Across the nation the percentage of women enrolled as undergraduates has been increasing over the past two decades. At this time women are actually in the majority, making up 50.8 percent of all U.S. undergraduates. However, despite women’s participation in higher education and their generally good academic performance, women continue to be less likely than men to set high career goals. One explanation for women’s lower career aspirations has to do with the nature of the campus environment, including traditional advisement programs. In this paper, the impact of the undergraduate experience on women’s career goals will be examined, and a career development program designed to enhance women’s career confidence will be described.

One way to measure college impact is to look at the educational and occupational goals that women develop and maintain over the college years. Studies from campuses across the country indicate that women are less likely than men to obtain advanced degrees (Alexander and Eckland, 1974; Astin and Kent, 1980; Dearman and Plisko, 1977; National Science Foundation, 1982) or to maintain high occupational goals in the years during and following college (Astin, 1979; Kutter and Brogan, 1976; Women’s Bureau, 1971; Watley, 1971). In general, women show a shift in college from more innovative career goals to more traditional career and lifestyle choices (Astin, 1979; Astin and Kent, 1980; Bruegger, 1968; Marini, 1978; Ochsner and Solomon, 1979). For example, only 10 percent of students receiving the bachelor’s degree in engineering are women (National Science Foundation, 1982) and even fewer women continue to the doctorate in this field (3.9 percent). Furthermore, women are less likely than men to have made a career choice by graduation (Adler, 1976) or to show a positive change during college in their self-reported drive to achieve (Astin and Kent, 1980). These attitudes among women students are significant because students’ goal-setting has been found to accurately predict future occupational achievement among both men and women (see Marini, 1978; Rosen and Aneshensel, 1978, for reviews). Astin’s conclusion from his research in this area is that undergraduate programs “serve more to preserve, rather than reduce, stereotypic differences between men and women in aspirations and achievement.”

The lack of women’s participation in the work force, particularly in the more demanding career fields, represents a serious loss of human potential for our society and a personal loss for those women who would benefit from the challenges a career would bring them. Yet this problem has tended to be overlooked on college campuses because women do not have lower grades than men (Astin, 1979; Cross, 1975; Gadzella and Fournat, 1976) nor are they more likely to drop out of college.

Confidence, commitment

To understand why women don’t develop career goals in college, it is necessary to look at measures other than grades and retention. Since educational and occupational goal-setting are related to confidence in one’s abilities (Canter, 1979; Stake, 1979b), it is important to consider the amount of confidence students gain during their undergraduate years. Studies are consistent in showing that men develop greater confidence in their abilities during the undergraduate years, and that women gain little or no added confidence for their persistence and good grades (Astin, 1977; El-Khawas, 1980; National Center for Educational Statistics, 1977). These studies indicate that the campus environment is helpful to men in building self-confidence, but that the college experience does not lead to the same gains for women.

In our research at the University of Missouri-St. Louis, we found a similar pattern in the development of confidence. Advanced (upper division) male students had higher scores on a measure of performance/self-esteem than less advanced (lower division) male students, but advanced women did not have higher performance/self-esteem scores than less advanced women (Stake, 1979a). Hence, the upper division men had substantially higher scores than the upper division women. Furthermore, in a longitudinal study we found that full-time male students showed greater increases than full-time female students on five of six measures of confidence and expectation considered: performance/self-esteem, certainty of attaining their educational goal, motivation for the degree, level of educational goal, and certainty of attaining their occupational goal. The results of these studies, and the research from other campuses described above, point to a widespread problem in undergraduate education. The undergraduate experience does not reduce sex differences in career confidence and expectation and may, in fact, promote such differences.

Classroom, future success

It may appear contradictory that women perform well in the classroom but do not develop confidence in their abilities. There is considerable evi-
dence, however, that women do not make the link between academic performance and career success. For example, women with good grades have not been found to have higher educational goals (Wallace, 1971), higher occupational goals (Spaeth, 1977), or higher ratings of career confidence (El-Khawas, 1980; Farley, 1981; Stake, 1984). Hence, too often women do not make the connection between their classroom successes and their potential for future careers.

Why don't women make this connection? Answers to this question can be found both off campus and on campus. First, although women may be encouraged to get good grades, they have less support from their families for their career goals than do men (Peterson, Rollins, Thomas, and Heaps, 1982). It is also true that other noncampus influences (e.g., the media) tend to support the traditional women's role as normative for all. Hence, women often are not encouraged to make the connection between school and career, even by those who are paying the cost of their education.

The second arena in which women fail to receive sufficient support for career development is the campus itself. Hall (1982) summarized evidence from a wide variety of colleges concerning the atmosphere of the college classroom for women's achievement. She reported considerable evidence that some faculty and advisers contribute to the discouragement of women's career goals. Sometimes women are subject to overt discrimination, but more often they simply do not receive validation for their career interests and potential. Another source of discouragement on campus is that the majority of college women (50 percent in one Brown University study; Asten and Kent, 1980) do not want their future wives to have a career commitment, even though they may view a college education as an asset in a future wife. It is indeed unfortunate that college women do not receive more support from peers and teachers for their career ambitions, for research indicates that women require more encouragement than men for high career goalsetting to compensate for the lack of general societal support for their ambitions (Adler, 1978; Lanneborg, 1982; Stake and Levitz, 1979).

A related problem for women on campus is the scarcity of female role models. Same-sex role models have been found to be important for the development of career goals (Stake and Granger, 1978); for undergraduates women specifically, having a female faculty role model has been found to increase expectations for advanced degrees and plans to enroll in graduate school (Seater and Ridgeway, 1976). It is indeed a loss to women, therefore, that only 27 percent of college-level teachers are women.

In addition to acting as a role model, some faculty fulfill the role of mentor. A mentor provides direct opportunities for advisees to learn skills and techniques related to their career goals. Mentors also encourage and support the career progress of the student, acquainting the student with the informal structure of the profession, such as how decisions are made and what career strategies are best. Although the effect of having a faculty mentor has not been ascertained for undergraduate women, evidence suggests that mentors are important at later career stages for both the informal socialization and concrete help they provide (Missirian, 1981; Phillips, 1977; Wood, 1981). Hence, the scarcity of women teachers to serve as mentors is a barrier to the development of career confidence in women.

Previous approaches

Most campuses provide traditional advisement for all students. These programs are helpful to students who seek information about undergraduate requirements. However, advisement is usually limited to providing information and does not include consideration of the students' personal inhibitions and self-doubts about pursuing a career. A second problem with traditional advising is that it is passive and reactive; it relies on the students' initiative to seek advice. Women who lack confidence in their abilities are unlikely to make an active request for help with their career development, even though these women have the greatest need for this support and encouragement. Probably because of these limitations of traditional campus advising, undergraduate women have reported few feelings of encouragement from the advisement process (Stake and Levitz, 1979; Vollmer, 1983).

Despite this rather discouraging picture of women's campus experiences, there is some evidence that college women can develop more confidence and motivation for high-level careers. A number of isolated programs for women have been developed on campuses across the country; these programs demonstrate that women's career orientation is enhanced when women are given support for their career interests. For example, Trachtenberg (1976) developed an innovative program that gave college women an opportunity to work as interns in a professional field of their interest. Responses from the participants indicated that the program was effective in helping to bolster the women's career involvement. One limitation of this approach was, however, that students were required to apply for the intern positions and competition was high. Women with low confidence in their abilities, and who are therefore most in need of help, are not likely to be reached through such programs.

Women who are low in confidence are also less likely to benefit from women's studies programs. In a recently completed study we compared students enrolled in nine women's studies classes with a comparison sample. We found that in the women's studies classes showed greater improvement in career-related confidence than a comparison group and that the students enrolling in these classes were more confident at the outset. Hence, women's studies courses are effective in improving women's confidence, but low self-esteem women are less likely to opt for these courses.

Thus, to help women who are low in confidence a program must not rely on the women's initiative to seek out supportive experiences on campus for themselves. Instead, the program must reach out to these women. A few recent programs have taken this approach (Cooper, 1978; Greene, Sullivan and Byard-Taylor, 1982). These studies provided information to students about career possibilities. This information led the students to consider expanded career options. It is clear from these studies that students' consideration of their own career possibilities can be influenced by career-related information even when the students have not initiated contact with the information source. That is, female students are responsive to positive career information even if they have not actively sought it for themselves.

The above research indicates that women's career confidence and motivation can be enhanced by programs that offer support and the opportunity to learn about what women can achieve in their careers. Women profit from general information about what women can do, as is gained through role models and women's studies courses, as well as by specific information about a profession, as is obtained through an internship or mentor experience.
A campus program

Our program was designed as a response to the inadequacies of the college environment for fostering women's career confidence. It is a proactive career development program that provides the support, role models and career information necessary to encourage undergraduate women's career development. The program is structured to provide individualized advisement for each participant; students can elect to participate in any combination of four program options (described below) in accordance with their personal needs.

The first step in launching this program is to identify one or two faculty who have a strong commitment to women's career development. These faculty should be very familiar with the resources available on their campuses, for their job is to adapt the career development program to fit the needs and resources available on their campuses.

The second step is for the coordinator to select program counselors who will individually monitor students' participation through the one-year program. The program counselors play a key role. First, they provide each student with support and guidance on a one-to-one basis, which promotes students' active interest in the program. Second, they are responsible for coordinating the students' participation in the program options.

Since the program counselor's function as the primary link between the undergraduate student and the career development program, they should have some counseling or related experience. They should be natural helpers who readily establish rapport with others, and they should have an interest in women's career development. One possible source for these counselors is doctoral programs in counseling and clinical psychology. Advanced students in these programs have developed their counseling skills and are often interested in part-time counseling responsibilities. By appointing doctoral students to the program counselor role, one is both providing training in women's achievement concerns to beginning counselors and providing a stipend to help these counselors complete their advanced studies. An added advantage to using graduate student counselors is that they also may serve as "mid-step" career role models to the undergraduate participants.

The program counselors help students to explore their concerns about pursuing a career and, through the options available in the program, insure that students have the information and experiences needed to make informed choices about their future. As a part of their training, the counselors learn about the achievement-related concerns of women as described earlier in this article. Also, they explore their own conflicts and biases about women's career development. Although a major goal of the program is to raise women's career aspirations, the counselors must learn to be open to all lifestyle choices, including the single maternal role and the traditional homemaker role.

This program is designed for students who do not have confidence in their abilities or who lack a career focus. To circumvent the problem that women low in confidence are not apt to initiate participation, the program is designed to actively reach out to students. To identify potential program participants, incoming women undergraduates should be surveyed early in their first year on campus. The survey should include a measure of students' confidence in their abilities and questions regarding their career plans and expectations. A quick measure of students' confidence in their abilities is the Performance-Self-Esteem Scale (PSES, Stake, 1979a). This scale was originally designed with 40 items, but a 15-item version is now available (Stake, 1984). The questionnaire requires students to describe themselves on 15 traits, such as "able to get ideas across" and "makes mistakes when flustered." These items are related to feelings of confidence in career settings (Stake, 1979). The PSES can be self-administered and completed in five minutes. In addition to this scale, subjects should be asked to state their career goal (if any), their expectation of reaching that goal, and their level of career commitment.

From these measures it is possible to determine those students who are most likely to benefit from the career development program—students who lack confidence in their abilities or who lack a career focus. Students who are selected for the program are assigned to a program counselor. The student's counselor contacts her by phone to explain the program and to invite the student to attend an initial individual advisement conference. It is best that counselors refer to themselves as "advisors" in their contacts with students to avoid negative associations students may have with the term "counselor."
Peer support program

Students electing to participate in the "big sister" option are assigned to an advanced undergraduate woman whose major role is to give information and advice about the campus and to provide support and encouragement to the entering students. This option is particularly helpful for students who feel lost and disoriented when they arrive on campus. The campus student affairs office or women's center can be helpful in identifying students who would function well in the big sister role.

Another means of helping the student to develop a supportive network is the small discussion group. Counselors form these groups from the students in their caseload who show an interest in this program option. In these groups students can learn from one another under the direction of their counselor. The groups give students a chance to discuss their life plans and the conflicts surrounding those plans. The group setting is especially helpful for discussing the underlying concerns about how to combine career and family goals.

A study was conducted on one University of Missouri campus to determine the amount of student interest in such support groups. The group leaders in this study found that the student participants were very enthusiastic about having an opportunity to discuss their academic and career plans within the peer group setting. Of the women who participated, 96 percent indicated that they would like to attend future career discussion groups that were available on the campus.

The research reviewed earlier indicates that role models and mentors are effective in developing women's career interests. The following two options provide students an opportunity to learn from women who have established themselves in their careers.

Informal speaker series

Since women students have virtually no knowledge of women's possibilities for achievement in many career roles, they do not picture themselves in such roles. The informal speaker series gives the student a chance to get to know women who have developed successful careers in male-dominated fields.

Women from a variety of occupations are invited to discuss their careers with students. These speakers can be located by contacting campus and community women's groups, such as the local NOW chapter. The speakers can provide a realistic picture of women's opportunities in their respective fields. It is especially important for students to learn about the conflicts and barriers the speakers have experienced in their careers and the coping strategies they have used to overcome them.

Women's studies courses are effective in improving women's confidence, but low self-esteem women are less likely to opt for these courses.

Mentor program

This option is most appropriate for women who have set a specific career goal. Whenever possible, these women are assigned to a mentor on the campus who has a similar career and who has an interest in the special needs of women students. To prepare mentors for their roles, a training session is recommended in which mentors are informed of the goals of the program and instructed in the role of a mentor.

The mentors meet with the students informally over the year, allowing them to learn firsthand about their chosen career. The relationship between mentor and student can vary depending upon the wishes and needs of each. But in all cases mentors should meet with their students at least three times per semester.

Evaluating the program

At the close of the academic year, it is important to evaluate the effectiveness of the program and to determine what changes in the program would be beneficial in future years. There are at least three methods for determining the impact of the program. First, students can be given the same measures of confidence and career expectations that they completed at the beginning of the year, and changes in confidence and career expectations between the two test periods can be measured. In addition, all who are involved in the program, including students, counselors, mentors, and big sisters, can be asked to provide their personal reactions to the program and their suggestions for program changes. Finally, graduates of the program may be surveyed in subsequent undergraduate years to determine the long-range impact of the program on career expectations and confidence.

Summary and conclusion

Although women now achieve in the college classroom as well and in the same number as men, women are less likely than men to fully utilize their talents upon graduation. A persistent barrier that affects women's postgraduate achievement is low career confidence. Many women do not gain career confidence even when they experience solid academic success.

There have been numerous studies of the problems of women on campus, but few programs have been designed to facilitate women's career development. This project described a multi-faceted approach to developing women's career expectations and confidence. This one-year program provides four program options to meet the diverse needs of undergraduate women. The progress of each student in the program is coordinated by program counselors who provide individual and group counseling and who insure that students gain the information and experience they need to develop their career goals.

The program as described draws on many resources that are already available on college campuses, including interested faculty and staff and service-minded advanced undergraduates. In developing this project on our campus, we found that many faculty, staff and students were enthusiastic about the program and willing to devote their time and talents to it as part of their commitment to the campus. Hence, direct costs required to launch the program need not be high. The major expense is the stipend provided to program counselors. The amount of funding required depends, of course, upon the number of program counselors and students included in the program. The benefits of the program for undergraduates and the added benefits of training and support for graduate students certainly outweigh these costs.
References


