectations are considered, the picture becomes somewhat more complicated. As Table 3.3 indicates, overall these students expect to earn about $19,000 (on the average) per year in their first full-time job after graduation. (16) However, the salary expectations of males and females differ significantly when students speculate about the future. At a point 10 years after graduation, the men in this sample project

Table 3.3

PRETEST AVERAGE SALARY EXPECTATIONS*

	Male	Female
	(n=147)	(n=220)
After Graduation	$19,354	$18,296
	(n=147)	(n=214)
Ten Years Later**	$39,660	$29,767

*Salary values computed from mean scores on an 8-point (not equal interval) scale where 1=under $10,000 and 8=over $75,000. See note 16.

**Difference between males and females is highly significant; t=4.16, p<.001, df=359

that they will earn an average of nearly $40,000, while the women believe that they will earn less than $30,000, or almost 25% less.

Salary and career motivation. When the relationship between salary expectations and career motivation is examined, the results, not surprisingly, indicate that both male and female students with high career motivation expect to earn more at their first job than do those who are less motivated (for females r=.22, p=.001, df=219; for males r=.29, p<.001, df=146). For women, that relationship is even stronger when earning power 10 years after graduation is considered (r=.36, p<.001, df=213). For males, however, the relationship drops slightly (r=.24, p=.004, df=146).

"Getting ahead" in one's career. Finally, subjects were asked what attributes they believed would be important in terms of "getting ahead" in their chosen occupations. They were asked to select and rank their top five choices (where 1=most important) from a list of 16 items. Table 3.4 displays the most frequently chosen items. "Superior performance" was clearly the most salient factor, chosen by 89% of the subjects and receiving the highest average rank (2.31, sd=1.70). (17) In fact this item's rank was more than a full point higher than any other item. Other frequently chosen items were "enthusiasm/a good attitude," "assertiveness/self-confidence," and "cooperation/teamwork."

Ideas such as "getting along with the boss," "having a helpful advisor," "working long hours," "willingness to move," "ability to travel for the job," or "playing (or dodging) office politics" counted for much less in the minds of these students. As Table 3.4 also shows, males and females differed on three items: competitiveness (t=3.50, p=.001, df=375), loyalty to employer (t=2.22, p<.03, df=375), and knowing how to "play office politics," (t=2.14, p<.04, df=375), with males considering each item of greater importance.

Table 3.4

"MOST IMPORTANT WAYS OF GETTING AHEAD IN MY OCCUPATION" AT PRETEST

ITEM:	% Ranking Item 1-5*	n**
Superior performance	89	337
Enthusiasm/a good attitude	80	303
Assertiveness/self-confidence	79	298
Cooperation/teamwork	50	189
Getting along well with co-workers	41	154
Competitiveness***	27	101
Advanced degrees	25	94
Loyalty to employer***	23	86
Getting along well with boss	21	79
Working long hours	14	52
Knowing how to "play office politics"***	14	51
Willingness to move to another location	13	48
Having a wise and helpful advisor	9	34
Ability to travel for the job	8	29
Knowing how to "dodge office politics"	3	12

*Subjects could choose 5 out of 16 items (including 1 write-in option) and rank them 1-5, with "1" being most important.

**Total n=377.

***Males and females differed significantly ($p<.05$), with males ranking this item more important.

What is most striking about the findings on this question is that attitudes related to success and achievement at work seem to be shaped by the experience of being a student. After all, a superior performance is certainly valued in academic life. Often the student is known to his/her instructors mostly by virtue of performance (i.e., tests, term papers). The three most highly ranked items concerned the individual's attitudes rather than his/her direct relationship to other people in the work force or to the nature of organizational constraints. This view may not be consonant with what is actually required to "get ahead" in the world of work, where attention to workplace culture is often crucial to success. As for the few male/female differences, they seem to reflect the more stereotypic male concerns with competition, loyalty, and political issues.

Living arrangements. The large majority of respondents in this study were neither involved in an intimate living situation with someone--only 12% were living with a spouse/partner (n=373)--nor had they had the experience of parenthood--only 9% had one or more children (n=374). To a person without a spouse or children, it is possible that questions about plans for personal relationships and family life are not terribly meaningful. Nevertheless, most people often try to imagine the future, as the students in this sample did. The results, therefore, are probably best considered as reflecting people's fondest hopes rather than pragmatic goals.

Plans related to parenthood. When asked whether they "plan to have children," men and women seem to share a remarkably similar view. Eighty-three percent of the subjects replied "yes," while 12% were "not sure" and 5% said "no" (n=340). (18) As to how many children these subjects would like to have, again men and women had similar perceptions. The most common response was "2"

(46%). About one-third (31%) of the subjects reported that they would like to have three children, and 20% hoped for more than that (n=276). (19) Interestingly, of those wanting children, only 3% said they would like to have one child.

Several questions addressed the issue of the appropriate age to begin having children. Here subjects' perceptions were of particular interest because becoming a parent is generally thought to have consequences for career development, especially for women, but more recently for men as well. The question was posed in two forms, one general and one personal: "How old do you think a women should be when she has her first child?" and "How old do you plan to be when you have your first child?" In the latter case, the question was posed in terms of what female subjects planned for themselves and what male subjects believed regarding their potential (or real) spouses.

The results were fairly straightforward. Using an arbitrary three-category age scale (21 or younger, 22-30, 31 or over), we found that about 75% of the subjects agree that, in general, a woman should have her first child between the ages of 22 and 30 (n=368). What is more, the majority (77%) reported that they (if they are women) or their spouses (if they are men) plan to (or should) have their first child during that same age period (n=313). In spite of this general consistency, there was some "hedging" on the questions about how old women should be when becoming a parent for the first time. For example, while there was no place to provide an "other" response to either the general or personal question, a substantial number of subjects wrote something in the margin (nearly 18% on both questions, n=368, n=313, respectively). And in both cases these responses reflected a feeling of "it depends." The dependent factors most often concerned a woman's personal maturity and the need

for her to make a choice based on circumstances that no one could foresee until they actually occurred.

Parenthood and SEC. A relationship emerged between subjects' socioeconomic background and their feelings about having children. While higher SEC tended to be related to wanting children ($r=.19$, $p<.001$, $df=335$), lower SEC was strongly related to already having had children ($r=.33$, $p<.001$, $df=365$). It is difficult to interpret the exact meaning of these findings since age and other factors could be involved in the relationship.

In summary, the majority of these postsecondary students seem to be clear in their intention to have children, and there is little difference, in general, between male and female subjects about this desire, about when to begin their families, or about how many children to have.

Combining career and personal life. In order to learn about students' understanding of the relationship between reaching career goals and developing a satisfying private life, specific questions that addressed both topics at once were included in the questionnaire. In addition, correlations of the answers to questions that addressed the issues separately were examined. In the sections below, results related to the problems of working couples, students' parental leave plans, career conflicts, and beliefs about "success" will be explored.

Difficulties for working couples. When asked "what is the most difficult problem for couples who try to combine work and a serious personal relationship?" ($n=372$), of the eight items provided (and only one could be selected), the two most frequently chosen by women and men were "managing time" (38%) and "combining work and a serious relationship with parenthood" (28%).

Parental leave. The decision one makes about parental leave--the amount

of time taken off from work after the arrival of an infant--can have profound effects on the career of a parent as well as on the life of the family. We asked subjects: "How much time do you plan to take off after the birth of your first child?" and "How much time do you think your spouse/partner should take off?" Included in the responding group are only those subjects without children who expect to have (or who are at least thinking about having) them.

Table 3.5 summarizes the pattern of results. Immediately apparent is the fact that women and men agree, by and large, about who should take time off and how much. Clearly, men expect (and are expected) to stay home either not at all or at most a week or two. Although a majority of both sexes envision women staying home from one month to one y , a not insignificant proportion expect that the woman will remain at home for more than a year, sometimes for as long as five years. Worth noting also is the pattern for male subjects to expect they will stay at home for a somewhat shorter time than female subjects expect their spouses to. Interestingly, the period of parental leave chosen most frequently by female subjects (1-3 months) corresponds to the one preferred by corporate women surveyed in an earlier study by Catalyst (1986b).

Parental leave, career motivation, and salary expectations. A striking absence of relationship was found between subjects' parental leave plans and their career motivation as well as between those plans and their salary expectations. There wasn't a single significant correlation between either factor for women, men, or both sexes taken together. Clearly, from an equity standpoint, there is no reason why there should be a relationship between hopes for a standard parental leave period and a person's career motivation or salary expectations. But when a sizable proportion of women and men (22%) indicate that they expect (or expect their spouse) to take two, three, or even five

Table 3.5

PRETEST EXPECTATIONS FOR FIRST PARENTAL LEAVE

	Time off for Women		Time off for Men	
	What Men Say (n=113)	What Women Say (n=158)	What Men Say (n=125)	What Women Say (n=171)
	%	%	%	%
None	-	-	19	15
< 1 week	-	-	49	37
2-4 weeks	13	9	30	42
1-3 months	23	26	2	6
4-6 months	18	22	-	-
1 year	24	21	-	-
2 years	8	3	-	-
3-5 years	14	19	-	-

Note: This is not an equal interval scale.

years off from work after the birth of their first child, one would expect to find a relationship between career motivation and parental leave plans. These "nonfindings" suggest a potential conflict between some subjects' desire to have a lengthy leave from their work to bear and/or raise children on the one hand and progress in their career on the other.

Career conflicts. The issues of parenthood and spouse/partner relationships come up again when subjects are asked to consider: "What are the most difficult problems that people who have a career may encounter?" Respondents were asked to select five items from a list of 18 and rank them in order of importance. Some items related directly to on-the-job concerns; others related to personal values and family life. Of interest was the question of whether subjects would choose items from one arena or the other, or both. Table 3.6 shows that of the five most popular items, four concerned the implications of a career for one's personal life and family relationships.

Nevertheless, the single most frequently chosen item was "tensions on the job cause too much worry/stress," indicating that subjects recognized clearly that a career in itself brings a potential for stress and tension. Mirroring their concern managing time discussed above, about one-third of the subjects included items related to the limits on one's time, freedom, and leisure imposed by having a career.

Interestingly, as Table 3.6 shows, there were several male/female differences, even on items where the overall percentage of subjects choosing the item was small. Women felt that a career interfering with having a family ($t=2.92$, $p=.004$, $df=375$), involving too much competition ($t=2.37$, $p<.02$, $df=375$), and making it difficult to manage a household ($t=3.08$, $p=.002$, $df=375$) were more important problems than men did. Men, on the other hand, indicated

Table 3.6

MOST SERIOUS PROBLEMS WITH HAVING A CAREER AT PRETEST

ITEM:	% Ranking Item 1-5*	n**
Tensions on the job can cause too much worry/stress	63	239
It interferes with having a family***	42	159
It interferes with the spouse/partner relationship	40	150
It limits your time with your children	38	143
It leaves you too little time for yourself	35	132
It limits your freedom	34	127
It limits your social/leisure activities****	31	116
Combining work and home responsibilities can create too many problems	31	115
You see/have to do things that go against your beliefs	26	98
It involves working with people whether you like them or not	25	95
You might have to move to another location	25	95
It ties you down****	24	90
It is tiring	22	82
It involves too much competition***	15	58
It is too difficult to manage a household at the same time***	14	53
It involves too much responsibility	10	37
It makes you too concerned with yourself****	6	23

*Subjects could choose 5 out of 18 items (including 1 write-in option) and rank them 1-5, with "1" being most important.

**Total n=377.

***Males and females differed significantly ($p<.05$), with females ranking this item more important.

****Males and females differed significantly ($p<.05$), with males ranking this item more important.

that careers interfering with leisure (t=2.97, p=.003, df=375), tying one down (t=2.50, p<.02, df=375), and making one too concerned with oneself (t=2.60, p=.01, df=375) were more serious problems than the women felt they were.

The pattern of intercorrelations among the items on the list (n=377) provides some insight into subjects' thinking. Those who indicated that one of the most difficult problems with a career is that it interferes with having a family also tended to say that it interferes with the spouse/partner relationship (r=.16, p=.001) and limits time spent with one's children (r=.23, p<.001). But of equal interest is the finding that subjects who said that "tensions on the job can cause too much worry/stress" were not as likely to mention family life problems ("interferes with family": r=-.29, p=<.001; "interferes with spouse": r=-.15, p=.004; "limits time with children": r=-.18, p=.001). In fact, only about one-third of the subjects who chose "job tensions" also chose any of the family items (32% chose "family," 36% chose "spouse," and 33% chose "children").

Career conflicts and SEC. Several significant relationships between subjects' SEC and their understanding of career-related problems were found (n=369). That a career may limit one's freedom (r=-.16, p=.003) or that it might interfere with having a family (r=-.16, p=.003) was seen as more important by those from higher SEC backgrounds, while feeling strongly that a career may force one to see or do things that go against one's beliefs (r=.15, p=.005) was associated with being from a lower SEC background.

Feeling "successful" in life. To tap students' personal values and most powerful motivations across all arenas of their lives, we asked subjects to identify those things one must accomplish in life in order to feel "successful." Five items were to be chosen from a list of 13 (including a

write-in option) and ranked according to importance; items related to various life activities and roles were included (e.g., leisure, career, intimacy, and home life).

As Table 3.7 indicates, the two top choices reflected students' interest in both work and family. Having a stable home life and being competent at one's work were clearly important considerations for both men and women. And a substantial number of people mentioned being a good parent. Although making money was of concern to men and women, it was more important to men ($t=4.24$, $p<.001$, $df=375$) as was being one's own boss ($t=2.60$, $p=.01$, $df=375$) and having leisure ($t=2.69$, $p<.01$, $df=375$). For women somewhat more than for men, feeling needed by others ($t=2.93$, $p=.004$, $df=375$) and achieving something important in their work ($t=2.07$, $p<.04$, $df=375$) were central concerns.

Here again, an examination of the intercorrelation among items ($n=377$) revealed some not unexpected relationships: those subjects for whom "being my own boss" was important were likely to rank highly "make a lot of money" ($r=.22$, $p<.001$) while those who chose "be a good parent" were the ones who thought it was important to "have a stable home life" ($r=.20$, $p<.001$). But there were negative correlations as well. Ranking of the item "be my own boss" ($n=377$) was negatively correlated with "have a stable home life" ($r=-.18$, $p<.001$) and "be a good parent" ($r=-.14$, $p<.007$). Choosing "make a lot of money" was negatively related to "being a good parent" ($r=-.26$, $p<.001$) and to "having a stable home life" ($r=-.14$, $p=.006$).

On examination, it appears that for many subjects, these negative correlations among items that define success do not always represent a prioritizing of desires and goals related to career and family, but rather a concentration on one area to the complete exclusion of the other. For example,

Table 3.7

MOST IMPORTANT WAYS TO FEEL "SUCCESSFUL" AT PRETEST

ITEM:	% Ranking Item 1-5*	n**
Have a stable home life	73	274
Be competent at my work	64	241
Be a good parent	59	221
Make a lot of money***	47	176
Achieve something important in my work****	47	176
Have a spouse/partner	45	169
Have a satisfying leisure life***	42	159
Have a steady job	29	110
Feel needed by others****	29	108
Help/take care of others	25	93
Be my own boss***	17	63
Be happy/general well-being*****	6	23
Be famous	4	14

*Subjects could choose 5 out of 13 items (including 1 write-in option) and rank them 1-5, with "1" being most important.

**Total n=377.

***Males and females differed significantly ($p<.05$), with males ranking this item more important.

****Males and females differed significantly ($p<.05$), with females ranking this item more important.

*****A write-in item.

only 46% of subjects choosing and ranking "be my own boss" (n=63) at any level of importance and only 48% of subjects picking "make a lot of money" (n=176) also chose "be a good parent." Remember, however, that when asked on separate questions about career motivation and family goals, students do say they want both.

In summary, as these 377 male and female college students entered the courses, they had opinions about career and family plans that corroborate the findings of other studies mentioned above. It is obvious that they do "want it all." Most have clear-cut desires for a career along with expectations to be part of a family and to have children. But many subjects seem unaware of the complex interdependence of these roles and of the realities involved in making the activities in each arena fit together. Moreover, there seems to be a certain lack of understanding about such things as workplace culture or the relationship between extended parental leave and occupational advancement.

Although these men and women share similar views on many issues, in some of the most crucial areas--salary expectations, the importance of financial rewards, interactions in the world of work, feelings about time and leisure, and the meaning of success--there are differences in understanding and expectations between the sexes. One can only speculate that these differences about work and family roles may hinder individuals' own development as well as increase the likelihood of conflict in their interpersonal relationships.

Highlights of Changes in Student Attitudes: Pre/Post Comparisons

One of the major interests in this study was to determine whether students' initial attitudes about career and family would change by the end of the courses (courses lasted, on the average, three months). While it is

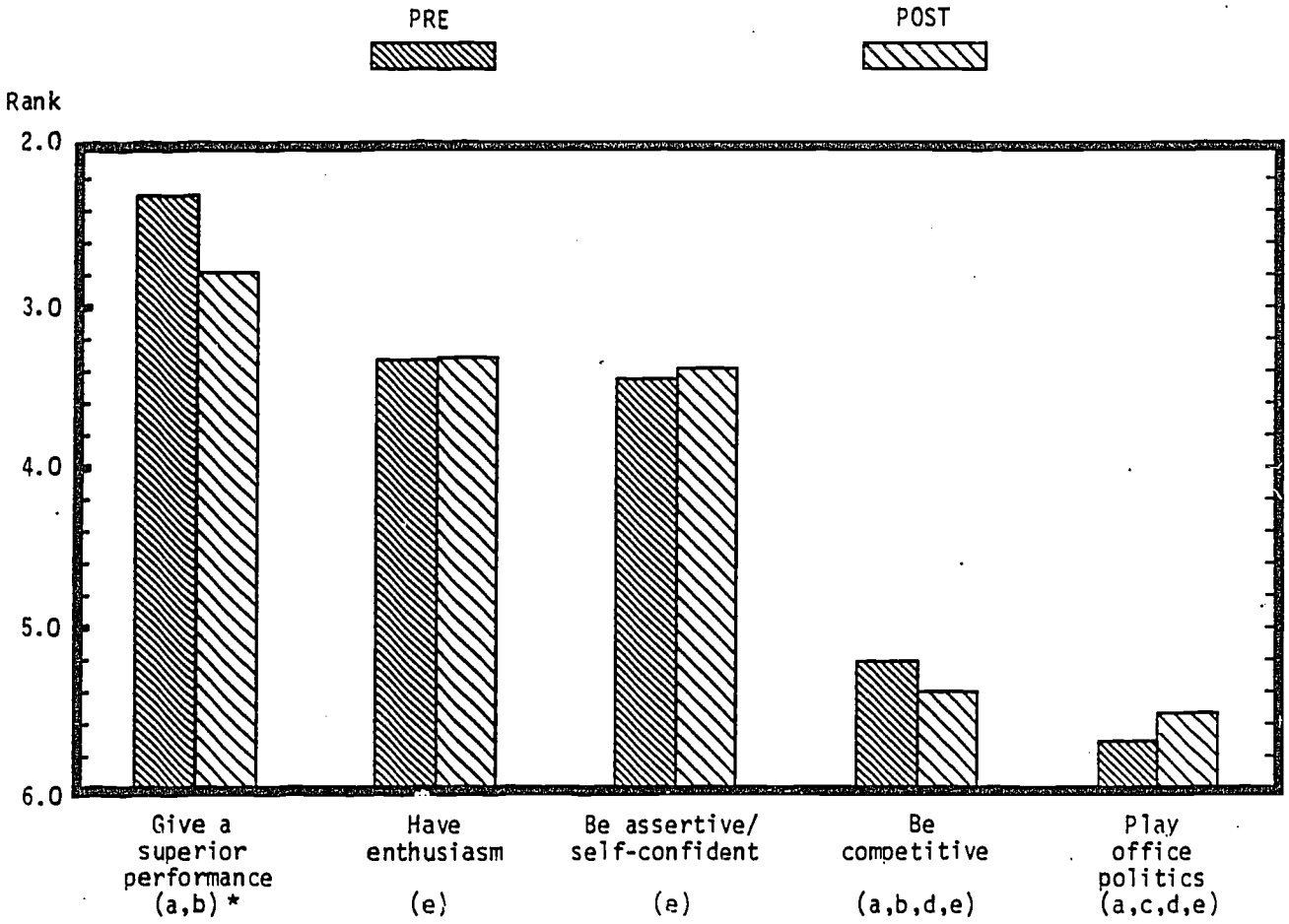
impossible, given the experiment's design, to attribute change exclusively to the Catalyst intervention or to any aspect of the courses, any change that did occur seems worthy of further investigation. The next few sections will highlight the most provocative changes as well as indicate some areas where change did not occur.

Career motivation and "getting ahead." Such fundamental concepts as high career motivation, plans to work full time, and desires to work for larger rather than smaller organizations did not change for men or women. But students' understanding about the ways in which one gets ahead in a career expanded by the end of the course. Recall that the single most important factor at the pretest was "superior performance." Figure 3.1 indicates that by the end of the courses, its average ranked importance had dropped from 2.31 to 2.79 ($t=4.66$, $p<.001$, $df=376$). (See note 17.)

It should be noted, however, that much of the difference could be accounted for by a change in women's attitudes. For female subjects, the importance of superior performance declined from 2.20 to 2.89 ($t=5.32$, $p<.001$, $df=224$). It should not be concluded that these female subjects no longer cared about superior performance; a high percentage (77%) ranked the item as one of their top five choices at both pre- and posttest. The finding suggests, rather, that instead of "forgetting" the importance of performance, most women simply adjusted its ranking and included other items in their list of most important ways of getting ahead. For example, while initially it was not one of the most frequently chosen items, "playing office politics" rose significantly in importance for men and women from 5.70 to 5.53 ($t=2.86$, $p=.004$, $df=376$). But the change was not sufficient to eliminate the differences between the sexes (men still saw this factor as more important, $t=2.81$, $p=.005$,

Figure 3.1

MEAN RANK OF ITEMS CONSIDERED
"MOST IMPORTANT WAYS OF GETTING AHEAD IN MY OCCUPATION"



*The letters beneath items indicate significant differences ($p<.05$) as follows: a=pre/post difference, all subjects; b=pre/post difference within women; c=pre/post difference within men; d=difference between sexes at pre; e= difference between sexes at post.

Note: Subjects (base n=377) could choose 5 out of 16 items and rank them 1-5 with "1" being most important. The number "6" was assigned to all subjects not ranking an item. A ranking of 5+ on this figure indicates that the item was chosen by a small percentage of subjects and/or that those choosing the item ranked it relatively low in importance. Items included on this figure were chosen by a substantial proportion of subjects and/or represented male/ female or pre/post differences.

df=375).

Women and men differed significantly in their opinions on several other items at the pretest; and did so also on items at the posttest. For female subjects, the rank of "competitiveness" dropped slightly, from 5.43 to 5.64 ($t=2.43$, $p<.02$, $df=224$). While the direction of change was the same for men, it did not erase the difference between the sexes. At the posttest, male subjects continued to believe more strongly in the importance of "competitiveness" than did the women ($t=4.99$, $p<.001$, $df=375$). As for "assertiveness/self-confidence" and "enthusiasm/a good attitude," which were popular items at pre- and posttest, a breach between men and women developed by the end of the courses (assertive: $t=2.97$, $p=.003$, $df=375$; enthusiasm: $t=3.08$, $p=.002$, $df=375$). Male subjects decreased their importance while female subjects increased them.

To conclude, when measured at the pretest, the issue of "getting ahead in one's career," while an important one, did not produce much variability among items. Subjects overwhelmingly believed that performance was the key to success. But students identified some new options during the courses (e.g., there was more variability in choices at the posttest), allowing them to see beyond the single standard of "superior performance" that they had almost unanimously chosen initially. The importance of the "culture of the workplace" began to emerge, but certainly did not loom large in these students' consciousness. And, women somewhat more than men seemed to begin considering a greater variety of ways in which they might "get ahead in their careers."

Salary expectations. Students' salary expectations, depicted in Table 3.8, were somewhat modified over the semester-long courses. Subjects tended to decrease their expected salary for "after graduation" and "10 years later."

Table 3.8

PRE/POST CHANGE IN AVERAGE SALARY EXPECTATIONS*

	Pre	Post	t	p	df
After Graduation					
Male	$19,483**	$18,621	2.56	.01	144
Female	$18,230	$17,919	0.98	.33	208
All	$18,743	$18,206	2.30	.02	353
Ten Years Later					
Male	$39,518	$36,896	1.49	.14	144
Female	$29,878	$29,289	1.67	.10	203
All	$33,668	$31,204	2.25	.03	348

*Salary values computed from mean scores on an 8-point (not equal interval) scale where 1=under $10,000 and 8=over $75,000.

**The small discrepancy in average salary expectations between Table 3.3 and Table 3.8 is due to the fact that computations for this table were based only on those subjects with valid data on both pre- and posttests.

On the former item, however, the change was accounted for by men more than women. (20)

Combining career and personal life. The remainder of the results relate to the changes from pre- to posttest in students' understanding of the problems of combining professional and private life. These results will be examined in the sections below.

Plans related to parenthood. Central family goals did not change. Men's and women's desire to have children, the number they planned to have, and the age at which they thought women and men should start their families remained constant. But, strikingly, both men and women who expected to have children changed their minds about their plans for their first parental leave.

Parental leave. Men indicated that they would take a longer first parental leave at the posttest than they did at the pretest ($t=2.42$, $p<.02$, $df=109$). Women also said that their spouses would take more time off for the birth of a first child at the posttest than they had stated at the pretest ($t=2.99$, $p=.003$, $df=168$). But the total picture is more complex. Table 3.9 illustrates that women's and men's expectations diverged significantly at the posttest, where there had been only a trend on the pretest; women now expect their spouses to take off significantly more time than the men in this sample think they will. While half the men report that they would take off a week, and a quarter are willing to take off between two and four weeks, only a third of the women consider a one-week leave sufficient for their spouses, and nearly a half expect their spouses to remain at home for two to four weeks. What seems to have occurred is that the role of the father has become more salient to both men and women, but women moved farther in their desire for men's involvement in the early weeks of parenthood.

Table 3.9

POSTTEST EXPECTATIONS
FOR MEN'S FIRST PARENTAL LEAVE

	What Men Say (n=117)	What Women Say* (n=173)
	%	%
None	12	9
< 1 week	53	31
2-4 weeks	27	43
1-3 months	8	17
4-6 months	-	-
1 year	-	-
2 years	-	-
3-5 years	-	-

*Difference between males and females at posttest is highly significant; χ^2=17.85, p<.001, df=3.

Note: This is not an equal interval scale.

Parental leave, career motivation, and salary expectations. Some of the most notable findings in the study concern the relationship between men's and women's career motivation and salary expectations on the one hand and their expectations for parental leave on the other. Remember that there was no correlation between the former and the latter concepts on the pretest for women or men. On the posttest, however, men's career motivation and plans for working full time relate strongly to their expectations for parental leave. The longer male subjects plan to take off from work for the birth of their first child, the less career motivated they are ($r=-.30$, $p=.001$, $df=118$) and the more likely they are to say they'll do some part-time work ($r=.31$, $p=.001$, $df=118$).

The posttest pattern is similar for women. The more time they plan to take off for their first parental leave, the lower is their career motivation ($r=-.24$, $p=.002$, $df=170$) and the more willing they are to do part-time work ($r=.22$, $p=.005$, $df=158$). There is still no measurable relationship, however, between women's beliefs about salary 10 years after graduation and their parental leave plans ($r=-.10$, $p=.21$, $df=166$).

Career conflicts. Students' greater awareness of the interdependence between career and family plans was also revealed in the posttest by the change in their views about what are the most serious problems with having a career. While there was variability in choice of items on the pretest, the list of the five most frequently chosen items shifted slightly by the posttest so that it included the problem of limits on one's social/leisure activities, which replaced limits on the time with one's children. (See Table 3.6 above.) Recall that on the pretest, men and women differed significantly on six items; in some cases the men judged an item more important, in other cases, women did so. By

the posttest, all but one of those differences disappeared.

Figure 3.2 depicts the major changes in viewpoint, and demonstrates that the idea of a career interfering with the spouse/partner relationship became a more salient concern for both sexes ($t=3.23$, $p=.001$, $df=376$). (See note 17.) That careers bring the possibility of relocation ($t=2.86$, $p=.004$, $df=376$) and the need to accept a great deal of responsibility ($t=2.27$, $p<.03$, $df=376$) seemed less problematic to women and men by the time they had finished the course. However, the realization that careers are likely to limit one's social/leisure activities became a more important problem to both men and women ($t=2.53$, $p<.02$, $df=376$), but even more so to women ($t=2.73$, $p=.007$, $df=224$). While the pre/post changes were in the same direction for men and women on the above items, they tended to be more significant for women.

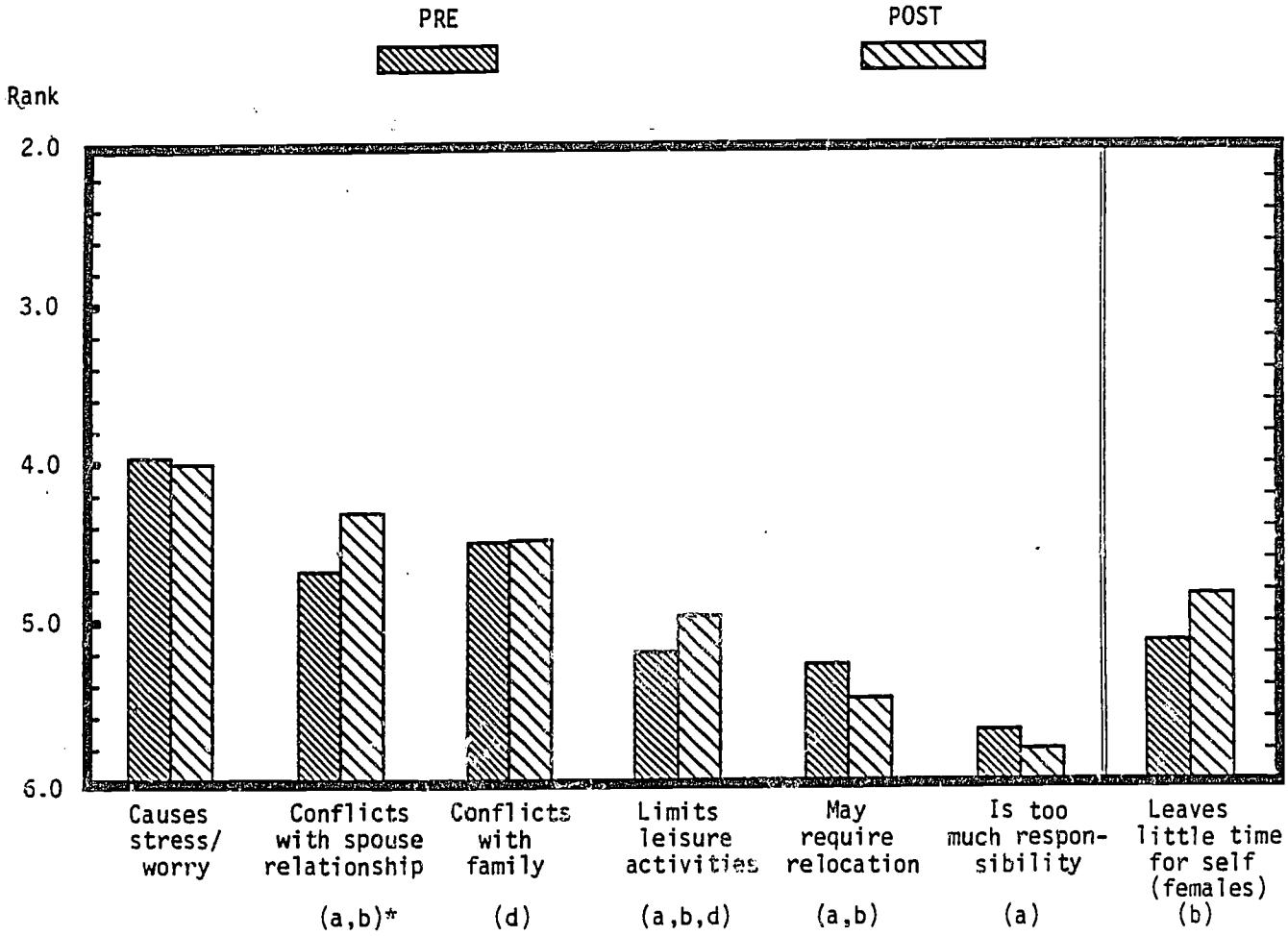
The pattern of means indicates that the attitudes of male and female subjects moved closer in alignment on two issues: the idea that careers interfere with one's family and that they make it difficult to manage a household. (21) The fact that women felt these problems were greater than did men at the pretest but not at the posttest suggests a greater concern with family issues among the men after the courses, as well as a willingness on women's part to see themselves as not solely responsible for family welfare.

The positive correlations found among items at the pretest related to careers causing family problems remained at the posttest; that is, those subjects who chose one item in this area tended to choose others. The idea that careers may cause tension remained popular among both male and female subjects. Taken together, the changes suggest an increased awareness of the interface between career and family for both men and women.

Feeling "successful" in life. On the prequestionnaire subjects were asked

Figure 3.2

MEAN RANK OF ITEMS CONSIDERED
"MOST SERIOUS PROBLEMS WITH HAVING A CAREER"



*The letters beneath items indicate significant differences ($p<.05$) as follows: a=pre/post difference, all subjects; b=pre/post difference within women; c=pre/post difference within men; d=difference between sexes at pre; e= difference between sexes at post.

Note: Subjects (base n=377) could choose 5 out of 18 items and rank them 1-5 with "1" being most important. The number "6" was assigned to all subjects not ranking an item. A ranking of 5+ on this figure indicates that the item was chosen by a small percentage of subjects and/or that those choosing the item ranked it relatively low in importance. Items included on this figure were chosen by a substantial proportion of subjects and/or represented male/ female or pre/post differences.

what they thought they had to "accomplish in life in order to feel successful." Their most common responses fell fairly consistently into categories representing two major interests--work (e.g., be competent, make a lot of money, achieve something important in my work) and family (e.g., have a stable home life, be a good parent, have a spouse/partner). By the posttest, some of these attitudes had changed significantly.

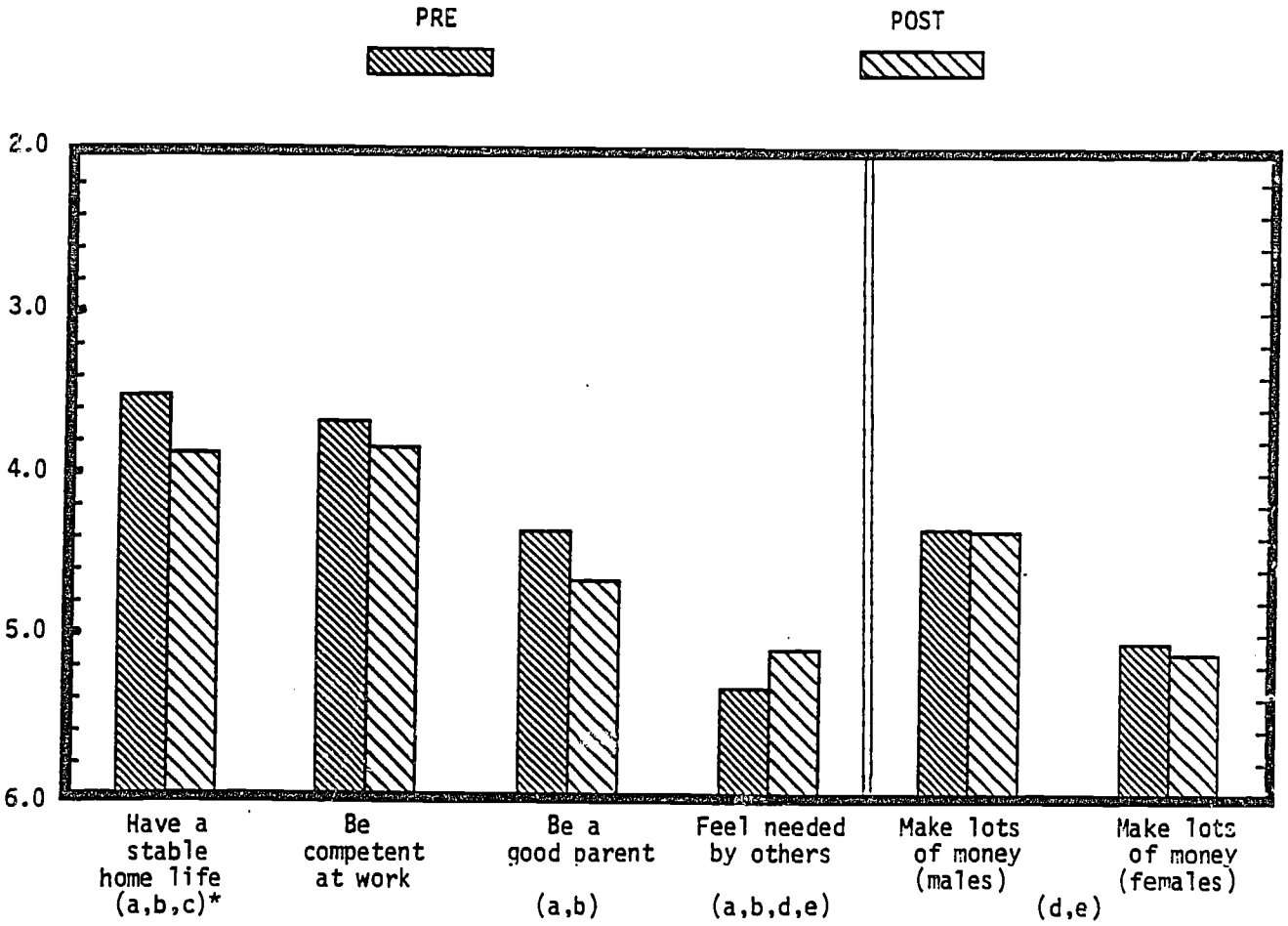
Figure 3.3 shows that of the most consistently chosen items, "have a stable home life" and "be a good parent," declined somewhat in importance (home: t=3.02, p=.003, df=376; parent: t=3.28, p=.001, df=376) for both men and women. (See note 17.) For women the changes are more pronounced than for men, but the trends are identical for both sexes.

The idea of "feeling needed by others" rose in importance for both men and women (t=3.12, p=.002, df=376) but was still significantly more important for women than for men (t=4.15, p<.001, df=375). Recall that positive correlations existed among "family" items and among "career" items on the pretest; they remained at the posttest. The negative relations also remained, such that, on the average, about 40% of the subjects mentioning "make a lot of money" and/or "be my own boss" as ways to feel successful did not rank among their top five choices items related to the family, such as "be a good parent" or "have a stable home life."

Challenging the meaning of "success". The concept of feeling "successful" is a complicated one, and interpretations must be presented with caution. It is difficult to know, for example, what the decline in importance of having a stable home life signifies. Is it that students cared less about having it at the posttest? Or had they simply come to believe that "stability" may not reflect success in contemporary American society?

Figure 3.3

MEAN RANK OF ITEMS CONSIDERED
"MOST IMPORTANT WAYS TO FEEL SUCCESSFUL"



*The letters beneath items indicate significant differences ($p<.05$) as follows: a=pre/post difference, all subjects; b=pre/post difference within women; c=pre/post difference within men; d=difference between sexes at pre; e= difference between sexes at post.

Note: Subjects (base n=377) could choose 5 out of 13 items and rank them 1-5 with "1" being most important. The number "6" was assigned to all subjects not ranking an item. A ranking of 5+ on this figure indicates that the item was chosen by a small percentage of subjects and/or that those choosing the item ranked it relatively low in importance. Items included on this figure were chosen by a substantial proportion of subjects and/or represented male/female or pre/post differences.

A similar set of questions comes to mind when considering the decline in the importance of being a good parent as part of feeling successful. Given other findings in this study related to parenthood, it seems unlikely that this decline means students are lessening their interest in being good to their children. Rather, it's tempting to suggest that the finding represents some recognition of the fact that being a "perfect" parent may not be easy in today's world and that a more complex definition of "success" may be required. In examining the patterns of change on this question, it must be remembered that it elicited variability initially and more inconsistency in the choice and ranking of items from pre- to posttest than any of the others. While the importance of some items grew and that of others decreased, many students actually replaced many or all of the items in the set with new choices. These results suggest that, by the end of the courses, students had begun to question their personal values and "try out" new concepts of success.

Student Evaluations of the Courses and Materials: Posttest Results

The measurement of attitude change alone does not convey the full meaning of a course to the students involved. Educators generally find it valuable to know something about students' subjective evaluations of the course, instructor, materials, etc. Therefore, the next few sections provide highlights from the evaluative data collected.

General ratings. Results show that in spite of the fact that the Catalyst materials were meant to evoke challenging and sometimes unsettling questions, the subjects exposed to them had very positive reactions. In fact, on the postquestionnaire, subjects were nearly unanimous in their appreciation of the experience. Ninety-six percent (n=374) felt that the course should be offered

again. And on a seven-point scale asking students how they would rate the course overall, where "1" is poor and "7" is excellent, the mean was 5.65 and the median was 6 (n=374, sd=1.13).

Of course, when students rate the general value of a course, they are responding to many factors, not just the materials used. And, as expected, a sizable correlation existed between students' general rating of the course and their evaluation of the teacher; the more students liked the teacher, the better they found the course (r=.50, p<.001, df=370). Moreover, there were equally high correlations between students' general rating and their judgments about how well organized the course was (r=.59), how much variety there was (r=.52), how enthusiastic the atmosphere was (r=.53), and how well the topics were covered (r=.51, p<.001, df=371).

Ratings of the student exercises. In addition to obtaining general reactions to the experience, we also asked subjects specifically about each exercise used. As Table 3.10 indicates, students liked best the exercises which helped them to explore themselves but which did not directly or strongly challenge their own sex role stereotypes; perhaps students remembered that the latter exercises caused them some discomfort during the actual discussion session (as they were intended to do). Based on the number of subjects exposed to each exercise, the four most highly rated from the students' point of view were: 1) a set of scenarios with discussion questions depicting a value conflict related to work and family life, 2) a short fill-in exercise on setting goals, 3) a project on interviewing for information, including "how-to" tips, and 4) a card-sort "needs" exercise.

Professionals using the materials also had the opportunity to rate each exercise they had used with their students on a variety of criteria. Table

Table 3.10

POSTTEST EVALUATION AND USE OF CATALYST EXERCISES

	Students		Professionals			
	"Very Satisfying"		"Very Stimulating"**		"Very Interesting"	
EXERCISE	%	n*	%	n***	%	n***
Goal Setting	53	156	7	14	29	17
Values	52	297	75	24	71	24
Fathering Questions	46	99	33	12	25	12
Information Interviewing	45	217	43	21	86	22
Needs Sort	44	211	67	24	96	24
Ideal Spouse	36	245	57	21	52	21
Job Interviewing	32	163	62	13	92	13

*Total n=number of subjects exposed to exercise who completed post-questionnaires in credit courses.

**Professionals ranked each exercise on 8 criteria. This section of the table reports 2 criteria.

***n=total number of professionals who used a given exercise with their students and completed a professional evaluation form. This number includes professionals who did not teach credit courses.

Note: The Catalyst materials contained 25 exercises. The exercises listed in this table were selected from the 15 most frequently utilized by campus professionals.

3.10 reveals that instructors' reactions to the exercises are fairly consistent with those of their students. Three of the exercises most highly rated by students were also most frequently chosen as teaching materials and were rated as being "very stimulating" and "very interesting" by a large proportion of the classroom teachers. There were two discrepancies, however. An exercise asking students to describe their "ideal spouse" was chosen often by instructors but not rated as highly by subjects. And the goal-setting exercise so highly valued by the students was not so frequently chosen or so highly evaluated by the campus professionals.

Open-ended evaluations. Finally, subjects were given the opportunity to answer three open-ended evaluative questions: "What was best about this course?" "What was worst about this course?" "What would you do to improve this course?" In coding the responses, 13 categories were created for the first question (best), 12 for the second (worst), and 33 for the third (improve). Only the most frequently used categories are reported here. Percentages tend to be relatively small because of the large number of categories.

Table 3.11 shows the varied responses generated by the subjects who completed these questions. The categories into which responses fell support findings already reported here. For example, in explaining what was best about their experience, subjects report that they enjoyed learning about themselves. As one person put it: "It opened my eyes to some things I was keeping from myself." Not infrequently, subjects used the space to indicate their general approval. One subject wrote: "There wasn't really a 'bad' aspect of the course. It was real positive and upbeat, but it also challenged my mind." Or this comment: "It really opened my eyes. It's something everyone should do."

Table 3.11

SUBJECTS' OPEN-ENDED EVALUATIONS AT POSTTEST

ITEM:	Post-Questionnaire
I. What was best about this experience?	(nr=556)*
	%
learning about myself	17
planning/decision making about future	12
career planning information	12
talking with others in the class	11
discussing new roles for men and women	4
learning specific job-hunting skills	11
general positive evaluation	14
II. What was worst about this experience?	(nr=302)*
	%
too many projects/topics	26
topic/speaker was boring or irrelevant	18
in-class exercise was inadequate	3
felt uncomfortable	1
III. What would you do to improve this experience?	(nr=397)*
	%
more speakers/lecturers	11
more group discussions	6
more variety of experiences (e.g., films, field trips, guidance)	11
more on specific topics (e.g., resume writing, sex roles)	16
less on specific topics (e.g., women's problems)	2
different projects/materials (e.g., didn't like tests)	12
different topics (e.g., workplace issues)	5
no improvement needed	11

*nr=total number of responses to that particular question.

Note: Of the 377 people who completed postquestionnaires containing the 3 open-ended evaluative questions, 94% responded to "What was best about this course/experience?"; 80% commented on what was worst; and 77% made suggestions for improvement (including "don't change anything").

Others wrote enthusiastically about the opportunity to interact with members of the opposite sex and to challenge some of their own assumptions. One female student wrote: "I was able to realize the other side of male opinions...but I didn't feel I had to agree. I noticed we [male and female students] tried to meet in the middle and share our individual needs, wants, and thoughts."

Students were not afraid to be critical. One general comment was that some of the topics seemed irrelevant to them, or that some of the lectures were boring. Most probably, students in career planning courses were perplexed by the introduction of material dealing with family roles. When asked what suggestions they would make if the course were to be offered again, some subjects wanted more information, others desired less, and still others wanted different kinds of topics to be covered. In short, there was a great deal of variability in people's responses, as might be expected when personal exploration is a major goal.

The evaluative data will be used to further revise and refine the Catalyst materials for future use. But the sketchiness makes it somewhat problematic to reach precise general conclusions here. That some of the experiences presented a challenge and stimulated a complex array of emotions for the students seems evident. One young subject wrote: "I often walked out in a state of anxiety...it was almost too real." And another person generously stated: "Classes such as these offer the opportunity...to change future generations of thinking." Each of these comments seems to reflect considerable impact of the materials on students' thinking.

Discussion and Implications

In bringing into perspective the myriad of findings reported here, one conclusion seems clear: many of these subjects' opinions and attitudes were affected during the time they spent in these courses on career and family life. Evidence for this comes directly from students' evaluations as reported above. Comments like "This course is a must for those people that want to get closer to the real 'them'." "If anything, it convinced me that I am not ready to get married." "The information given was priceless." "It made me realize that money is not as important as I thought," reveal that the experience engaged students and challenged their thinking.

Naturally, it is more complicated to define exactly what aspects of the experiences were responsible for these reactions. From the responses to the close-ended evaluative questions, it seems most likely that the effect was based on a combination of 1) the information on career and family (exercises, lectures, readings, panel presentations), 2) the instructor-moderated student discussions, 3) the variety of the learning experiences, and 4) the quality or "charisma" of the teacher. When subjects' self-reported enthusiasm is combined with changes in students' attitudes displayed at the end of the credit courses, one conclusion is that development occurred. Movement was evidenced especially in relation to increased awareness of options and understanding of the interaction of career and family roles for men and women.

Subjects came to realize that there is more to getting ahead in one's career than simply superior performance. They learned to link their own career motivations and salary expectations to some of their plans for starting a family and being a parent. Other findings may be cause for concern. For

example, women expect to earn substantially less in their careers later in life than do men. This finding may be simply a reflection of women's awareness of contemporary salary statistics, including the fact that the potential for women's advancement is not as great as men's. Or it might relate to women's plans, whether explicit or not, for home and family. One could further speculate about the psychological implications of this attitude differential, especially the possibility that female students don't believe that their performance as workers over the years will be as highly valued as men believe theirs will be. In any case, given the similarity of men's and women's career motivation, the difference in their expectation for reward bears further examination.

Changes in attitude tended, in general, to be more pronounced for women than for men. One possible explanation for this finding is that an expansion of career options for women over the last few decades has enticed more women to remain in the workplace throughout their adult lives. This fact, then, may have sensitized young women, in general, to the conflicts they may face, especially those related to combining motherhood with a career. But such interpretations must be made with caution since the trend could be due partially to the greater number of women in the sample (i.e., larger n provides more power to observe differences).

Several interesting changes, however, occurred for male subjects. Some of these men began to envision themselves taking a greater part in the early weeks of parenthood than they originally foresaw, and some drew closer to the female subjects in their thinking about the relationship between a career and family life.

Initially, many of these subjects were able to envision time-management

and role-overload problems but seemed less aware of the stress engendered by trying to meet conflicting demands. When they focused on their work life, they could identify some specific issues and problems with a career per se; when they looked beyond the job itself, they saw their personal lives as suffering because of their work, but many did not choose a set of items in answering the question about problems with a career that would reflect an awareness of blending the two together.

Possibly, these students would find it difficult to imagine what it feels like when the two roles--professional and personal--overlap or concretely interfere with one another. For example, how would they cope with a briefcase full of unfinished reports sitting in their living room on a Saturday morning or how would they handle a call from a child at home during an important business meeting? There was some movement by male and female students toward a recognition of the realities involved at the end of the course, but more investigation in this area seems warranted.

Whether students actually became aware of implicit assumptions about sex roles is difficult to determine. It can be interpreted as encouraging that male subjects wished to share in the early weeks of parenthood. And, if the spouses of female subjects turn out to have similar views, there is a potential for cooperation between the s in planning for parental leave even if there may be some conflict over the exact amount of time each parent should take off. Given the current standards of policy in the workplace, however, there could also be some friction between male employees and their employers, unless these male workers are able to negotiate at least some parental leave time.

The findings related to concepts of success--many subjects choosing new and sometimes nontraditional variables to define success by the end of the

courses--suggest that an expansion of options entered the picture for many students.

The experimental campuses were chosen for their diversity, and so it was striking that there were no campus differences and very few SEC differences related to students' attitudes and beliefs. Perhaps "college" is the great equalizer in the sense that attending college and, in the case of this subsample, choosing to take a course on career planning and personal-life decision making, reduces the impact of ostensible demographic and family background variables. The findings suggest, too, that, for the most part, these students were focusing on similar goals, goals not circumscribed by their location in the country or the level of socioeconomic privilege they had known.

Certainly, the original profile of student attitudes, obtained from the pretest questions, supports earlier findings reported in the introduction to this report. These students did seem to "want it all." From their reactions and evaluations, it seems fair to say that at first they did not realize how difficult it may be to achieve it all (at least over the short term). But when exposed to a challenge to their thinking, as they were in these courses, they responded with an openness and a willingness to reconsider that might help them in the process of planning and implementing career goals and personal life hopes, both during their postsecondary education and beyond.

No one would claim that these students have solved all their problems or developed strategies to reach all their goals. Rather, as one social psychologist who heard about the Catalyst experiment suggested, "Your work may help students to begin to map out the territory and to create a framework for thinking about the issues." (22) This was, in fact, the goal of Catalyst's Campus Resource in working with postsecondary students. The Catalyst materials

were designed to do more than inform; they were intended to engage the student in a process of self-questioning that could potentially enhance awareness of the issues in the present and perhaps help solve problems in the future.

What is most encouraging about the posttest attitude shifts is that they happened at all. Given the fact that students signed up for courses not knowing that their instructors had decided that they would participate in an experiment, and that the entire process of selecting and handling the Catalyst materials was unsupervised and uncontrolled, we expected to find little change on the posttests. That measurable attitude change occurred under these circumstances suggests that courses like these should be offered again and further research conducted.

The caveat mentioned in the Methods section above regarding the meaning of the findings bears repeating here. That is, subjects in this study were not randomly selected nor were there any control groups with which to compare their responses. Since they registered for career planning courses or special courses on work and family life, they may be unlike many other students who choose not to take such courses. Moreover, there is no way of knowing whether the changes in attitude reported here will be lasting or whether they will affect students' current or future decision making. Ideally, one would like to follow these students through longitudinal studies and compare the quality of their [illegible]rs and personal lives with those of students who have not been exposed to such educational experiences. While Catalyst has no immediate plans to conduct such longitudinal investigation, we would encourage further research along these lines. We hope as well that instructors will experiment further in their classrooms (in a more controlled manner) using innovative approaches and interactive materials on the topic of career and family life similar to the

ones provided to the experimental campuses.

The three basic models that were used during this experiment would permit further research using pre/post measurement:

1. Integration of the topic into courses within disciplines. The inclusion of active discussion and personalized exercises in the framework of an already existing course defines this model. Particularly appropriate disciplines would be the social sciences, humanities, or business. Courses on sex roles, family relations, women in the novel, management styles, or introduction to sociology might be appropriate forums.

2. Creation of new curricula. The creation of new courses and new syllabi using the topic of career and family as the central theme provides a more comprehensive approach. This model lends itself to dynamic designs, including guest lecturers, panelists, films, etc. Such courses could be offered under the rubric of various disciplines and/or staff offices.

3. Design of extracurricular workshop series. The development of these not-for-credit experiences can be handled through the student service staff and can range from long- to short-term programs in the residence halls and Greek life houses or be offered through the personal counseling, health, or career-planning offices.

On four of the experimental campuses, faculty and staff worked together to provide the educational experiences, utilizing the talents and expertise of such diverse individuals as residence life coordinators, religious life directors, health center psychologists, professors from women's studies, counseling psychology, sociology, business, and education. These cooperative efforts seem to be promising ventures.

Based on our experience over the last few years, we at Catalyst believe

intuitively that as college and university administrators continue to compete for shrinking populations of undergraduate and graduate students, they will become increasingly more concerned with students' full campus experience. The recent Carnegie report (Boyer, 1987) suggests that values can and must be discussed as part of postsecondary education. Career and family values could certainly be part of that discussion. Students will continue needing help to plan realistically, examine potential conflicts, question their assumptions, and develop new coping mechanisms in order to integrate their education successfully with their plans for the future.

The most frequent inquiry at Catalyst from campus professionals who are already concerned about the issue of students' career and personal life options usually sounds something like this: "I want to do something for my students. They seem unrealistic about their futures. They have false ideas (or no idea at all) of how to make the transition from the campus to the 'real world.' They don't want to discuss the issues because they think they won't experience any problems, and they feel such discussions don't fit with their 'together' image--for both men and women." The publication of the Catalyst materials (expected in 1988) may be one contribution to the efforts of faculty and staff, designed as they are to make it easier for interested professionals to help postsecondary students meet the challenge of thinking clearly about new roles for men and women at work and at home.

References

Astin, A.W., Green, K.C., Korn, W.S., & Schalit, M. (1986). The American freshman: National norms for fall 1986. Los Angeles: University of California Higher Education Research Institute.

Baber, K.M., & Monaghan, P. (1986, August). Young women's career and parenthood expectations: A new synthesis? Paper presented at the annual meeting of the American Psychological Association, Washington, D.C.

Baldwin, A.C., Critelli, J.W., Stevens, L.C., & Russell, S. (1986). Androgyny and sex role measurement: A personal construct approach. Journal of Personality and Social Psychology, 51, 1081+.

Baruch, G., Barnett, R., & Rivers, C. (1983). Lifeprints: New patterns of love and work for today's women. New York: McGraw-Hill.

Basler, B. (1986, December 7). Putting a career on hold. New York Times Magazine, pp. 152-160.

Baucom, D.H., & Weiss, B. (1986). Peers' granting of control to women with different sex role identities: Implications for depression. Journal of Personality and Social Psychology, 51, 1075-1080.

Bem, S.L. (1984). Androgyny and gender schema theory: A conceptual and empirical integration. In T.B. Sonderegger (Ed.), Nebraska symposium on motivation (vol. 32, pp. 179-226). Lincoln: University of Nebraska Press.

Bloom, D. (1986, September). Women and work. American Demographics, pp. 25-30.

Brinn, J., Kraemer, K., Warm, J.S., & Paludi, M.A. (1984). Sex-role preferences in four age levels. Sex Roles, 11(9/10), 901-910.

Broverman, I.K., Vogel, S.R., Broverman, D.M., Clarkson, F.E., & Rosenkrantz, P.S. (1972). Sex role stereotypes: A current appraisal. Journal of Social Issues, 28(2), 59-78.

Bureau of Labor Statistics. (1984, March). Employment projections for 1995. Washington, D.C.: U.S. Department of Labor.

Bureau of Labor Statistics. (1986, August 20). Half of mothers with children under 3 now in labor force. (USDL No. 86-345). U.S. Department of Labor, Bureau of Labor Statistics.

Boyer, E. (1987). College: The undergraduate experience in America. New York: Harper and Row.

Catalyst. (1981). Corporations and two-career couples: Directions for the future. New York: Catalyst.

Catalyst. (1982). Catalyst on campus: An undergraduate model. Unpublished manuscript.

Catalyst. (1983). Human factors in relocation. New York: Catalyst.

Catalyst. (1986a). Organizational development consultants' comments on gender issues in the workplace. Unpublished manuscript. New York: Catalyst.

Catalyst. (1986b). Report on a national study of parental leaves. New York: Catalyst.

Catalyst. (in press). Workplace policies: New options for fathers. In P. Bronstein & C.P. Cowan (Eds.), Fatherhood today: Men's changing role in the family. New York: John Wiley & Sons.

Coverman, S. (1983). Gender, domestic labor time, and wage inequality. American Sociological Review, 48, 300-312.

Cowan, G., & Hoffman, C.D. (1986). Gender stereotyping in young children: Evidence to support a concept-learning approach. Sex Roles, 14, 211-224.

Deaux, K. (1984). From individual differences to social categories: Analysis of a decade's research on gender. American Psychologist, 39, 105-116.

Eagly, A.H. (1983). Gender and social influence. American Psychologist, 38, 971-981.

Economic Policy Council of the United Nations Association-USA. (1986). Work and Family in the U.S.: A policy initiative. New York: Author.

The Ethan Allen Report: The status and future of the American family. (1986). Danbury, CT: Ethan Allen, Inc.

Frieze, I.H., Bailey, S., Mamula, P., & Moss, M. (1985-86). Life scripts and life planning: The role of career scripts in college women's career choices. Sex Roles, 5, 59-72.

Geber, B. (1987, January). The myth of the new worker. Training, p. 108.

Granrose, C.S. (1985, June). Plans for work careers among college women who expect to have families. The Vocational Guidance Quarterly, pp. 285-295.

Gregg, G. (1986, April 13). Putting kids first. New York Times Magazine, pp. 46-48, 50-51, 88, 97, 99, 104.

Herzog, A. R., Bachman, J.G., & Johnston, L.D. (1983). Paid work, child care, and housework: A national survey of high school seniors' preferences for sharing responsibilities between husband and wife. Sex Roles, 9, 109-135.

Hoffman, L.W., & Nye, F. I. (1974). Working Mothers. San Francisco: Jossey-Bass.

Hollingshead, A.B. (1975). Four factor index of social status. Unpublished manuscript, Yale University, Department of Sociology, New Haven, CT.

Horner, M.S. (1972). Toward an understanding of achievement-related conflicts in women. Journal of Social Issues, 28, 157-176.

Hymowitz, C., & Schellhardt, T. (1986, March 24) The glass ceiling. [A Special Report: The Corporate Woman], supplement to The Wall Street Journal.

Komarovsky, M. (1985). Women in college: Shaping new feminine identities. New York: Basic Books.

Korn/Ferry. (1986). Korn/Ferry International's executive profile: A survey of corporate leaders in the eighties. New York: Korn/Ferry International.

Machung, A. (1986). Talking career, thinking job: Gender differences in career and family expectations of Berkeley seniors. (Available from University of California at Berkeley, Women's Center, Berkeley, CA 94720.)

Major, B. (1987). Gender, justice, and the psychology of entitlement. In P. Shaver and C. Hendrick (Eds.), Review of Personality and Social Psychology (Vol. 7). Beverly Hills, CA: Sage Publications.

Panos, R.J., Astin, A.W., & Creager, J.A. (1967). National norms for entering college freshmen--Fall 1967, 2(7). Washington, D.C.: American Council on Education.

Phillips, S.D., & Johnston, S.L. (1985, July). Attitudes toward work roles for women. Journal of College Student Personnel, pp. 334-338.

Pietromonaco, P.R., Manis, J., & Frohardt-Lane, K. (1986). Psychological consequences of multiple social roles. Psychology of Women Quarterly, 10, 373-382.

Regan, M.C., & Roland, H.E. (1985, November). Rearranging family and career priorities: Professional women and men of the eighties. Journal of Marriage and the Family, pp. 985-992.

Ross, C.E. (1986, August). The division of labor at home. Paper presented at the meeting of the American Sociological Association, New York, NY.

Scanzoni, J.H. (1978). Sex roles, women's work, and marital conflict. Lexington, MA: Lexington Books.

Sekaran, U. (1986). Dual-career families. San Francisco: Jossey-Bass.

Shaver, P., & Hendrick, C. (Eds.). (1987). Review of Personality and Social Psychology (Vol. 7). Beverly Hills, CA: Sage Publications.

Skolnick, A.S., & Skolnick, J.H. (1983). Family in transition. Boston: Little, Brown and Co.

Spence, J.T. (1984). Masculinity, femininity, and gender-related traits: A conceptual analysis and critique of current research. In B.A. Maher & W.B. Maher (Eds.), Progress in experimental personality research (vol. 13, pp. 1-97). New York: Academic Press.

Spence, J.T., Deaux, K., & Helmreich, R.L. (1985). Sex roles in contemporary American society. In G. Lindzey & E. Aronson (Eds.), Handbook of social psychology (3rd ed., vol. 2, pp. 149-178). New York: Random House.

Staff, National Commission on Working Women. (1986, Spring/Summer). An overview of women in the work force. Women at Work, pp. 3-4.

Staff of the Office of Research, American Council on Education. (1970). National norms for entering college freshmen--Fall 1970, 5(6). Los Angeles: University of California.

Tavris, C., & Offir, C. (1977). The longest war: Sex differences in perspective. New York: Harcourt Brace Jovanovich.

Tittle, C.K. (1981). Careers and family: Sex roles and adolescent life plans. Beverly Hills: Sage Publications.

Van Lenten, H. (Ed.). (1985). The 1985 Virginia Slims American women's opinion poll. New York: Philip Morris, Inc.

Voydanoff, P. (1984). Work and family: Changing roles of men and women. Palo Alto, CA: Mayfield.

Whitley, B.E. (1986). Masculinity, femininity, and self-esteem. Manuscript submitted for publication.

Zuckerman, D.M. (1985). Confidence and aspirations: Self-esteem and self-concepts as predictors of students' life goals. Journal of Personality, 53, 543-560.

Appendix 1

Supplementary Information on Experimental Design and Methods

Types of Data

During the three-semester experimental period (January, 1985 through June, 1986) a variety of data were collected from seven of the eight participating campuses. (The one campus that did not produce data reported difficulty in obtaining release time for faculty, financial support for the program, and appropriate places in the curriculum for Catalyst materials.) In total, 1,148 subjects (both students and other community participants) were exposed to some Catalyst materials as a result of attending any one of 52 different courses, workshops, and special events (see note 8). A breakdown of those data can be seen in Table A.1. Thirty-nine principal instructors and co-teachers and 25 group leaders participated in the experiment voluntarily; Catalyst received 44 Professional Evaluation Forms (PEFs) from these campus professionals. Data from 377 respondents to the pre- and postquestionnaires appear in the body of this report. (Data from 94 workshop series questionnaires and 100 special events questionnaires are reported in Appendix 2.)

Questionnaires

In addition to the pre/post questionnaires and PEFs described in the report, campuses received two other kinds of questionnaires: A six-page workshop series questionnaire (to be used when there was more than one session) including 26 questions dealing with demographics and evaluations, and a one-page special event questionnaire (one session only) with just six questions regarding general level of satisfaction and expectations for the event. Most questions were forced choice but some permitted open-ended responses. Table A.1 summarizes all the data by campus. As can be seen in Table A.1, there were several other kinds of questionnaires developed by Catalyst or the campuses to accommodate special situations where time or other factors made the use of the standard questionnaires awkward (public events, partial workshop, and Campus 1). While information from these questionnaires was generally consistent with the other findings, and will be used in revising our materials, it is not reported here.

Choosing Sites

On the basis of the substantial campus interest shown in the first few courses Catalyst taught earlier (see Introduction), we decided to send a written questionnaire to everyone who inquired about the program. These completed and returned questionnaires from campus professionals (n=180) were evaluated for representativeness on a set of relevant criteria (e.g., size, geographic location, degree awarded, funding structure of campus, and position; and interests, job title, and experience of the respondent). Telephone interviews and later site visits were conducted to determine which campuses should be chosen to participate in further experimentation.

Campus Arrangements

The two most important tasks for each campus were 1) the promotion of the experiment on campus and 2) the dissemination of materials to interested instructors. Catalyst identified one individual on each campus to act as campus contact and coordinate activities. These professionals represented

TABLE A.1

NUMBER OF STUDENT AND PROFESSIONAL QUESTIONNAIRES

	Matched Pre/Post	Unmatched Pre*	Workshop Series	Special Events	Public Events	Campus 1**	Partial Workshop	Total Student	Professional Evaluation
Campus 1	32	8	-	-	-	176	66	282	2
Campus 2	47	18	-	-	-	-	-	65	2
Campus 3	148	48	-	7	-	-	-	203	17
Campus 4	35	2	-	29	-	-	-	66	1
Campus 5	72	7	-	40	-	-	-	119	6
Campus 6	43	3	11	14	-	-	-	71	7
Campus 7	-	-	83	10	6	-	155	254	9
Campus 8	-	-	-	-	-	-	-	-	-
Total	377	86	94	100	6	176	221	1060***	44

*Data from these questionnaires are not included in this report, but were analyzed and did not differ significantly in any systematic way from those included here.

**Data from questionnaires designed by Campus 1 are not included in this report.

***These questionnaires were produced from 52 separate courses, workshops, and special events, under the direction of 64 campus professionals. Eighty-eight pre/post questionnaires were received too late for inclusion in analyses and are, therefore, not included in this table.

various disciplines and offices. The plan was to evaluate the successes and failures of the contacts in developing an experimental program on their respective campuses and use that information in the revised Catalyst materials as guidelines to professionals who want to begin programs on their own campuses. The job of the contact required not only promotion of the idea, but the duplication and dissemination of material to each interested campus professional. Institutional support, both financial and moral, varied from campus to campus. There was, therefore, great variability in the number of subjects exposed, the number of faculty and staff participating, and the kinds of educational experiences developed at each campus.

Catalyst's Role

Approximately every six weeks during the experimental period, Catalyst sent a mailing (in newsletter form) to the contact people that included news of all the campuses' activities, progress reports on the experiment, and preliminary feedback from each campus. In addition, the mailings provided information on relevant conferences, reprints of articles, and reports of Catalyst programs and services. These materials were to be shared with all participating professionals. Catalyst staff also made one or two site visits to four of the campuses during the experimental period.

Collecting the Data

Raw data were returned to Catalyst's office by mail at the end of each semester sometimes by the main contact and sometimes by the individual instructors. While guidelines were included as to which questionnaires to administer under different circumstances, some instructors found that adaptations were required. This procedure meant that some data had to be eliminated from the report because they did not fit with the standardized coding and analysis plan.

Appendix 2

Supplemental Demographics, Expectations, and Evaluations

Each type of questionnaire had a substantially different design to accomodate anticipated circumstances and time constraints. The rationale in constructing questionnaires was to be able to gather the most essential and reasonable information possible given subjects' attendance at a particular kind of educational event. This appendix will present data collected from the two types of extracurricular questionnaires (workshop and special event) and will indicate the number of subjects for each result. Data suggest that there were no fundamental or significant differences between the demographic profile of subjects attending extracurricular programs and those in credit courses, but when items such as religion are concerned, there is no way to be sure, since the question appeared only on the prequestionnaire to be used in credit courses.

Types of Events

Several examples of the kinds of extracurricular events that took place may serve to illustrate their variety. On one campus, an extracurricular workshop for counselors designed to help them aid their clients make career decisions contained portions of four career-related Catalyst exercises. At another campus, during a four-week workshop series, participants were exposed to Catalyst materials on sex-role stereotypes, interpersonal conflict resolution, and interviewing skills.

Demographics

Subjects (n=190) ranged in age from "under 18" to "51+" years of age with a mean of 22 (sd=1.53). As for socioeconomic background, the mean was 3.68 (n=85, sd=.86), indicating that these subjects too came largely from a middle- to upper-middle-class background. In terms of paying for their education (n=94), 24% depended solely on their parents for support; others worked and got some help from their family (33%); the rest received no support from parents (43%). Many of these subjects lived alone outside the parental home either in dorms or apartments (34%); some lived with spouses or partners (16%); others lived with parents at home (50%) (n=92).

Expectations

Subjects (n=194) were asked what made them decide to attend the event. The two most commonly chosen items were "the topic applies to me" (20%), and "I heard about it in class" (18%).

Evaluations

The majority of subjects responding to the workshop series questionnaire (n=89) thought the experience should be offered again (76%) and felt they would recommend it to a friend (72%). When responding to special events (n=100), subjects indicated strong approval. Eighty-three percent said "the event was satisfying."

Subjects who completed workshop series questionnaires (n=94) had the opportunity to answer the same three open-ended questions that were on the postquestionnaire described in the report. While findings were generally similar to those found in Table 3.11, it is interesting to note that on "what

was best?" there was more appreciation of "talking with others in the class" (25% of 87 responses) and "discussing new roles for men and women" (13%). There was also more complaint (What was worst?) about some topics being irrelevant (30% of 56 responses) and some exercises being inadequate (36%). When asked what they would do to improve the event, a large percent (40% of 57 responses) indicated that they would pick different kinds of materials. While there is no way to know exactly what the causes of these findings were, one could speculate that short-term exposure to materials about sex roles, personal values, and career and family roles may be less effective and less appealing than long-term exposure (e.g., in a semester-long course) where there is more opportunity for slow assimilation and reflection.

Appendix 3

Sample Syllabus

Duke University
House Course
Spring 1986

CAREER GOALS AND PERSONAL RELATIONSHIPS: EXPLORING THE OPTIONS

Mondays, 4:45-6:30
Epworth

Tuesdays, 3:30-5:15
House H

The Course

Duke University has been chosen to be a test site for a course being developed by CATALYST, a national not-for-profit organization that works with corporations and individuals to develop career and family options. The course focuses on career and family questions, using a format that combines written scholarship, group exercises and discussions, AV materials, guest speakers, and a field trip to help students explore personal options and make individual decisions. It is designed to provide an education in the realities of work situations and personal relationships. Since many Duke students generally expect to have careers, partnerships, and in many cases children, the intent of this course is to carefully explore the ways in which individuals can prepare to make decisions about options and to balance professional and personal goals. Topics of the course include gender role socialization, marriage and marriage contracts, partnerships that are not marriages, daily communication, relocation, housework, child care, children's influence on relationships, and personal goals, values and decision-making.

The Requirements

Students will be required to:

(1) Read two contemporary paperbacks, available at the Book Exchange and at the campus bookstore:
Barbara Ehrenreich: THE HEARTS OF MEN (Doubleday Anchor, 1983)
Grace Baruch, Rosalind Barnett and Caryl Rivers: LIFEPRINTS: NEW PATTERNS OF LOVE AND WORK FOR TODAY'S WOMEN (New American Library, 1983)

(2) During the last two weeks of the course, read an article or chapter per week of the student's choice from the attached CATALYST bibliography.

(3) Keep a journal of reactions to the readings and discussions that will be turned in twice during the semester (see attached sheet, "On Keeping a Journal").

(4) Conduct an interview with a two-career couple of the student's choice (see attached "Guidelines for Interviewing").

(5) Participate in all class sessions as well as one site visit to a day care center in Durham.

A bibliography, descriptions of the journal and interview assignments, and brief descriptions of the films to be viewed are attached to this syllabus. Exercise and discussion materials will be handed out during each class session.

Credit and Grades

The course carries a .5 course credit that will be awarded upon successful completion of the assignments listed above. Reading assignments listed on the syllabus should be completed by the date on which they are listed. Grading for the course is on a pass/fail basis.

Sponsors and Instructors

The course is a joint project of three campus programs, under the sponsorship of Trinity College. Counseling and Psychological Services (CAPS), Residential Life, and the Women's Studies Program have cooperated in working with CATALYST and in planning the course.

Instructors for the Monday section are Patti Cox and Rob Sepich of CAPS; for the Tuesday section, John Barrow of CAPS and Cheri Sistek of Women's Studies. The student coordinator for the Monday (Epworth) section is Sharon Klavins, and for the Tuesday (House H) section, Stephanie Gordon.

Class Session and Date	Topics to be Covered
(1) January 20/21	Introduction to CATALYST and Course Content "The Princeton Women" (1984, 50 minutes) - Video and discussion
(2) January 27	Students in both sections of the course should attend public lecture and reception for Grace Baruch, author of Lifeprints. Events to be held at 3:30 PM in 130 Social Psychology Building. Assignment: Start reading Baruch (to be completed by February 17/18)
(3) February 3/4	Work and Family in Contemporary America: Patterns and Emergent Questions - Lecture "My Ideal Spouse/Partner" - Group Exercise and Discussion Assignment: Continue reading Baruch
(4) February 10/11	Confronting the World of Work - Panel Discussion College graduates discuss work choices, educational and training decisions, personal life, long-term goals, hardest and easiest decisions, and preparing for task of combining several roles. Assignment: Continue reading Baruch

(5) February 17/18	Introduction to Sex Role Socialization - Lecture "Sex Roles and Socialization" - Group Exercise and Discussion Assignment: Complete Baruch
(6) February 24/25	"A Man's Place" (1979, 27 minutes) - Film and Discussion Student Comments on Interviews with Two-Career Couples Assignment: Begin Ehrenreich (to be completed by March 24/25)
(7) March 10/11	"Spouse/Partner Expectations" - Group Exercise and Discussion Mid-semester evaluations Assignment: Continue Ehrenreich
(8) March 17/18	"Welcome to Parenthood" (1979, 16 minutes) - Film and Discussion "Deciding Whether to Become a Parent" - Group Exercise and Discussion Assignment: Continue Ehrenreich
(9) March 24/25	More Work for Mother: Women and Housework in the 1980's - Lecture "Fathering" - Group Exercise and Discussion Assignment: Complete Ehrenreich
(10) March 31/April 1	Love and Work: Life's Balancing Act - Lecture "How Personal Needs Relate to Work and Family Choices" - Group Exercise and Discussion Assignment: Site visit to Durham day care center in groups, to be arranged by class members.
(11) April 7/8	"Your Move" (1982, 25 minutes) - Film and Discussion "Values, Goals and Priorities" - Group Exercise and Discussion Assignment: Read one article or chapter from attached bibliography
(12) April 14/15 THIS CLASS WILL MEET FOR 2 HOURS	"Negotiating with Spouse and Family" - Group Exercise and Discussion Wrap-up and Final Course Evaluation Assignment: Read one article or chapter from the attached bibliography

Instructor/Group Leader Guide
Values, Goals, and Priorities

Purpose: These eleven scenarios with discussion guides are designed to help students consider how values affect people's career and personal life choices. They can also encourage students to think about how priorities and goals change according to the specific circumstances and stages of an individual's life. Finally, they should permit students to imagine what they would do if they found themselves in the same situations as the characters in the scenarios.

Explanation: Values are the broadest, most general benefits and feelings that represent our orientation to life. They are the things that we learn implicity as we grow up and develop in our family, in our schools, and with our friends.

A **goal** is defined as the purpose toward which an endeavor is directed; the finish line of a race; and an end or objective. A goal is not a decision -- it's simply a statement of what one plans to achieve (and often when one plans to achieve it). It is important to be as specific as possible about goals because being vague and nonspecific prevents people from figuring out how and when to achieve their goals.

On the other hand, finding out about **priorities** involves working with both values and goals. It is the process of ranking ("prioritizing") one's values and goals in order to take steps toward making decisions and choosing activities to perform. While goals and even values may change over time, the most obvious changes occur in people's priorities. A most important goal at the age of 20 may seem a very low priority one at the age of 65.

In order to promote the discussion of values, goals, and priorities so that what is frequently left unsaid is made overt and explicit, we include these scenarios, many of which were inspired by real life situations. Individuals' ideas about the situations described will vary. It is your role as group leader to act as a catalyst for students' developing awareness of their own values, goals, and priorities. Your job is to help students consider all the issues involved in the situations described and to think about how they might react in similar situations. Reaching consensus about what the people in the scenarios should do or whether they are "right" or "wrong" is not the goal of the exercise.

One essential point: These scenarios are designed to encourage a discussion of values, goals, and priorities. Of course, deciding what to do and how to do it involves more than values and goals; it

involves, among other things, practical considerations about money, health, availability of resources (e.g., education, child care, jobs). These are the issues that most people talk (and argue) about regularly. Values, goals, and priorities are highlighted here because they are so rarely discussed (or argued about) and yet are so often at the root of major as well as minor problems in life.

Audience: Students at all levels

Uses: Small group exercises; take home exercises.

Time: If used as small group exercises, you should allow approximately 15 minutes to discuss each scenario.

Note: These exercises should not be graded or used to evaluate students' performance.

Instructions:

Before the Session:

1. Decide which scenario(s) you plan to use. The scenarios represent a broad range of career and personal interests, and life stages. Several scenarios should be used together so that students may consider how values, goals, and priorities relate to each particular situation. Heterogeneous groups of students will probably have the most challenging experience, since disagreement about appropriate values and goals should emerge. Choose those scenarios which best reflect the range of career and lifestyle interests of your group, and supplement them with others that are beyond the students' experience so that they'll have to consider more options.

2. Any existing scenario (and accompanying questions) may be rewritten or adapted to reflect situations more relevant to your students' needs.

3. If used as a take-home exercise, plan a lecture or discussion on values for the following session, and have students use the exercise as preparation for the session.

4. Plan to present the material in the Purpose and Explanation statements above to introduce the exercise.

At the In-Class Session:

1. Distribute one copy of all the scenarios you have chosen to each student. Do not give copies of the questions to the students until **after** all the scenarios have been discussed.

2. Ask students to read silently the first scenario.

3. When everyone has finished, conduct a discussion using several of the suggested discussion questions following each scenario as a guide. Start the discussion by asking the groups one of the scenario questions. As group members respond, keep in mind some of the following general questions which relate to **values.** If the issues included here arise, point them out; if not, ask a few of these questions as the discussion proceeds.

   -- Are the people in the scenario acting **selfish**

   -- Does any character have problems with **sex role stereotypes?**

   -- Do they have **false expectations?**

   -- Are the characters acting and thinking **responsibly towards others** (family members, peers, co-workers)?

   -- Has everyone considered the **welfare of the family?**

   -- Are the people **communicating** (talking to each other) sensitively, that is, **considering each other's feelings?**

   -- Is everyone being **fair** and treating others **equally**?

   -- Is anyone being **overprotective?**

   -- Who **values career/job** over **personal life** or vice versa?

   -- Has anyone considered **nontraditional approaches to work** (like flexible work schedules)?

   -- Are the parties in the dilemma thinking about the meaning of **love and commitment?**

   -- Are the characters intelligently **considering their own needs?**

4. Repeat the procedure with as many of the scenarios as can be included in the session.

5. To conclude the session and stimulate students' awareness of how their own values entered into the discussion, choose one of the following phrases and ask each group member to complete the sentence.

   --I discovered that I care a lot about...

   --I was surprised that I felt strongly about...

   --I was pleased (or displeased) that I thought...

6. Distribute the discussion questions that go with the scenarios to each student to take home.

Take-Home Exercise

1. Decide which scenarios you wish to use.

2. Distribute one set of materials to each student (a cover sheet, the scenarios, and the discussion questions). Be sure to staple the appropriate questions to each scenario.

3. Instruct students to read the scenarios and consider the questions. Encourage them to meet informally with other students, roommates, or friends outside of class to discuss the scenarios and questions. Remind them that they will not be turning in the papers for evaluation, but that the scenarios are to be used to stimulate their thinking about values.

4. Use the material in the Purpose and Explanation sections of the guidelines above to introduce the exercise. If this exercise is to prepare students for a lecture or discussion in the next session, encourage them to think about questions they may want to raise at that time.

Student Exercise
Values, Goals, and Priorities

Scenario I

Cynthia works for the personnel department of a small retail company. The personnel division is very small--just Cynthia and her boss. Since there are only two employees, Cynthia's job has many different responsibilities, from interviewing job applicants and recruiting new employees to overseeing employee benefits and the company's small cafeteria.

Cynthia is divorced and has one child, age 4, who is in a family day care home close to where they live. Cynthia's job has very regular hours (9-5) and that helps her to arrange for the care of her daughter. She never has to take work home and her weekends are free to spend with her child. Cynthia's boss is also very flexible, and if her daughter is sick, or Cynthia can't come in for some other reason, she and her boss can usually make some arrangement that's agreeable to both.

Cynthia's salary is moderate; she has friends who work in the personnel divisions of much larger companies and they make more money than she does. They also have a lot more responsibility and opportunities to move up within their companies. Cynthia knows that there won't be much room for advancement if she stays with her company, but she also appreciates the flexibility and "atmosphere" of her workplace. Still, sometimes she envies her friends with the high salaries and more stimulating work. But as long as her daughter is little, she feels she should make some tradeoffs as far as her career is concerned.

Student Exercise
Values. Goals, and Priorities

Questions for Scenario I

1. What do you think of Cynthia's job? What do you like about it? dislike about it?

2. As a single parent, Cynthia has total responsibility for her child and their economic survival. If you were in Cynthia's position, do you think you would stay in the job at the retail company? If so, why? If not, why?

3. If Cynthia were a man with custody of his child, would you feel differently about the job? Why?

4. Cynthia is trading possible career growth and higher salary for flexibility and regular hours. Do you think at some point she should try to get a more demanding, high-paying career? When? Would it make a difference if her child were older? if she got married again?

5. Today, would you rather have a 9-to-5 job that tended to be routine or would you rather have a more challenging career that paid well but left less time for fun, for your spouse/partner, or for your children? How do you think you'll feel 15 years from now?

6. If you had (have) a spouse/partner, which type of job would you like him/her to have? Why?

Student Exercise
Values, Goals, and Priorities

Scenario VIII

Dorothy is a vice president at a large oil company. She is 33 and returned to work three months ago after having her first child (a daughter) and taking a two-month maternity leave. She had hoped to take a longer leave, but her office was in the midst of negotiating an important contract for which her services were needed. Her husband, Lee, requested a brief paternity leave from the hospital where he practices psychiatry, but it was denied because hospital policy does not give men parental leaves.

Both Dorothy and Lee worked hard to attain their current career levels and do not wish to leave their jobs. So they decided to hire a daytime caretaker for their daughter and alternate taking time off from work when the baby or the caretaker is sick. They had thought about maintaining this type of arrangement until their child is about two years old. At that time the couple expects to enroll her in the hospital's child care center.

Dorothy and Lee work long hours. Although their schedules are less hectic than they once were, each of their positions demands at least nine or ten hours of work per day. They are beginning to worry that neither of them has the time or energy to be the kind of parents they had hoped to be. They are also worried about the quality of their own relationship, which has suffered since the baby was born.

Student Exercise
Values, Goals, and Priorities

Questions for Scenario VIII

1. Do you think it was wise for Dorothy and Lee to have a child at this point in their careers? Why or why not?

2. How do you feel about Dorothy and Lee leaving their baby with a hired caretaker all day, every day? Under the same circumstances, what would you do?

3. Imagine you are Dorothy's boss. How do you think you would respond if she asked you for additional time off to care for her child, even if it was without pay? How long would you guarantee to hold her full-time job open? How would you respond if she asked for a part-time position? What are some of the problems either of these arrangements (more leave, part-time work) might cause?

4. How do you feel about Lee wanting to take a leave to care for his baby? (For women) Would you want your spouse to take such a leave? Why or why not? (For men) Would you be willing to take such a leave? Why or why not?

5. If you were Dorothy, and you decided to quit your job to care for your child, what would be the most difficult part of leaving? What might be some of the advantages?

6. If you were Lee, and you decided to quit your job, what would be the most difficult part of leaving? What might be some of the advantages?

8. Picture yourself as a policy maker in an organization, institution, or company. Do you think it would be your responsibility to provide paternity leaves? If so, why? If not, why?

Values

Books

*Maslow, A.H. New Knowledge in Human Values. Chicago: Regnery-Gateway, 1970.

Raths, L.E. et. al. Values and Teaching: Working with Values in the Classroom. Columbus, Ohio: Charles E. Merrill Publishing Co., 1966.

*Rokeach, M. The Nature of Human Values. New York: The Free Press, 1973.

*Simon, Sidney B. Values Clarification. New York: A & W Pubs., 1978.

Journal Articles

*Faver, C.A. "Life Satisfaction and the Life Cycle: The Effects of Values and Roles on Women's Well-Being." Sociology and Social Research, 66:4, 435-451.

Grant, P.C. "Why Employee Motivation Has Declined in America." Personnel Journal, December, 1982, 905-909.

*McClintock, C.G. "Social Values: Their Definition, Measurement, and Development." Journal of Research and Development in Education, 1978, 12, 1, 121-136.

*Medling, J.M., and McCarrey, M. "Marital Adjustment over Segments of the Family Life Cycle: The Issue of Spouses' Value Similarity." Journal of Marriage and the Family, February, 1981, 195-203.

*Tittle, C.K. "Career, Marriage, and Family: Values in Adult Roles and Guidance." The Personnel and Guidance Journal, November, 1982, 154-156.

Magazine and Newspaper Articles

Allen, F. "Chief Executives Typically work 60-Hour Weeks, Put Careers First." Wall Street Journal, August 19, 1980.

Ball-Rokeach, S.J., et al. "The Great Amer[illegible]alues Test." Psychology Today, November 1984, 34-41.

Footnotes

1. Diana Zuckerman, Rayburn House Office Building, Washington, D.C. 20515 (personal communication, January 31, 1987).

2. Interested readers may wish to consult more basic research on socially determined sex roles and sex role stereotypes. Below are selected references divided into three subcategories: Sex role behavior (such factors as occupational choice, same and mixed-sex group interactions, and performance of activities in the workplace and in the family): Baucom & Weiss, 1986; Coverman, 1983; Frieze, Bailey, Mamula, & Moss, [illegible], Scanzoni, 1978. Personality traits: Baldwin, Critelli, Stevens, & Russ, 1986; Bem, 1984; Horner, 1972; Spence, 1984. Attitudes and implicit associations (governing peoples' own sex-typed behavior as well as those that guide their reactions to others): Broverman, Vogel, Broverman, Clarkson, & Rosenkrantz, 1972; Eagly, 1983; Shaver & Hendrick, 1987; Tavris & Offir, 1977; Tittle, 1981; Zuckerman, 1985.

3. Analyses for these particular questions were based on 204,491 respondents.

4. Diana Zuckerman, Rayburn House Office Building, Washington, D.C. 20515 (personal communication, August, 1986).

5. While there are many courses on such subjects as sex roles, women and work, family relations, etc., we know only a few academics who have in the past or who are now thoroughly integrating the areas of work and family in their teaching: Marcus Maier, State University of New York at Binghamton; Jo-Ann Nicola, California State University at Sacramento; Kathleen Campbell, Bowling Green State University; Patricia Voydanoff, University of Dayton; John Scanzoni, University of North Carolina at Greensboro; Abraham Zaleznik, Harvard University; Joseph Pleck, Wheaton College; Ann Early, Southern Methodist University; and Sally Power-Ross, College of St. Thomas. As already mentioned, many counselors and student service personnel have recognized the need for interventions and have linked the two topics (career & family) in their work. Two larger-scale interventions were undertaken by Sunny Hansen at The University of Minnesota, and Judy Richardson and Alice Thomas at St. Olaf's College. The Commission on Work and Family Linkages, a project of the National Career Development Association, a division of the American Association of Counseling and Development, is designing training workshops for campus and noncampus-based counselors. The list above is not meant to be inclusive.

6. Some examples of these are: Resources for Change in Cambridge, Massachusetts; Career Resource Center in Mt. Kisco, New York; Job Advisory Service in Pittsburgh, Pennsylvania; the Ohio Department of Education; Minnesota Curriculum Services Center in White Bear Lake, Minnesota; Stephen Segal of Resources for Parents at Work in Philadelphia, Pennsylvania; and The Conference Board in New York, New York.

7. The Consulting Committee reviewed all the Campus Resource materials and plans; the members then met with us in the summer of 1984 and made recommendations for the next phase of the Campus Resource program. They highly recommended more experimentation with the materials on a wider selection of

campuses before revision and publication of the materials took place.

8. This number (1,148) includes 88 pre/postquestionnaires that were received too late to include in the analyses and are not included in Table A.1. Eighty- six prequestionnaires included in the 1,148 could not be matched with corresponding postquestionnaires. Only data from matched questionnaires are presented in this report.

9. The manual of Catalyst materials is scheduled for release in 1988. For further information contact Catalyst's Campus Resource.

10. Questionnaires used in the study may be obtained by writing to Catalyst's Campus Resource. Costs for printing, handling, and mailing will be billed to the requestor, and the materials will be sent as long as supplies last.

11. The codebook and category system may be obtained by writing to Catalyst's Campus Resource. Costs for printing, handling, and mailing will be billed to the requestor, and the materials will be sent as long as supplies last.

12. Summations may not always total 100% because, throughout this report and in all tables, percents are rounded to the nearest whole number.

13. Throughout this report, the "n" in parentheses refers to the total number of subjects included in the analysis.

14. In terms of SEC, different campuses produced not only different means but different ranges (deviations from the mean). In fact, we chose the eight campuses precisely because they represented different populations of students. The violation of the assumption of homogeneity of variance by campus is, however, of minimal importance since no significant campus differences in students' attitudes toward the major issues were found, although there were some differences based on subjects' SEC.

15. Data on the prequestionnaires were available for 463 subjects, but due to missing identification numbers only 377 could be reliably matched with postquestionnaires. Analyses of these 86 prequestionnaires indicated no differences between them and the 377 matched pre/post questionnaires discussed in this report.

16. Mean salary was determined by calculating it from the mean value on an eight-interval scale where 1=under $10,000; 3=$15,000-$19,999 and 8=over $75,000. The scale contains unequal intervals.

17. Average rank was computed by including all subjects in the analysis. Those subjects who ranked an item 1-5 received the number they indicated. Those subjects who did not rank an item received a "6." Thus, although there were only five choices possible, the average rank for an item could be greater than five.

18. Subjects who were already parents were not included in this analysis.

19. Subjects who were already parents or who indicated they did not plan to have children were not included in this analysis.

20. In Table 3.8 there are significant pre/post differences between means, which, at first glance, seem closer together than other pairs of means where no significant difference was found. This is due to the fact that salary expectations were not measured on an equal interval scale; i.e., 5=$25,000 to $29,999 while 6=$30,000 to $49,999.

21. Males moved from an average rank of 4.85 to 4.62 on careers "interferes with family" and from 5.85 to 5.82 on careers make it "difficult to manage a household." Females moved from 4.25 to 4.37 on "family" and from 5.54 to 5.73 on "household." While these mean differences are small, taken together they are strong enough to eliminate male/female differences at posttest.

22. James Uleman, Professor and Chairperson, Social Personality Psychology Department, New York University (personal communication, December 29, 1986).