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**Perceived academic self-efficacy of reentry female community  
college students in relation to life circumstances**

**Waterbrook, Marjorie Ellen, M.A.**

**The University of Arizona, 1994**

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**PERCEIVED ACADEMIC SELF-EFFICACY OF REENTRY  
FEMALE COMMUNITY COLLEGE STUDENTS IN  
RELATION TO LIFE CIRCUMSTANCES**

by

Marjorie Ellen Waterbrook

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A Thesis Submitted to the Faculty of the  
**SCHOOL OF FAMILY AND CONSUMER RESOURCES**  
In Partial Fulfillment of the Requirements  
for the Degree of  
**MASTER OF ARTS**  
**WITH A MAJOR IN COUNSELING AND GUIDANCE**  
In the Graduate College  
**THE UNIVERSITY OF ARIZONA**

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## ABSTRACT

The purpose of this study was to explore the relationships between academic self-efficacy beliefs and life circumstances of reentry women students.

Participants in the study were 45 women 25 years of age or older who were returning to a community college after an absence from any level of school of 3 or more years. Participants answered two questionnaires, one to measure their academic self-efficacy beliefs and one to gather demographic data as well as data related to the respondents' life circumstances.

Results showed that overall, perceived academic self-efficacy beliefs were low and that there was a significant relationship between low self-efficacy beliefs and the life circumstances of having a marriage end, wanting to postpone employment, and having a total annual family income of \$20,000 and under.

## CHAPTER 1

### INTRODUCTION

Many trends in contemporary society conspire to bring nontraditional age students back into the college or university classroom. Longer lifespans lead many adults of both genders back to school to pursue changing interests or changing careers; those who may not have chosen to go back to school may have the choice made for them when their employers "downsize" and hand them their "pink slips." In addition, a sense of the expanding options for women or "empty nests" may lead wives and mothers back into the classroom; divorces and the necessity of supporting themselves and their children may force them to be there. Colleges and universities are glad to register these older students and to take their tuition money, but often do so primarily to offset currently declining enrollments of traditional age students, not out of any real commitment to making higher education more accessible to this relatively new population of learners. If schools seek to recruit and enroll returning female students, they must be willing to do what leaders at C. W. Post did when they recognized that ". . . it was simply not enough to recruit. What was important was to assess the academic needs of this group and to ask ourselves if our institution could meet those needs through our programs" (Murphy & Ahtziger, 1981, p. 315).

Long and Blanchard (1991), examining the connections between social and economic changes and trends in higher education from 1969 to 1988, found that

women's enrollment in colleges and universities increased, while men's enrollment decreased. They also found that women's degrees were increasingly connected to potential employment, resulting in less degrees in traditionally female fields such as the humanities and social sciences and more degrees in traditionally male fields such as business and computer sciences. They suggested that there is now "the possibility that American higher education may be a feminine arena for decades, if not centuries" (p. 56), but that "while increasing attention is being directed to ethnic and racial pluralism in higher education, recognition of the increasing presence of women on American college campuses has been muted" (p. 48).

There is general agreement throughout the counseling and education literature that reentry adult learners of both genders have needs different than the needs of students of the traditional ages of 18 to 21. Adult students, as described by Wilcoxon, Wilcoxon, and Tingle (1989) "must rediscover their study skills"; acquire information about and familiarity with "college or university life and practices"; are "often juggling various role responsibilities of being a spouse, parent, employee, and student"; and any support systems they may already have in place are usually composed of "nonstudents with minimal sensitivity to the demands of adult-student life" (pp. 40-41).

The transition of returning to school is often not the only transition facing returning adult students. Levin (1986) called these the concerns of "midlife," such as biological timetables, concern with the physical signs of aging, reevaluating original career goals and ambitions, financial pressures, and responsibilities for

college-age children and older parents (p. 372). Although men as well as women must manage these transitions, they are often more difficult for women, especially those who are newly separated or divorced.

Grottkau and Davis (1987) suggested that perhaps the biggest problem facing reentry women is what they label a "sociological barrier": The need for these women to give up the "gender-appropriate" (p. 10) roles they may have learned, such as being dependent and passive and feeling inferior, and to learn instead to be independent, assertive, and aware of their own self-worth. They quoted Astin and Kent (1983, cited in Grottkau & Davis, 1987, p. 10), who called for higher education "to provide its female students with the competencies necessary for effective performance on the job and with a sense of autonomy and self-worth that will enable them to overcome any handicap stemming from earlier socialization for dependency and conformity.

The expanding field of self-efficacy theory, research, and application in academic and career counseling seems to be a promising one to address many of the obstacles standing between reentry women and their fully realized potential in higher education and in the work force. In fact, Lent and Hackett (1987) called for "expanding career self-efficacy research . . . to study more thoroughly self-efficacy in relation to environmental parameters" because it can be expected to "[shed] light on the career development of women considering nontraditional careers" as well as "racial/ethnic minorities, and other groups for whom environmental press may be of paramount importance in negotiating career decisions and achievements" (p. 371).

It is important to note that Lent and Hackett also encouraged further investigation of academic achievement as a "career-relevant domain" (p. 373). In addition, they classified college major choices and academic performance as "career entry behaviors."

Regarding the interaction of socialization and school and career aspirations, Lent and Hackett (p. 368) asserted that

. . . to the extent that traditional female socialization experiences foster biased exposure to sources of information for acquiring efficacy expectations, many women may develop strong efficacy beliefs for traditional career activities but weak beliefs regarding their ability to succeed at nontraditional (male-dominated) career pursuits. In effect, self-efficacy beliefs may then serve as a potent internal barrier to women's career choices and achievements.

(As noted in the preceding paragraph, career choices and achievements are tightly bound with academic choices and achievements.)

Life circumstances—e.g., age, income, marital status, number, and ages of children—can all be seen as factors affecting the acquisition of efficacy expectations, whether they be about returning to school or any other new undertaking. Sarason, Johnson, and Siegel (1978) cited studies that report "negative relationships between life stress and academic and teacher performance" (Harris & Carranza, 1973, cited in Sarason et al., p. 932). They found their Life Experiences Survey was "capable of differentiating college students who had sought help for adjustment problems from those who have not" (Sarason et al., 1978, p. 940). Roehl and Okun (1985) reported that "one strategy for determining the needs of a student group is to ascertain factors which impede their goal attainment" (p. 23). They proposed life events—"occurrences which typically effectuate change in the

usual activities of most individuals who experience them" (p. 23)--as one source of impediments to goal attainment. Thus the relationship between the slightly more general category of life circumstances and the more specific category of academic self-efficacy expectations is worth investigating.

Our current understanding of self-efficacy theory allows us to start devising and testing interventions designed to develop and/or modify efficacy expectations. According to the theory, there are four primary means by which efficacy expectations may be acquired and modified: personal performance accomplishments, vicarious experiences, verbal persuasion, and emotional arousal (Bandura, 1977, cited in Lent & Hackett, 1987, p. 375). Thus a counselor or teacher might structure a series of increasingly difficult tasks that provide the client or student with an increasing sense of mastery (performance accomplishments); she might expose clients or students to others like themselves who have succeeded in that course or that career (vicarious experience); she may provide "inspirational, supportive messages regarding clients' or students' capabilities" (verbal persuasion); or she might find ways to decrease excessive career choice or performance anxiety (emotional arousal) (Lent & Hackett, pp. 375-376).

#### Purpose of the Study

The purpose of this study was to explore the relationships between academic self-efficacy beliefs and life circumstances of reentry women students. More specifically, it sought to discover some of the specific doubts and fears these women have as they return to school as well as to discover whether there was a connection between these doubts and fears and any of the specific life

circumstances in which they found themselves. This knowledge can be of use to counselors and other student service professionals as they develop programs and services designed to enhance the academic success and achievement of this group of students.

### Questions

In an attempt to understand more about academic self-efficacy beliefs of returning women students and the relationship of these beliefs to their life circumstances, the following questions were addressed:

1. Did this group of women have the low academic self-efficacy reported in the literature?
2. In what specific areas did these women have the lowest academic self-efficacy?
3. In what specific areas did these women have the highest academic self-efficacy?
4. Is there a statistically significant relationship between certain specific life circumstances and level of perceived academic self-efficacy?

### Assumptions

The following assumptions were made in this study:

1. The subjects answered the questionnaires thoughtfully and truthfully.
2. The sample was representative of a larger population of returning women students.

### Definitions

The following definitions were used in this study:

**reentry women students:** female students 25 or older who are returning to school after 3 or more years away from school at any level. In this study, synonymous with **returning women students**.

**self-efficacy expectations**--"beliefs about one's own ability to successfully perform a given behavior" (Bandura, 1977, cited in Lent & Hackett, 1987, p. 348).

In this study, synonymous with **self-efficacy** and **perceived self-efficacy**.

**academic self-efficacy**--beliefs about one's own ability to successfully perform specific behaviors related to school work.

**career self-efficacy**--beliefs about one's own ability to successfully perform specific behaviors related to training for and functioning in a specific career.

**life circumstances**--any events or conditions in a woman's life that may influence her thoughts and feelings as she returns to school. Concept related to life experiences, life stress, and life changes (Sarason et al., 1978) and life events (Roehl & Okun, 1985).

### Limitations

The limitations of the study are as follows:

1. Subjects answered questions by self-report.
2. Subjects were drawn from one campus of a local community college and therefore the ability to generalize the results may be limited.

### Summary

This chapter has provided an overview of current thinking about reentry women students and about self-efficacy theory as it applies to women's academic choices and academic development. The chapter has also presented the questions for consideration, assumptions, definitions, and limitations relevant to this study.

The following chapter presents a more thorough review of the literature on reentry women students and self-efficacy theory.

## CHAPTER 2

### REVIEW OF RELATED LITERATURE

The previous chapter introduced the subject matter relevant to this study, stated the purpose, assumptions, limitations of this study, and the questions for consideration. This chapter focuses on the literature related to the study and covers in more detail the literature on the experience of reentry women students--the return to school in the context of other transitions; academic obstacles; differences among reentry women; suggested academic support services; and alternative paths toward college degrees. It also focuses on the literature on self-efficacy theory and the related concept of "agency," on the relationship of both to women's academic and career choices, and on self-efficacy counseling interventions.

#### Experience of Reentry Women Students

Returning to school is just one of the life transitions reentry women may be experiencing and which may be placing unique obstacles between them and their college degrees. While these women have in common many transition issues related to the return to school, there are almost always many other specific sets of obstacles for each of them as well. Whether these women's needs are homogeneous or heterogeneous, there are a plethora of student services proposed to support them in the pursuit of their degrees. In fact, some researchers even suggested reformulating our traditional view of what constitutes persistent progress

toward a degree to accommodate the varied paths these women travel on their way to completing their college educations.

### Return to School in the Context of Other Transitions

Hughes (1983) pointed out that adult learners are so diverse that it is hard to generalize about and provide services for them. Amidst the diversity, however, he cited three characteristics which he believed "consistently appear in the literature and seem to accurately differentiate between non-traditional and traditional students" (p. 52): they have "multiple commitments," such as family and jobs, in addition to their school commitments; these additional commitments mean that their focus tends to be more off campus than on, a quality Hughes labelled "off-campus `directedness;""and they have "a preference for informal learning" (pp. 52-53).

Greenfeig and Goldberg (1984) saw the return to school as one of the many transitions of adult life, a transition during which reentry students are experiencing not only the stress of the return to school but also the stresses of some of the major life events that brought them back to school. Separation or divorce, "the most often cited reason for returning to school" (Kahnweiler & Johnson, 1981; Markus, 1976; both cited in Glass & Rose, 1987, p. 112), usually creates the need for a woman to take more financial responsibility for herself and her children and propels her back to school to become more marketable (Mohensin, 1980, cited in Glass & Rose, p. 112). Separation or divorce may also bring her back to school "to establish her intellectual worth and individuality," and to create an identity

other than "somebody's wife" (Roach, 1976, cited in Glass & Rose, p. 111). For women already working outside the home, the return to school may be motivated by the desire to change careers, seek better employment, climb the career ladder, or to train for a different job or "upgrade herself at her present place of employment" (Glass & Rose, p. 111). Women whose children are old enough to have moved out--or at least old enough to require significantly less "caretaking"--have more time to spend on themselves and school is often where they want to spend it. Paradoxically, along with having more free time may come the "sense of time running out" (p. 112).

The major transition issues for these women are usually a "renewed search for identity;" "low confidence and self-esteem" and great uncertainty about "their abilities and self-worth" (Greenfeig & Goldberg, 1984, p. 82). Glass and Rose (1987) went so far as to speculate that "perhaps central to all the reasons is the reentry woman's real and pressing need for a feeling of self-worth" (p. 112).

Wheaton and Robinson (1983) described some other transition issues more specifically, citing "role conflict and guilt regarding family demands and role demands" (p. 46), "challenging, disapproving friends who socially isolate her" (p. 46), and "lack of confidence, inability to communicate assertively, lack of decision-making skills, low self-esteem and dependency" (p. 46).

#### Academic Obstacles

Hughes (1983) listed "outside responsibilities, limited time for study, inadequate study skills and educational motives that are almost exclusively oriented toward employment" (p. 55) as some of the obstacles facing single female parents.

Married women have their own set of stressors: They usually continue to take full responsibility for running the household even when carrying a full course load, and many "[experience] the fear of isolation, the guilt of spending time, money and effort in education, the belief that they are not worth the trouble they may cause their family, and spousal disapproval" (p. 55).

A study by Suitor (1987) found that, in fact, the marital happiness of couples in which the wife was enrolled in school full-time did decline, presumably because as wives needed more time for school and had less time for their families and homes, husbands became dissatisfied with their lack of "service" and availability, while wives became more dissatisfied with their husbands' unwillingness to pitch in and help out. In contrast, returning women with part-time student status created less need for change in their families' patterns so that their husbands, not having experienced much disruption of their families' routines, were more focused on the positive contribution of their wives' having returned to school.

Holt (1982) focused on women over 30 as returning women students. She believed that this group is sufficiently different than traditional students to warrant special programs of their own. They tend to be much more serious about their studies than their younger counterparts, often viewing their return to school "as the last chance for personal and professional recognition" (p. 32) and often haunted by the thought of failure "long after . . . the excellence of their performance has been recognized" (p. 33). These women are also engaged in different life tasks than younger students. Instead of the emotional turmoil of learning to live apart from their parents for the first time, engaging in "the social rituals that accompany

mate selection," and learning how to keep house for themselves, returning women students are more likely to be trying to "[balance] family demands with study," caring for elderly parents, and feeling that "this education is a last-chance opportunity" (p. 34).

In Holt's survey of returning women students at the University of Georgia, women reported that their six most common problems were "demands on their time and energy, financial concerns, finding time to study, keeping up with family responsibilities, parking on the campus, and keeping up with their social life" (p. 36).

Glass and Rose (1987) conceptualized the difficulties of reentry women as two kinds of barriers--personal barriers and institutional barriers. Among personal barriers they included juggling the roles of "wife, mother, wage-earner, or any combination of these" (p. 112); and wrestling with lots of insecurities--about rusty study skills, about competing with college "kids," about the number of years they have been out of school, about their ability to keep up with their classes and to participate in class discussions. These women may also battle fear that their physical appearance will make them seem out of place among younger students; guilt over "neglect" of their families; "negative reactions from their families [and] from female friends" and "lack of economic resources" (p. 113). For women of low socioeconomic and/or minority status, there are additional barriers imposed by "family roles and expectations" (p. 113).

Among institutional barriers Glass and Rose listed being viewed as "dilettantes who take a course here and there but have no real commitment"

(Astin, 1976, cited in Glass & Rose, 1987, p. 114); admissions policies which require "old transcripts, S.A.T. scores, and letters of recommendation" (p. 114); financial aid policies which "tend to discriminate against part-time students and married women whose husbands work" (p. 114); and lack of convenient and affordable child care (p. 114).

In addition, because these women are often commuting and/or part-time students and often there is no orientation specifically addressing their needs, they are less likely to find out about available and relevant student services. And even if they have information about these services, they may be reluctant to use them, feeling that as adults they should not be needing support services and assuming those services are meant only for students of traditional age (Badenhoop & Johansen, 1980, cited in Glass & Rose, 1987, p. 114).

Grottkau and Davis (1987) also conceptualized many of these concerns as barriers, although they use the terms "practical barriers" and "psychological barriers" instead of institutional and personal barriers. They added, however, the concept of a sociological barrier: the need for reentry women to give up the "gender-appropriate" (p. 10) roles they may have learned such as being dependent and passive and feeling inferior, and to learn instead to be independent, assertive, and aware of their own self-worth. They quoted Astin and Kent (1983, cited in Grottkau & Davis, 1987, p. 309), who called for higher education "to provide its female students with the competencies necessary for effective performance on the job and with a sense of autonomy and self-worth that will enable them to over

come any handicap stemming from earlier socialization for dependency and conformity."

### Differences among Reentry Women

While most studies draw consistent pictures of reentry women, some do not. A study by Johnson, Wallace, and Sedlacek (1979) found that, contrary to these researchers' expectations, the needs of returning women students did not "differ from those of traditional students" (p. 17). They hypothesized that perhaps reentry women need to be regarded not as a homogeneous group but as subgroups of women whose needs may differ based on demographic variables such as "age, marital status, socio-economic status and work status" (p. 17).

Adelstein, Sedlacek, and Martinez (1983) pointed to eight variables that may create "different [emphasis mine] patterns of characteristics, needs, and interests of returning women students" (p. 35). These variables are: interest in special services, the presence of older children in their households, self-confidence, "the Empty Nest factor," "roommates," young children, satisfaction with the student role, and academic needs (p. 34). Like Johnson et al. (1979), they suggested that while programs providing "cohesive support" are "critical for some returning women," "planning programs to accomplish specific objectives for specific groups" may ultimately "be more beneficial and cost effective than trying to . . . provide a program aimed simply at returning women in general" (p. 36).

Clayton and Smith (1987), in replicating a 1978 study by Maslin, also found diversity in the motives and therefore the needs of reentry women. They aligned

themselves with other researchers who have shown that one particularly strong motive is vocational (i.e., related to job concerns) and that, therefore, "the stereotype of empty-nest older women returning to college primarily for reasons of self-fulfillment would seem to be in question" (p. 102). Many of the women participating in their study were single heads of households, partially accounting for the finding that "for over one-fourth (28.3%) of the women . . . role change was a motivating factor for return to college" (p. 102). They pointed out that "the fact that one half of the reentry women in this study did not have dominant, positive motives for returning to school seems to indicate a need for counseling, both personal, goal-oriented counseling as well as academic counseling" (p. 103).

Kirk and Dorfman (1983) found that factors contributing to satisfaction in the lives of reentry women were "helpfulness of professors' attitudes, helpfulness of counseling, and psychological support from children and friends" (p. 15). Factors contributing to strain in the lives of these women were "dissatisfaction with job, rated helpfulness of financial aid, and number of years since previous school enrollment" (p. 15). The women in this study related that their greatest satisfactions came from learning new things, developing a more positive self-image, and experiencing success and achievement; their greatest strains came from not having enough time, performing multiple roles, and managing finances (p. 21).

Roehl and Okun (1985) surveyed returning women students as to the life events and "non-redundant school events" (p. 24) they had experienced during the previous school year and where they turned for support while going through these events. They found that women experienced most of the events as positive; and

that they sought and received adequate support most often "from family members and friends" (p. 28) rather than from student services, even when the events were school-related.

### Suggested Academic Support Services

Researchers suggest and schools have put into place a variety of support services in a variety of formats for reentry women. Hughes (1983) stressed the importance of "orientation programs designed specifically for the non-traditional student," and quoted Cohen (1980, cited in Hughes, p. 56) as recommending that "Ideally orientation for the adult learner should be a twice-weekly program throughout most, if not all, of the initial semester." Hughes would have liked to see "a special orientation program for returning women students," and would like it to include the students' spouses and/or families (p. 56). Wheaton and Robinson (1983) also called for "[including] husbands in orientation and [discussing] anticipated strains of wives' student role on home life along with suggestions for coping;" "[teaching] couples communication skills" (p. 48); and even "[making] family and couples counseling available for re-entry women" (p. 49). Minicourses and workshops are two other formats Wheaton and Robinson proposed for serving reentry women's needs.

Other formats proposed are tutorial services and courses for remedial education for adult students, peer counseling, and special meeting places for adult students (Lamb-Porterfield, Jones, & McDaniel, 1987); a telephone peer advising network (Griff, 1987); and an academic course proposed by Steltenpohl and

Shipton (1986) focusing on adults' developmental stages and variations in learning styles.

Wilcoxon et al. (1989) described a support group for both male and female adult students which aims to provide "(a) resources and information regarding academic life, policies, and procedures, (b) emotional support from peer adult students, (c) opportunities for social interactions, and (d) traditional group counseling for developmental and remedial needs" (p. 41). Wilcoxon et al. explained that the group "prohibits clean distinctions" as a particular type of group; it "[seems] to combine elements of support groups, topical interest groups, and personal growth groups" (p. 43). In doing so, it fits the "need for flexibility by its members" (p. 44).

In their survey of the professional literature, Glass and Rose (1987) also found a variety of formats in place at a variety of schools. These included "voluntary student organizations, institutionally organized seminars, and orientation seminars available for pass/fail credit" (p. 114); conferences featuring "presentation of positive reentry women role models" and small group discussion (pp. 114-115); noncredit (or for credit, to motivate women whose schedules are too jammed for noncredit school activities) seminars on "study skills renewal, stress management, test taking, career planning and needs assessment, job hunting skills, etc." (p. 115); networking with "peers and university personnel" whom they have met during these seminars; noontime information series "organized around psychological adjustment themes" such as "test anxiety, single parenting, home/campus/job conflicts, and coping with depression" (p. 115); "workshops dealing with new lifestyles for women;" and "an integrated package" including "(a) a workshop series designed to

inform and assist reentry women, (b) an institutional commitment to offer financial aid to qualified women, (c) provision of adequate child care, and (d) development of a support group for returning women" (p. 115).

Other options are evening and weekend orientation, enrollment, and drop/add sessions, as well as evening hours in the bookstore, especially during the first week of classes; and evening hours several times a week for student advising and/or counseling (Glass & Rose, p. 115); a student manual, or at least a section in the manual, geared for adult students; courses "on a once-a-week, late afternoon or evening basis," or even on weekends.

The similarities Glass and Rose found throughout the literature are "the need for peer support and positive role models"; "special orientation sessions"; "more help in identifying student services and feeling comfortable in their new environment" (thus the need for the special orientation); redesigned admissions policies with less adherence to "old S.A.T. scores and transcripts"; offering credit for life experience, perhaps determined by "CLEP (College Level Exam Program) type testing" (p. 117).

Keller and Rogers (1983) drew on their study of traditional and nontraditional women students' "awareness, impressions, and use of a campus women's center" (p. 550) to offer some interesting suggestions for serving the broadest population in the most cost-efficient manner:

1. publications, ideally a newsletter, but if that is too expensive, "occasional articles about women's issues for the student newspaper" and/or "a monthly announcement of available services for women" (p. 554);

2. for nontraditional students, who will not be reached through programs in dorms, "radio spots focusing on women's issues" aired at "peak commuting times and during the lunch hour" (p. 554);
3. presentations by prominent people, perhaps funded by several different campus organizations working together, as well as a drop-in center, ideally with a small library devoted to women's issues;
4. personal and career counseling. (If there is not enough in the school budget to support enough qualified staff, then most of the counseling could be in groups rather than in individual sessions.)

#### Alternative Paths toward College Degrees

It may also be crucial in supporting reentry women to take a new look at their movement toward completion of their degrees. That is, these women may be nontraditional not just in their ages but also in the way they complete their degrees--more often than not taking more than the traditional 4 years and skipping an occasional semester as the other demands of their lives may necessitate. For the purpose of her study of persistence in degree completion among reentry students, Brenden (1985) defined persistence [emphasis mine] as "continuing registration for and completion of courses in the pursuit of a baccalaureate degree. Registration need not have been full-time and temporary leaves of absence were acceptable provided the student later continued work toward a degree. Nonpersistence [emphasis mine] was defined as "withdrawal, formally discontinuing work towards the degree" (p. 23).

Reasons for leaves of absence among students in Brenden's study, in descending order of frequency, were finances, job responsibilities, health/medical issues, family responsibilities, maternity, moving, travel, and attendance at another college (p. 25). Based on her findings, she suggested several recommendations for retaining adult students. They were:

1. Identifying students "who may be prone to leave or withdraw." In her study these were students who were "undecided about majors, below the 50th percentile high school rank, have current cumulative GPA below 2.5, or taking a leave of absence [especially their first]" (p. 25);
2. "development of options students may select as alternatives to a leave of absence (p. 25) or withdrawal (perhaps independent study, correspondence courses, contract learning)" (p. 26);
3. "continuation of ongoing contact and provision of support services to students while they are on leave" (p. 26); and
4. "services that facilitate a student's reentry from leave" (p. 26).

Brenden believed it is imperative that colleges and universities accept "occasional leaves of absence" as part of the process of "lifelong learning," with student services available to ease the process both of taking a leave of absence as well as returning from one. She also felt it is important to foster the "social and academic integration" of all students, but most especially this group of students, by creating more opportunities for informal interaction between students and faculty and between students who are in similar situations; i.e., who have "major commitments to family, employment, and community affairs" (p. 26).

Pirnot (1987), in her study of persistence in nontraditional female students, found that the reentry women in her sample "persisted in college at a phenomenally high rate, compared to their younger colleagues" (p. 23). Because of this finding, she suggested that college and university administrators, as well as government agencies, understand what a good "investment" educating this population is when budgeting for student aid and planning support services and programs for them. The three biggest stressors emerging from her study were "environmental restraint, lack of challenge and understanding, and adherence to socialized roles" (p. 26). Interestingly, she found that both persisting and nonpersisting women reported the same stressors; Pirnot speculated that persisters felt a stronger need for "self-actualization," while nonpersisters felt a stronger need to adhere to "more traditional sex-role expectations."

#### Reentry Women and Self-efficacy Theory

In the literature on reentry women reviewed for this study, interventions based on self-efficacy theory were never suggested. Yet the literature on self efficacy, especially on women's academic and career choices, indicates that such interventions might be especially effective in giving women the confidence to look beyond traditionally female school and career paths (such as nursing, social work, and teaching) and consider the more traditionally male school and career paths (such as architecture, laboratory research, or financial consulting). Empowering women to pursue less traditional paths ultimately gives them many more choices in both the world of school and the world of work. It also gives them the opportunity to do work that may be more satisfying to them and the opportunity to earn

significantly more money than if they stick to the more traditionally female school and career paths.

### Self-efficacy Theory in Brief

According to Wood and Locke (1987), "perceived self-efficacy can be defined as an individual's estimate of his or her capability of performing a specific set of actions required to deal with task situations" (p. 1014).

As explained by Betz (1992), Bandura's original (1977) model of self-efficacy suggests that self-efficacy beliefs are created by the interplay of four sources of information--"performance accomplishments, vicarious (or observational) learning, emotional arousal (where arousal in the form of anxiety gives the individual negative information in terms of her or his performance capabilities), and verbal persuasion (or encouragement)" (p. 22). The self-efficacy beliefs created from this interaction then affect three areas of the individual's behavior--"choice, versus avoidance of the behavioral domain in question, performance in the domain, and persistence in the face of obstacles or disconfirming experiences" (p. 23) (emphasis mine). Wood and Locke (1987, p. 1014), citing Bandura (1986), added three other areas of behavior to the list of those affected by self-efficacy information--effort, thought patterns, and stress reactions.

This article, like many on self-efficacy, focuses on career issues, but as will become apparent, career self-efficacy is so closely linked with academic self-efficacy that it is relevant and necessary to consider it in any discussion of academic self-efficacy. For example, Betz (1992) cited "the avoidance (by women) of traditionally male-dominated career fields, or the avoidance of math coursework"

(p. 23) as **career choice problems**; "the debilitating effects of low self-efficacy and consequent anxiety on both studying for and taking tests (e.g., math tests)" (p. 23) as **performance issues**; and "continuation in an educational program" (p. 23) as a **persistence issue** (emphasis mine).

### Concept of Agency

Betz and Hackett (1987) looked at the related concept of "agency," which they define as "a constellation of behaviors that described the tendency of the individual to behave in ways that **created** rather than simply **responded** to educational and career opportunities" (p. 300) (emphasis mine). In their pilot study of instruments designed to measure the relationships among competence, perceived self-efficacy, and agency, they found that "college students of both sexes were only minimally proactive in situations having potential relevance to educational and career development. . ." (p. 306). They believed that both male and female college students can benefit from a greater capacity for proactive behavior since they are often left "with the responsibility of initiating contacts to provide them with desired mentoring, research experience, advice, and letters of recommendation" (p. 300). Women especially would benefit from counseling interventions designed to enhance the sense of agency, since they have been socialized into "inhibited social and assertive behavior in situations they perceive as traditionally the province of men" (Epstein, 1970, cited in Betz & Hackett, 1987, p. 300).

### Self-efficacy and Women's Academic and Career Choices

Betz and Hackett (1981) investigated "the possible importance of self-efficacy expectations in the explanation of women's continued underrepresentation in many professional and managerial occupations" (p. 399). They found "significantly greater self-efficacy among females in relationship to some traditionally female occupations, such as dental hygienist, social worker, home economist, and secretary, and significantly greater self-efficacy among males with regard to some occupations in which males have predominated, such as accountant, mathematician, engineer, and drafter" (p. 408).

In their review of the literature on self-efficacy and women's career development, Betz and Hackett (1986) found this same pattern recurring and concluded that "career self-efficacy appears to be important in understanding women's career choices when the traditionality of the occupational alternatives is taken into account" (p. 287). They also concluded that self-efficacy expectations about specific skills, tasks, or abilities are strongly influenced by sex-role stereotypes of the task or activity (p. 287).

Matsui, Ikeda, and Ohnishi (1981), studying male and female Japanese students, in their replication of Betz and Hackett's (1981) study, found males reporting high self-efficacy for both male-dominated and female-dominated occupations and females reporting "higher self-efficacy in female-dominated occupations but lower self-efficacy in male-dominated occupations" (p. 1).

As mentioned earlier, career self-efficacy is closely related to academic self-efficacy, because in order to choose a career in which a woman feels she can

succeed, she also has to believe in her ability to succeed at the schooling that such a career requires. Thomas, Iventosch, and Rohwer (1987) defined academic self-efficacy as "the extent to which students believe they can control the outcomes of their learning" (p. 346) or level of achievement. They suggested that it "combines notions of perceived competence or self-worth . . . with those of locus of control and perceived contingency between actions and outcomes . . ." (p. 346). In their study of junior high school, senior high school, and college students, they found that self-efficacy was a more reliable predictor of achievement than academic aptitude.

Similarly, Lent, Brown, and Larkin (1986), studying a group of science and engineering undergraduates, found that "self-efficacy does contribute significantly to the prediction of technical grades, persistence, and range of career options considered" even when used apart from "objective math ability, high school achievement, and vocational interest" (p. 268).

Zimmerman, Bandura, and Martinez-Pons (1992), studying 9th and 10th graders, found that ". . . perceived efficacy to achieve motivates academic attainment both directly and indirectly by influencing personal goal setting. Self-efficacy and goals in combination contribute to subsequent academic attainments" (p. 673). Chartrand, Camp, and McFadden (1992) studied the theoretical constructs of self-efficacy, defined by them as "beliefs about one's ability to organize and execute courses of action needed to successfully perform a given task or behavior" (p. 293); interest congruence, defined by them as "the correspondence between a person's interests and the interests of people in a particular major or career" (p. 293); and

commitment, defined by them as "a perceived obligation to carry out a chosen course of action even in the face of adverse feedback and criticism" (p. 294), as predictors of college students' career indecision and academic adjustment. They found that "both commitment and self-efficacy were salient predictors of academic adjustment, with commitment the more powerful of the two predictors," and interest congruence being "the only significant individual predictor of career indecision" (p. 298).

From their review of the literature, Multon, Brown, and Lent (1991) found a pattern of "positive and statistically significant relationships between self-efficacy beliefs and academic performance and persistence outcomes across a wide variety of subjects, experimental designs, and assessment methods" (p. 30).

#### Self-efficacy Interventions

The many studies of academic and career self-efficacy all have implications for counseling interventions. These interventions all begin with providing the client (or student) with more and/or better information about her area of concern in order to create a higher sense of self-efficacy, which in turn will result in more choices, less performance anxiety, and longer persistence. For instance, low self-efficacy about mathematics, writing, or science may prevent a client from considering careers which demand these skills; low self-efficacy about a job search or combining home and career may lead clients to "procrastinate (avoidance, in Bandura's conceptualization) making any career decision or may delay implementing a decision that has been made" (Betz, 1992, p. 24).

Betz suggested that in applying Bandura's model to clients, counselors must first "ascertain areas in which low perceptions of self-efficacy are serving as a barrier to the client's career options, decisions, or implementation (where implementation could include persistence in an educational program in the face of obstacles or lack of support" (p. 24). The counselor can then design interventions "that can increase expectations of efficacy" (p. 25). For example, the counselor can structure "successful performance accomplishments," e.g., "courses or workshops where a predominance of successes was ensured" on subjects such as mathematic skills or assertiveness (p. 25). In the area of vicarious or observational learning, the counselor should seek to find role models of the client's gender and race (because the more the role model resembles the client, the more effective the vicarious experience will be), either in person or through films, videos, and books. To counter debilitating anxiety, the counselor can teach techniques of anxiety management such as relaxation training, more adaptive self-talk, and thought stopping. Throughout the entire process, the counselor can provide encouragement and support.

Brown, Lent, and Larkin (1989), in their study of science and engineering majors, found that high self-efficacy beliefs enhanced the grades and persistence of lower aptitude students but had relatively little effect on the grades and persistence of higher aptitude students. They warned, however, that while self-efficacy interventions may boost performance in student with adequate skills, it "would not likely counteract a lack of requisite skills" (p. 73). They concluded that interventions to increase self-efficacy beliefs would be useful in "academic and career

counseling for students with **requisite** scholastic aptitudes (p. 73) (emphasis mine); i.e., aptitudes in the "adequate" range, rather than at the high or low end. They suggested that one element of appropriate treatment would be to provide students with or remind them of "personal mastery experiences in ways that encourage students to attribute performance successes to their own capabilities" (p. 73). (It is worthwhile to note that while most discussions of interventions speak of providing mastery experiences, this one suggests that reminders of relevant mastery experiences in the client's past may also be effective in boosting self-efficacy).

Lent et al. (1986) believed that assessing self-efficacy beliefs may have relevance for career and academic counseling because it does appear to be related to "range of perceived career options" as well as issues of academic achievement and persistence such as "poor grades, inefficient study habits, or multiple major changes" (p. 268). They also felt that developing interventions which help clients modify self-efficacy beliefs may help them remove a significant obstacle between themselves and their educational and vocational goals (p. 269).

Chartrand et al. (1992) encouraged academic counselors "to assess students' perceived ability to successfully complete the requirements within a major and their personal identification with the student role" (p. 299). To boost those with low self-efficacy beliefs in certain majors, they suggested "interventions that promote skill development and success experiences" in tasks relevant to their majors. To enhance grades and persistence in college, especially among reentry students who have so many competing demands on their time and energy, they suggested that it "is important to develop strategies that promote identification

with the student role and one's major" (p. 299). They cited social psychological literature that emphasizes "the importance of having students specify their attitudes toward being a student, engage in behavioral activities that identify them as a student (sic), and associate with others who acknowledge this role" (pp. 299-300).

Zimmerman (1989) discussed the potential of teaching students to use "self-regulated learning strategies"--strategies which "[enable] them to increase their personal control over their own behavior and immediate environment"--which go hand in hand with "enhancing perceptions of self-efficacy" (p. 336). Examples of self-regulated learning strategies include self-evaluating ("I check over my work to make sure I did it right"); goal-setting and planning ("First, I start studying two weeks before exams, and I pace myself"); and seeking social assistance ("If I have problems with math assignments, I ask a friend to help") (p. 336).

Betz and Hackett (1987) suggested that their study of the concept of "agency" offers a basis for interventions such as "discussion and role-playing practice of means of proactively influencing one's educational environment and of how to assertively respond to problem situations along the way" (p. 307). Essentially, they added an important dimension to the study and development of self-efficacy by considering the importance not just of responding to opportunity but also of creating opportunity in the classroom or in the workplace.

Betz and Hackett (1981) suggested that "interventions designed to increase women's career-related self-efficacy expectations could enhance the degree to which women effectively utilize their abilities and develop their talents and

interests" (p. 409), especially in encouraging women to consider and pursue nontraditional majors and occupations and to move away from their "continued under-representation . . . in nontraditional occupations and their continued over-representation in traditionally female fields" (p. 409). This effect alone would open up many more job/career possibilities for women as well as possibilities for earning significantly more money than they can earn in more traditional female occupations.

#### Summary

This chapter has presented a review of the literature on the experience of reentry female students, including the many transitions they are undergoing, academic obstacles they face, differences among them, academic support services both existing and proposed, and alternative paths toward college degrees. This chapter has also presented a review of the literature on self-efficacy theory, including the concept of "agency," its relationship to women's academic and career choices, and possible counseling interventions. An overview of the literature suggests that self-efficacy interventions have been overlooked as potentially powerful counseling tools in facilitating reentry women's persistence in completing their degrees as well as in widening the academic and career choices they perceive as open to them.

The following chapter addresses the methodology utilized in the present study, including the proposed sample, the instruments, the procedure, and the data analysis.

## CHAPTER 3

### METHODOLOGY

The purpose of this study was to determine the relationships between various life circumstances and the academic self-efficacy of reentry women students. The previous chapter reviewed the literature pertinent to this study in the areas of reentry adult students, especially women; self-efficacy theory; and its application in academic and career counseling interventions. This chapter presents a description of the proposed sample, the data gathering instrument, and the procedures to be used in this study and in the data analysis.

#### Proposed Sample

This study used a convenient sample of women 25 years of age or older beginning classes at the Pima Community College, East Campus, in Tucson, Arizona, after an absence from any level of school of 3 years or more.

Human Subjects Committee approval for the study was solicited and obtained (Appendix A).

Verbal permission was also obtained from the Dean of Instruction and the Director of Advising at Pima Community College, East Campus, Tucson, Arizona, to distribute the questionnaire packets at the school's orientation and registration sessions.

### Instruments

To gather information about the academic self-efficacy beliefs of the sample population and the relationships of these beliefs to their various life circumstances, two questionnaires were developed by the researcher, one to measure academic self-efficacy (Appendix B) and one to gather demographic data as well as data related to the respondents' life circumstances (Appendix B). The questionnaire to measure academic self-efficacy consisted of 27 items, each of which stated a belief in the respondent's ability to perform individual school-related tasks. The tasks were drawn from the concerns of reentry women students as described in the literature reviewed in Chapters 1 and 2. Responses were on a Likert-type scale ranging from "very sure" to "very unsure." The questions on the demographic and life circumstances questionnaire were derived from studies of similar populations (Seger, 1989; Layne, 1991), and items were used that, it was hypothesized, would affect the respondents' academic self-efficacy beliefs.

The questionnaires were not field tested. Content and face validity were established through the literature review and review by a group of peers as well as by the thesis committee and professionals working with the sample population, some of whom had themselves been returning women students. Observations were solicited regarding readability, clarity, completeness, and time required to finish; changes were made as appropriate. Reliability was based on the participants' awareness that their responses were totally voluntary and confidential as well as their understanding of the purpose of this study as described in the cover page of the questionnaire packet (Appendix C).

The questionnaires were combined in one packet, with the self-efficacy questionnaire placed before the demographic and life circumstances questionnaire to ensure that responses about self-efficacy would not be influenced by respondents' first focusing on life circumstances, be they positive or negative.

The cover page of the packet briefly introduced the nature and purpose of the study and included assurances of anonymity and confidentiality as well as a referral phone number to use in the event that the questions raised any troublesome issues for the respondents. The packet also included a stamped, self-addressed envelope with which to return the questionnaire to the researcher.

### Procedures

Returning women students were contacted at Pima Community College East Campus during orientation and registration sessions taking place from the middle to the end of the Fall semester, 1993, for students planning to start back to school in the Spring semester, 1994. At the beginning of each orientation session, the researcher briefly introduced the study and distributed packets to those women indicating that they fit the criteria for the study and were willing to at least review the materials before deciding whether to participate or not. The packets included stamped, self-addressed envelopes to enable potential respondents to think about and fill out the questionnaires at a time and place more convenient and private than the orientation sessions themselves.

### Data Analysis

Data were tabulated and used to report demographic information about the reentry women students in the sample. Standard descriptive statistics, including mean, standard deviation, range, and percentage, were used for data analysis.

### Summary

This chapter has presented a discussion of the methodology used in this study, including the selection of subjects, instruments, and procedures for data collection and data analysis.

The following chapter presents the results of this study. To answer the research questions, academic self-efficacy scores were calculated for each respondent, and reported life circumstances were examined for any statistically significant relationships to level of self-efficacy.

## CHAPTER 4

### RESULTS

The purpose of this study was to explore the relationships between academic self-efficacy beliefs and life circumstances of reentry female community college students. It sought to discover whether there was the overall low level of self-efficacy reported in the literature about this population. It also sought to pinpoint in which specific areas these women have the lowest academic self-efficacy and in which specific areas they have the highest academic self-efficacy. Finally, it sought to find a relationship between specific life circumstances and level of perceived academic self-efficacy. That is, would more difficult life circumstances (e.g., divorce, job loss, low income, one or more preschool-aged children) be correlated with lower self-efficacy and would more positive life circumstances (e.g., long-term marriage, job security, average or better income, children not living at home or at least old enough to be able to take care of most of their own needs) be correlated with higher self-efficacy?

Since there is nearly unanimous agreement throughout the professional literature that returning female students are plagued with fears and insecurities upon their return to school, this study was designed to determine which areas of academic life they were most worried about as well as the role their life circumstances played in these fears and insecurities. More information about these

insecurities and the circumstances intensifying them could then be used in targeting specific groups of returning women students for specific advising and counseling interventions.

This chapter analyzes data obtained from a questionnaire completed by 45 women, 25 or over, registering during Fall semester, 1993, to reenter school at Pima Community College, East Campus, Tucson, Arizona during the Spring semester, 1994, after an absence from school at any level for 3 or more years. These women completed a questionnaire designed to gather demographic information as well as information about their life circumstances and a questionnaire designed to measure academic self-efficacy.

#### Demographic Data and Life Circumstances

Participants in the study answered a 28-item questionnaire that elicited demographic information as well as information about life circumstances in the categories of age, ethnicity, and living arrangements; family income and employment; perceived emotional support; educational background; and reasons for returning to school.

#### Age, Ethnicity, and Marital Status

Of the 45 women responding to the questionnaire, the youngest was 25, the oldest was 72, with a median age of 38 and a mean of 39. Seventy-four and four tenths percent identified themselves as Caucasian, 16.3% as Hispanic, 7.0% as African American, and 2.3% as Native American. Forty-five and five tenths percent of the women reported themselves as divorced, 34.1% as married, and

11.4% as single. Much smaller percentages reported themselves as widowed (6.8%) or remarried (2.3%) (Table 1).

In regard to people the respondents lived with, 43.2% reported living with their children, 25.0% reported living with a "significant other" (which included husband), 11.4% reported living with their parents, another 11.4% reported living alone, and 9.1 checked off "other" (Table 1).

The most children reported by the respondents was 8, the minimum was zero, and the mean was 2.5. Of these children, the most reported living at home was four, the least was zero, and the mean was 1.535. Regarding childcare arrangements, it was decided to group the responses according to how many women had children looking after themselves and how many had children requiring others to look after them, on the assumption that having children who were old enough to look after themselves made the return to school easier than having children who required that babysitting be arranged and possibly paid for. The vast majority of women (93.8%) had other adults taking care of their children while they (the mothers) were in school, while only 6.3% reported that their children were taking care of themselves during those times (Table 2).

#### Family Income and Employment

A full 50% of the women reported that they alone provided their own financial support, while 27.3% reported financial support from a "significant other." 13.6 received financial support from the government, 2.3% received support from parents, and 6.8% reported other sources of support (Table 3).

Table 1. Demographic information of 45 reentry women participating in study

Demographic Data	<u>n</u>	%
<u>Age Groups</u>		
25 to 30	9	20.5
31 to 35	10	22.6
36 to 40	8	18.2
41 to 45	10	22.6
46 and above	7	16.1
(n = 44; 1 case missing)		
<u>Ethnicity</u>		
Caucasian	32	74.4
Hispanic	7	16.3
African-American	3	7.0
Native-American	1	2.3
(n = 43; 2 cases missing)		
<u>Marital Status</u>		
Divorced	20	45.4
Married	15	34.1
Single	5	11.4
Widowed	3	6.8
Remarried	1	2.3
(n = 44; 1 case missing)		
<u>Persons with Whom They Are Living</u>		
Their kids	19	43.1
Significant other (including husband)	11	25.0
Parents	5	11.4
Other	4	9.1
(n = 44; 1 case missing)		

Table 2. Children and childcare arrangements of 45 reentry women participating in study

Number of Children and Childcare Arrangements	<i>n</i>	%
<u>Number of Children</u>		
No children	5	11.3
1 child	8	18.2
2 children	11	25.0
3 children	11	25.0
4 children	4	9.1
5 children & over	5	11.4
(n = 44; 1 case missing)		
<u>Number of Children at Home</u>		
None	15	34.9
1	7	16.3
2	8	18.6
3	9	20.9
4	4	9.3
(n = 43; 2 cases missing)		
<u>Use of Childcare</u>		
Children in childcare	30	93.8
Children taking care of themselves	2	6.2
(n = 32; 13 cases missing)		

Table 3. Family income of 45 reentry women participating in study

Income	n	%
<u>Total Family Income</u>		
Under \$20,000	33	76.7
\$20,001 and over	10	23.3
(n = 43; 2 cases missing)		
<u>Sources of Financial Support</u>		
Myself	22	50.0
Significant other (including husband)	12	23.3
Government	6	13.6
Parents	1	2.3
Other	3	6.8
(n = 44, 1 case missing)		
<u>Participants' Contribution to Family Income</u>		
Under \$20,000	38	95.0
\$20,001 and over	2	4.4
(n = 40; 5 cases missing)		

Although the questions on total family income and respondents' contribution to total family income offered several income brackets as possible answers, in reviewing the data it became apparent that the most meaningful way of working with these figures would be to divide incomes into two groups--those families earning less than \$20,000 a year and those earning more than \$20,000 a year. Within these groupings, 33 respondents (76.7%) indicated a total family income of \$20,000 and under, while only 10 respondents (23.3%) indicated total family incomes of over \$20,000. As might be expected, there was an even greater disparity in the amount each respondent contributed to total family income, with 38 (84.4%) reporting contributing under \$20,000 and 2 (4.4%) reporting contributing over \$20,000 (Table 3).

Fifty-nine and one tenths percent of these women reported they were employed, while 40.9% reported being unemployed. Of the employed women, one half reported working full-time and half part-time. Of the 18 women who indicated they were not currently employed, 5 indicated they were looking for work, while 13 indicated they were not. Most of the women surveyed did not do volunteer work, with only 26.8% reporting that they did so (Table 4).

#### Perceived Emotional Support

In looking at the degrees to which these women felt emotionally supported or unsupported in their return to school, it was decided to look only at the number of sources of support or nonsupport rather than at the specific sources of support, since an analysis of the specific sources of support is beyond the scope of this study. Analyzing the responses in that way, it was clear that most of these women

Table 4. Employment status of 45 reentry women participating in study

Employment Status	<u>n</u>	%
<u>Employment Status</u>		
Employed	26	59.1
Unemployed	18	40.9
(n = 44; 1 case missing)		
<u>Of Those Working</u>		
Full-time	13	50.0
Part-time	13	50.0
<u>Of Those Not Working</u>		
Looking for work	5	27.8
Not looking for work	13	72.2
<u>Volunteer Work</u>		
Doing volunteer work	11	26.8
Not doing volunteer work	30	73.2
(n = 41; 4 cases missing)		

felt supported in their return to school. Respondents claimed anywhere from 2 to 10 sources of support, with almost 85% reporting 3 to 8 sources of support. In contrast, slightly more than 60% of the women reported that no one was unsupportive of their return to school and almost 28% reported only one source of nonsupport. Of 11 possible choices, the most sources of nonsupport reported by any respondent was 4 (Table 5).

### Educational Background

The women who participated in this study had been out of school anywhere from 3 to 53 years, with a mean of 15.073 years and a mode of 10 years. Level of schooling last enrolled in ranged from GED (3 respondents, 6.7%) to 4-year college (4 respondents, 8.9%), with most respondents (22 respondents, 48.9%) having been last enrolled in high school. It is interesting to note that a full 79.5% (35 respondents) ranked themselves as "honors level," "excellent," or "good" students, while 18.2% (8 respondents) ranked themselves as "average," and only one (2.3%) ranked herself as a "poor" student (Table 6).

The question on probable majors was discarded because from the number of answers in the "other" category (primarily business and education), it became clear that the choices supplied were not accurate representations of the actual choices these women felt themselves to be making.

### Reasons for Returning to School

Respondents were asked to indicate on a checklist of possible reasons for returning to school all the reasons that applied to them. Wanting a degree and wanting self-enrichment were indicated by 63.6 and 61.4%, respectively, while one

Table 5. Perceived emotional support of 45 reentry women participating in study

Perceived Emotional Support	n	%
<u>Perceived Number of Sources of Emotional Support</u>		
2 to 4 sources	22	50.0
5 to 7 sources	18	40.9
8 to 10 sources	4	9.1
<u>Perceived Number of Sources of Emotional "Nonsupport"</u>		
None	26	60.5
1	12	27.9
2	3	7.0
3	1	2.3
4	1	2.3
(n = 43; 2 cases missing)		

study Table 6. Educational background of 45 reentry women participating in

Educational Background	n	%
<u>Years Out of School</u>		
1-5	7	17.1
6-10	9	22.0
11-15	9	22.0
17-20	5	12.2
21-25	8	19.5
Over 25	5	7.2
(n = 43; 2 cases missing)		
<u>Highest Level of School Attended</u>		
GED	3	7.2
High school	22	52.3
2-year college	7	16.7
4-year college	4	9.5
Other	6	14.3
(n = 42; 3 cases missing)		
<u>How Participants Rank Themselves as Students</u>		
Honors Level	10	22.6
Excellent	9	20.5
Good	16	36.4
Average	8	18.2
Poor	1	2.3
(n = 44; 1 case missing)		

half of the respondents indicated they wanted a career change. Equal numbers of respondents (16 in each category, or 36.4%) indicated wanting a job or wanting to transfer to a 4-year college. Smaller numbers of women indicated that they returned to school because of dissatisfaction with their jobs (22.7%), having children in school (13.6%) or grown (9.1%), or having their marriage end (13.6%). Further education as required by their jobs was reported by only 9.1% of the women, and having lost a job, wanting a promotion, or having a spouse die were each cited by 4.5% of the women (Table 7).

Respondents were also asked to answer the question: "What is success in college for you?" by checking off as many definitions in a list as they felt applied to them. A total of 77.7% indicated success in college for them meant completing a degree; 68.2% indicated learning new skills, and 61.4% indicated making A's and B's. Simply passing classes was enough success for only 47.7%, and staying in school was enough for only 45.5%. Oddly enough, graduating with honors was indicated by only 31.8% of the women even though a large percentage indicated making A's and B's and even though in an earlier question almost 80% had indicated they were good, excellent, or honors level students. This anomaly suggests that perhaps the phrase "graduating with honors" was somehow unclear to the respondents and should be rephrased or more completely explained in any future related studies (Table 8).

Table 7. Reasons for returning to school of 45 reentry women participating in study

Reason for Returning to School	Rank	<u>n</u>	%
<u>Rank Order of Most Cited Reasons</u>			
I want a degree	1	28	63.6
I want self-enrichment	2	27	61.4
I want a career change	3	22	50.0
I want a job	4	16	36.4
I want to transfer to a 4-year college	4	16	36.5
I am dissatisfied with my job	6	10	22.7
<u>Rank Order of Least Cited Reasons</u>			
I lost my job	10	2	4.5
I want a promotion	10	2	4.5
I want to postpone employment	10	2	4.5
My children are grown	9	4	9.1
My job requires further education	9	4	9.1

Table 8. Rank order of meanings of "success in school" of 45 reentry women participating in study

Item	Rank	n	%
Graduating with honors	1	32	72.7
Completing a degree	1	32	72.7
Learning new skills	3	30	68.2
Making A's and B's	4	27	61.4
Passing my classes	5	21	47.7
Staying in school	6	20	45.5
Other	7	11	25.0

#### Academic Self-efficacy of Reentry Women

The possible responses on the self-efficacy questionnaire and the numeric value assigned to each were Very Sure = 1; Somewhat Sure = 2; Sure = 3; Somewhat Unsure = 4; and Very Unsure = 5. This meant that the higher a respondent's perceived self-efficacy, the lower her numerical score would be, and the lower her perceived self-efficacy, the higher her numerical score would be. With 27 questions, the very highest self-efficacy score possible was 27 and the very lowest self-efficacy score possible was 135.

Actual scores recorded ranged from the highest self-efficacy rating of 45 to the lowest self-efficacy rating of 135. Mean, mode, and median scores were

all in the 90's--96.295, 94.0, and 98.0, respectively. In reviewing the overall pattern of scores, we find that out of 27 items, over one half the women responded in the "sure" range on only 5 items; they were evenly split between "sure" and "unsure" on 4 items, and over one half were in the "unsure" range on the remaining 18 items (Table 9).

Given these scores, it is clear that, consistent with the existing literature, this group of returning women students does indeed have serious doubts about their abilities to perform successfully many of the tasks involved in furthering their educations.

#### Areas of High Academic Self-efficacy Beliefs

The group of reentry women sampled reported being sure of their ability to perform competently in science classes, with 72.7% marking answers in the "sure" range ("sure," "somewhat sure," and "very sure") and only 27.3% marking answers in the "unsure" range ("somewhat unsure" and "very unsure"). They also reported being sure of their ability to balance family, work, and school responsibilities (68.2% in the "sure" range, 31.9% in the "unsure" range) and to perform competently in mathematics classes (63.6 in the "sure" range and 36.4 in the "unsure" range), as well as arrange any childcare necessary to enable them to attend school (61.4% in the "sure" range and 38.7% in the "unsure" range).

There was also more certainty than uncertainty about their ability to take time away from their families when necessary to fulfill school responsibilities, with 59.1% marking in the "sure" range and 40.9% marking in the "unsure" range (Table 10).

Table 9. Perceived academic self-efficacy of 45 reentry women participating in study (where the highest numerical score represents the lowest self-efficacy)

<u>n</u>	Maximum Score	Minimum Score	Mean	<u>SD</u>	Range
45	135	45	96.295	20.611	90

Table 10. Rank order of highest perceived academic self-efficacy of 45 reentry women participating in study.--Numbers and percentages of those indicating sure, somewhat sure, and very sure of their abilities

Item	Rank	<u>n</u>	%
<u>Ability to:</u>			
Perform competently in science classes	1	32	72.7
Balance family, work, and school responsibilities	2	30	68.2
Perform competently in math classes	3	28	63.6
Arrange for necessary childcare	4	27	61.4
Take time away from family for schoolwork	5	26	59.1

Areas of Mixed Academic Self-efficacy Beliefs

On several items the respondents were more evenly split. A total of 54.5% of the women indicated they were "sure" to "very sure" that they would be able to socialize comfortably with students younger than themselves, while the remaining 45.5% were in the "unsure" range. The women were exactly evenly split--with 50% marking in the "sure" range and 50% marking in the "unsure" range--on being able to handle their increased responsibilities, to perform competently on essay exams, to adjust to the college environment, and to budget for their school costs. Slightly more uncertainty was expressed on their beliefs about their ability to perform competently on essay assignments and ability to find information they needed in the college library, with 45.5% in the "sure" range and 54.5% in the "unsure" range on both these items. Less certainty was also expressed in their abilities to meet their academic goals and to remember the course material they studied, with 43.2% marking in the "sure" range and 56.8% marking in the "unsure" range on each of these items (Table 11).

Table 11. Areas of mixed perceived academic self-efficacy beliefs of 45 reentry women participating in study (where equal numbers of participants marked in the sure and unsure ranges)

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---

Ability to perform competently on essay exams  
 Ability to handle increased responsibilities  
 Ability to budget for school costs  
 Ability to adjust to the college environment

---

### Areas of Low Academic Self-efficacy Beliefs

The respondents indicated more uncertainty than certainty regarding their abilities to concentrate on and understand course materials, to locate and apply for financial aid, and to talk comfortably with their instructors, with 59% marking in the "unsure" range and only 40.9% marking in the "sure" range for each item. Greater uncertainty was also expressed regarding ability to participate in class discussions (38.6% in the "sure" range, 61.4% in the "unsure" range), to select the classes they need (34.1% in the "sure" range, 65.9% in the "unsure" range), and to seek help when necessary from their instructors (31.8% in the "sure" range, 68.2% in the "unsure" range).

Even more uncertainty was expressed regarding taking useful notes during class (31.8% in the "sure" range, 68.2% in the "unsure" range), performing as well in school as students younger than themselves (29.5% in the "sure" range, 70.5% in the "unsure" range), and performing competently on multiple choice and short answer tests (27.3% in the "sure" range, 72.7% in the "unsure" range). The greatest uncertainty appeared in beliefs in their abilities both to understand and carry out registration procedures and to locate and make use of academic advising or counseling when necessary (25% in the "sure" range, 75% in the "unsure" range) and to attend class regularly and on time (6.8% in the "sure" range and 93.2% in the "unsure" range) (Table 12).

Table 12. Rank order of lowest perceived academic self-efficacy of 45 reentry women participating in study.—Numbers and percentages of those including "somewhat unsure" and "very unsure" of their abilities

Item	Rank	n	%
<u>Ability to:</u>			
Attend class regularly and on time	1	41	93.2
Understand and carry out registration procedures	2	33	75.0
Locate & use advising & counseling services	2	33	75.0
Perform competently on multiple choice & short answer tests	4	32	72.7
Perform as well in school as students younger than myself	5	31	70.5

#### Further Analysis

This study also sought to discover whether there were statistically significant relationships between certain specific life circumstances and level of perceived academic self-efficacy. Of the 22 items on the life circumstances questionnaire, only 3 yielded such a relationship. Two of the reasons for returning to school --having a marriage end (Table 13) and wanting to postpone employment (Table 14)--and total family income of \$20,000 (Table 15) and under were all associated with lower self-efficacy.

Table 13. Comparison of self-efficacy mean scores between groups of subjects who indicated they were or were not returning to school because their marriage ended

Group	<u>n</u>	Mean	<u>SD</u>	<u>t</u>	<u>p</u>
1	38	104.53	18.21	3.32	.016*
2	6	73.17	22.00		

Table 14. Comparison of self-efficacy mean scores between groups of subjects who indicated they were or were not returning to school to postpone employment

Group	<u>n</u>	Mean	<u>SD</u>	<u>t</u>	<u>p</u>
1	42	101.93	20.04	2.52	.016*
2	10	65.00	26.87		

Table 15. Comparison of self-efficacy mean scores between groups of subjects who indicated total income of \$0-20,000 and of \$20,001 and over

Group	<u>n</u>	Mean	<u>SD</u>	<u>t</u>	<u>p</u>
1	33	96.58	22.83	-2.70	.011*
2	10	111.50	12.13		

\*  $p < .05$

### Summary

This chapter has presented the results of this study on reentry women students' academic self-efficacy beliefs in relation to their life circumstances. Demographic data on the 45 women in the sample population, taken from their responses to a questionnaire designed specifically for this study, were presented. Also presented were their beliefs about their abilities to perform 27 tasks commonly faced by women as they seek to succeed in school after an absence of several years, taken from their responses to a questionnaire on academic self-efficacy beliefs designed specifically for this study. The relationships between these women's life circumstances and their level of academic self-efficacy were discussed.

The final chapter includes a summary, conclusions, and recommendations for college programs and services as well as recommendations for future research.

## CHAPTER 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

The purpose of this study was to explore the relationship between perceived academic self-efficacy and life circumstances of reentry female community college students.

The subjects for the study were 45 reentry women registering during the Fall semester, 1993 to begin classes during the Spring semester, 1994 at Pima Community College, East Campus, Tucson, Arizona. Their participation was solicited at each orientation/registration session by a presentation by the researcher, who then distributed the questionnaire packets to willing participants. Each packet included a stamped, self-addressed envelope so that participants could complete the questionnaires and return them at their convenience.

Data gathering was accomplished through two questionnaires designed by the researcher specifically for this project, one on self-efficacy beliefs and one on demographics and life circumstances.

The questionnaires revealed that the typical respondent was 38 years old, Caucasian, married, with 2.5 children. Total annual family income was \$20,000 or below, with over one half of the respondents indicating they worked either full- or part-time.

The mean number of years out of school was 15.073, and last school enrollment for almost one half of the respondents was high school. A full 79.5%

ranked themselves as "honors level," "excellent," or "good" students. The most common measure of success in school for these women was completing a degree (indicated by 72.7% of the women), and the most common reason reported for returning to school was to earn a degree (indicated by 63.6%). Wanting self-enrichment was almost as strong a reason, indicated by 61.4% of the respondents (Table 16).

Overall, perceived academic self-efficacy beliefs were low. Assigning the response indicating lowest self-efficacy the most points, self-efficacy scores ranged from a maximum of 135 to a minimum of 46, with a mean of 100.25.

Specific findings showed areas of highest academic self-efficacy beliefs to be about (in descending order) performing competently in science classes; ability to balance family, work, and school responsibilities; performing competently in math classes; arranging appropriate childcare; and taking time from family responsibilities when necessary to fulfill school responsibilities.

Areas of mixed academic self-efficacy beliefs were about socializing comfortably with students younger than themselves, handling increased responsibilities, performing competently on essay exams, adjusting to the college environment, and budgeting for school costs. Mixed self-efficacy beliefs also included performing competently on essay assignments, finding information in the college library, meeting academic goals, and remembering course material.

The areas of lowest academic self-efficacy beliefs were about concentrating on and understanding course materials, locating and applying for financial aid, talking comfortably with instructors, participating in class discussions, selecting

Table 16. Profile of the typical respondent of 45 reentry women participating in study

Characteristic	Typical Respondent
Age	38
Ethnicity	Caucasian
Marital status	Married
Number of children	2.5
Annual family income	\$20,000 & under
Number of years out of school	15
Last school enrollment	High School
Employment status	Employed (full- or part-time)
Most common reason for returning to school	To complete a degree
Mean Self-efficacy Score (Where range was 135 to 46 and higher numerical score meant lower self-efficacy.)	100.25

the classes they needed, and seeking help from instructors. Also showing up in this category were low self-efficacy beliefs about understanding and carrying out registration procedures, locating and making use of academic advising or counseling, and attending class regularly and on time.

In reviewing the overall pattern of self-efficacy beliefs that emerge here, we find that out of 27 items, over one half of the subjects responded in the "sure" range on only 5 items; they were evenly split between "sure" and "unsure" on 4 items, and over one half were in the "unsure" range on the remaining 18 items.

### Conclusions

In answering the questions posed in Chapter 1, the results of this study revealed that this sample group did in fact have the low level of perceived academic self-efficacy reported in the literature; that areas of highest self-efficacy tended to cluster in the category of juggling school, family, and work responsibilities, while areas of lowest self-efficacy tended to cluster in the category of functioning within the college bureaucracy.

Statistically significant relationships were found between level of perceived self-efficacy and specific life circumstances for three circumstances. Having a marriage end, wanting to postpone employment, and having a total annual family income of \$20,000 and under were each correlated with low self-efficacy. These relationships perhaps can be explained by our society's attitudes toward each one. Having a marriage end or having a relatively low total family income are each associated with some sense of failure and/or inadequacy in our society which could

easily grow into more generalized feelings about one's inadequacy, including the anticipation of being inadequate in returning to school.

If future studies continue to demonstrate low correlation between life circumstances and academic self-efficacy, then academic counselors and advisors will know that their efforts to support students and enhance their educations should be slanted toward academic support (e.g., workshops or classes on study skills, research skills, math anxiety) more than personal support (e.g., counseling on personal issues such as depression, poor interpersonal relationships, anxiety), although clearly students of all ages will continue to need access to both. If, however, future studies find more correlation between life circumstances and perceived academic self-efficacy, then the direction of interventions should be adjusted accordingly.

The findings in this study are consistent with Gorrell's (1990) discussion of what he viewed as the advantages of self-efficacy research over self-concept research. He argued that self-concept research, especially in education, is based on the flawed "global concept of self-concept," assuming "that there is a total self-concept that varies with specific experiences" (p. 73) rather than taking into account the more recent acknowledgement that "there is no unitary self-concept, but rather a collection of concepts ranging from relatively enduring and influential concepts to relatively trivial and evanescent" (p. 73).

Gorrell contrasted the global quality of self-concept research with the specificity of self-efficacy research: "Since self-efficacy theory is concerned with perceived efficacy related to specific performances in specific situations, instruments typically are developed for the tasks in question" (p. 79), yielding

"measurement of changes in self-efficacy beliefs" with high construct validity and face validity (p. 79). While he thought that this approach might have its own limitations--i.e., "that little or nothing can be concluded about overall self-efficacy (if such a construct does in fact exist)" (p. 79)--he clearly believed that this limitation is far less significant than the limitations of the self-concept research of the last few decades, that the methods of self-efficacy research have much to offer self-concept research and that, most important, they have much to offer in increased knowledge about behavioral change.

Looked at in the context of Gorrell's critique, we see that the findings of the current study are consistent with the nature of the construct of self-efficacy, which is task specific, as opposed to constructs such as self-concept or self-confidence, which are more general. That is, since self-efficacy is task specific, one may, for instance, feel confident about doing well on an exam even if she is not doing so well in other areas of her life, or she may be dubious about doing well on an essay even if she is doing well in other areas of her life.

### Recommendations

The findings of this study, together with the review of related literature and a look at programs already in place at all campuses of Pima Community College, Tucson, Arizona have implications both for creating new interventions and refining interventions already in place to enhance reentry women's college experience. The study also has implications for further research in this area.

### Recommendations for College Programs and Services

This study is consistent with the literature to date which shows that returning women students do have many doubts and insecurities about most tasks related to their return to school--examined in this study through the construct of perceived academic self-efficacy--and that the level of self-efficacy is relatively unrelated to their life circumstances. Their low self-efficacy does not cluster in any particular categories of tasks related to the return to school, but can be found in all categories, from handling increased responsibilities and adjusting to the college environment to making their way through the college bureaucracy and having necessary academic skills.

If we examine the four sources of self-efficacy information accepted throughout the literature, we can formulate suggestions for interventions that will raise perceived self-efficacy and therefore will increase reentry women's students' willingness to take on academic tasks, as well as raise their level of commitment to and persistence in those tasks. The four sources of self-efficacy information are: "performance accomplishments, vicarious (or observational) learning, emotional arousal (where arousal in the form of anxiety gives the individual negative information in terms of her or his performance capabilities), and verbal persuasion (or encouragement)" (Betz, 1992, p. 22).

#### **Enhancing Performance Accomplishments**

To create more possibilities for performance accomplishments, all instructors could be informed about the positive impact of small, successful steps in the learning process and be encouraged to design their course assignments accordingly.

For instance, a course requiring a midterm examination, final examination, and term paper might be reorganized to include frequent quizzes as steps to mastering the two big examinations and drafts or parts of the term paper might be due throughout the semester, culminating in the finished paper.

It should be noted that all Pima Community College campuses already have in place many programs and services which, although probably not designed according to self-efficacy theory, nevertheless are consistent with it. For instance, all campuses require assessment tests in reading, writing, and mathematics to determine whether incoming students are functioning at college level or need to be placed in courses designed to bring them up to college level in these areas. Although it is a rare student who does not interpret a low score as a negative judgment upon herself, it is safe to assume that in the long run being placed in the courses appropriate to her current basic learning skills and experiencing success and growth in those courses will build self-efficacy, whereas plunging into courses she does not have the requisite skills for will erode self-efficacy. Another resource at the College for providing opportunities for performance accomplishments and mastery experiences are the Human Development courses offered by the Counseling Department, such as the comprehensive three-credit course entitled "Becoming a Master Student," as well as one- and two-credit courses that focus on specific skills such as how to study, note taking, and testing. The low self-efficacy reported in this study suggests that counselors and advisors should strongly encourage reentry women to take as many of these courses as early as possible, since these courses will give them the skills necessary to go on and experience performance accomplishments in the rest of their college program,

thereby building their academic self-efficacy and increasing their persistence toward earning their degrees.

### **Vicarious (or Observational) Learning**

The element of vicarious or observational learning--observing someone carrying out the requisite tasks--is postulated by self-efficacy theory to boost perceived self-efficacy. This is especially the case when those being observed have traits, such as ethnicity, gender, age, and/or educational level, in common with the target individual or group. What this suggests for enhancing the self-efficacy of returning women students is that bringing them into contact with women like themselves who are doing well in school or who have done well and graduated to other successes should boost their self-efficacy beliefs.

Such contacts might take many different forms. They might be one-time events, such as talks or workshops conducted by successful reentry women, perhaps as early as "recruiting" programs or during registration and orientation. They might be support groups open to reentry women at all levels of their education, with special effort made to insure the presence of women far enough along in their programs to serve as models for women earlier in their programs. Another possibility would be to train individual, successful reentry women to co-facilitate the support groups together with a counselor.

More sustained and individual contact might be brought about by a mentoring program through which new reentry students could be paired with more experienced reentry women for a working relationship through the newer students' first semester or beyond. The College already has a "job shadowing" program in

place, whereby students can spend a workday with someone doing a job they (the students) are interested in; self-efficacy theory suggests that this program could be made especially effective if students could "shadow" Pima graduates like themselves doing jobs they aspire to.

### **Emotional Arousal**

To deal with the third form of self-efficacy information--emotional arousal, especially anxiety--steps can be taken to make the reentry process as simple and straightforward as possible. In fact, Pima Community College does have what seems to be a very "user friendly" admission, orientation, and registration process in place, not just for reentry women but for all incoming students.

A comprehensive and easy to read packet of materials for the prospective student includes a checklist of the steps to take to be admitted, apply for financial aid, take assessment tests, and sign up for orientation and registration sessions. During these sessions, counselors and advisors are present to aid in selection of appropriate courses as well as the mechanics of registration. The packet also includes information about Human Development courses taught by College counselors in the areas of personal adjustment (e.g., wellness, assertiveness, stress reduction) and career and study skills (e.g., career exploration, becoming a master student, overcoming math anxiety). Counselors and advisors are always available on a walk-in or appointment basis to supplement the information and guidance given in the group orientation/registration sessions as well as to provide support throughout the students' enrollment at the College.

Given what seems to be a very manageable enrollment and registration process and given that most participants in this study completed their questionnaires after having gone through the orientation and registration process, it is surprising that some of the lowest self-efficacy scores showed up on tasks such as selecting appropriate courses and understanding and carrying out registration procedures. If low self-efficacy remains even after this supportive entry process, then perhaps it is because until new students have actually done some of these things on their own in subsequent semesters, they are not fully convinced of their ability to accomplish these tasks independently.

Another way in which Pima Community College seeks to allay student anxiety is by making academic support services available in many different formats throughout the semester. These include tutoring; academic skills workshops; the Human Development courses mentioned earlier, which award from one to three units of college credit (the awarding of college credit often motivates reentry women and other students who feel they do not have time for school work or activities that do not directly contribute to the completion of their program); as well as the availability of counselors and advisors on both walk-in and appointment bases, as mentioned above.

Taking advantage of any and all of these services and programs should enhance reentry women's self-efficacy beliefs. Research suggests, however, that many reentry women seek sources of support outside the college system even regarding college related issues (Roehl & Okun, 1985) and that many reentry women hesitate to use college support services because they think the services are there only for traditional age students (Badenhoop & Johansen, 1980, cited in

Glass & Rose, 1987, p. 114). Given these findings, more thought needs to be directed at finding effective ways of informing reentry students of the availability of these resources and of encouraging these students to use them.

### **Verbal Persuasion or Encouragement**

The fourth element in promoting self-efficacy beliefs is verbal persuasion or encouragement. Clearly, encouragement cannot be located in any one program or service and it cannot create or sustain high self-efficacy independent of the positive feedback provided by successful performance accomplishments. It can, however, be made part of the college atmosphere when school personnel at every level, inside and outside the classroom, are consistently reminded of the importance of encouragement in helping all students, reentry or otherwise, believe that they have the ability to stay in school and be successful there.

### **Recommendations for Further Research**

The literature review for this study revealed an abundance of literature on almost every aspect of reentry women's experiences and needs and the programs and services being created to support them in their pursuit of their college educations. There is nearly unanimous agreement throughout this literature that reentry women start back to school under an enormous burden of doubts and fears about their abilities to succeed in school. The literature review also revealed an abundance of literature on many aspects of self-efficacy theory, including the usefulness of self-efficacy interventions in academic and career behaviors, such as awareness of all the realistic choices for oneself and commitment to and persistence in an academic or career path once it is chosen. Because self-efficacy theory

seems to hold particular promise for widening academic and career possibilities for women and racial and ethnic minorities and because reentry women are a population that could benefit immensely from precisely this kind of research, it is surprising that the literature review for this study turned up no other studies attempting to apply self-efficacy theory to this population.

Thus the most basic research recommendation of this study is that more self-efficacy research should focus on this population. More specific recommendations are:

1. Different returning student populations should be tested to see if specific self-efficacy beliefs are the same or different for women returning to a community college, returning to a 4-year college, transferring from one to another, or even returning to graduate school. There is little, if any, research on the latter group, perhaps on the assumption that women who have completed an undergraduate program at any time in the past will not experience the level of insecurity and doubt that women returning to lower echelons of school will.
2. Testing the same population's perceived self-efficacy at different times during the semester would reveal how actual academic performance alters initial self-efficacy beliefs about anticipated performance.
3. Pre- and post-testing of sample populations before and after programs, courses, seminars or other interventions (e.g., presentations, workshops, courses) designed to boost self-efficacy would enable administrators, counselors, and advisors to gauge the effectiveness of various kinds of interventions and support programs.

4. Measuring self-efficacy in other groups of incoming students to see if the basic services in place will meet most of the perceived need or if, in fact, there are enough differences in needs of specific groups to justify individualizing services to individual populations.
5. Since the women in this study have at least enough self-efficacy to have decided to reenter school and to have taken the initial steps to do so, it would be worthwhile to study the self-efficacy beliefs of female high school students who do not plan to go on to college immediately (or ever) to determine what kinds of interventions might build the sense of self-efficacy at that level or throughout the high school years to make it strong enough to propel these young women on to higher education.

Women in the 90s have ever more reasons for enhancing their marketable skills. They may be single parents by choice, by abandonment, or by divorce; they may need to bring in a second income for their families to have a decent standard of living; they may need or want to change jobs or careers several times during their lifetimes. Education is the most basic step they can take to make themselves competitive in the marketplace. As the columnist Ellen Goodman wrote, "my generation went to college to get ahead; this generation has to go to college just to keep up."

Although the potential benefits of continuing their educations are high for these women, so too are the perceived risks. More self-efficacy research on this population, and the interventions arising from this research, could prove very effective tools in getting more of these women back in school, enabling them to

experience more success while they are there, and eventually to translate their success in school into success in the marketplace.

**APPENDIX A**  
**HUMAN SUBJECTS COMMITTEE**  
**APPROVAL LETTER**

Human Subjects Committee



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November 5, 1993

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Esquire Apartments, #210  
Campus Mail

RE: SELF-EFFICACY AS A FACTOR IN THE ACADEMIC SUCCESS OF NON-  
TRADITIONAL FEMALE COLLEGE STUDENTS

Dear Ms. Waterbrook:

We have received documents concerning your above cited project. Regulations published by the U.S. Department of Health and Human Services [45 CFR Part 46.101(b) (2)] exempt this type of research from review by our Committee.

Thank you for informing us of your work. If you have any questions concerning the above, please contact this office.

Sincerely yours,

William F. Denny, M.D.  
Chairman  
Human Subjects Committee

WFD:rs

cc: Departmental/College Review Committee

**APPENDIX B**

**QUESTIONNAIRE TO MEASURE SELF-EFFICACY AND  
DEMOGRAPHIC QUESTIONNAIRE**

Completing and returning these questionnaires is strictly voluntary; you may choose not to participate. If you return the questionnaires completed, it is understood that you are consenting to participate. The questionnaires are completely confidential and anonymous; they do not ask for your name. You may refuse to answer individual questions; whatever answers you do provide will contribute to the study.

### ATTITUDES ABOUT YOUR PERFORMANCE IN COLLEGE

The following questions ask about your attitudes toward your anticipated performance in college. Your answers will help us learn more about how to help women like yourselves succeed in college. Please answer each question as best you can, but don't spend time trying to figure out the right answer. There are no right or wrong answers, just answers that are right for you. Simply circle the response which best describes your feeling about each statement.

1. I will be able to attend class regularly and on time.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

2. I will be able to select the classes I need.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

3. I will be able to understand and carry out registration procedures.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

4. I will be able to budget for my school costs (examples: tuition, books, transportation, child care).

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

5. I will be able to locate and apply for financial aid.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

6. I will be able to locate and make use when necessary of academic advising or counseling.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

7. I will be able to seek help when necessary from my instructors.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

8. I will be able to talk comfortably with my instructors.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

9. I will be able to socialize comfortably with students younger than myself.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

10. I will be able to adjust to the college environment.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

11. I will be able to meet my academic goals.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

12. I will be able to perform as well in school as students younger than myself.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

13. I will be able to take useful notes during class.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

14. I will be able to participate in class discussions.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

15. I will be able to concentrate on and understand course material.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

16. I will be able to remember the course material I have studied.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

17. I will be able to perform competently on multiple choice and short answer tests.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

18. I will be able to perform competently on essay exams.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

19. I will be able to perform competently on essay assignments.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

20. I will be able to perform competently in science classes.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

21. I will be able to perform competently in math classes.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

22. I will be able to find the information I need in the college library.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

23. I will be able to meet my academic goals.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

24. I will be able to arrange for the childcare necessary for me to attend school.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

25. I will be able to balance my family, work, and school responsibilities.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

26. I will be able to take time away from my family in order to fulfill my school responsibilities.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

27. I will be able to handle my increased responsibilities.

Very sure    Somewhat sure    Sure    Somewhat unsure    Very unsure

PLEASE CONTINUE ON THE FOLLOWING PAGES...

## INFORMATION ABOUT YOUR LIFE CIRCUMSTANCES

1. Birth date: month... day... year...

2. Ethnic group:

(Please mark the one with which you most closely identify) Caucasian... African-American... Native American... Hispanic... Asian-American... Other (please specify).....

3. Marital status:

Single (never married)... Married... Divorced... Widowed... Remarried... Other (please specify).....

4. With whom are you currently living? Check all that apply:

Parents... Roommate... Roommates... Children... Alone... Siblings... Significant other... Other (please specify).....

5. Who provides financial support? Check all that apply:

Myself... Children... Spouse... Significant other... Friends... Parents... Other relatives... Employer... Scholarships... Loans... Grants... Vocational rehab... Government aid... Other(please specify)...

6. Are you currently employed? Yes... No...

7. If you are currently employed, is your work

Full-time?... Part-time?... If part-time, how many hours per week?... Work-study?... If work-study, how many work hours per week?...

8. If you are not currently employed, are you looking for work? Yes... No...

9. Do you do volunteer work? Yes... No...

10. If you do volunteer work, approximately how many hours do you give per week?...

11. If you do volunteer work, what kinds of organizations do you work with? Check all that apply:

Your children's schools... Youth groups... Church... Community agencies... Other (please specify).....

12. What is your total family income?

Under \$10,000... \$10,000 to \$20,000... \$20,000 to \$30,000... \$30,000 to \$40,000...  
Over \$40,000...

13. How much of your total family income do you provide?

Under \$10,000... \$10,000 to \$20,000... \$20,000 to \$30,000... \$30,000 to \$40,000...  
Over \$40,000...

14. How many children do you have?....

15. What are the ages of your children? ... ..

16. What are the ages of your children still living at home? ... ..

17. Who will be taking care of your children while you are in class or doing class-related activities? (Examples: i.e., studying, doing library work, etc.). Check all that apply:

Spouse... Significant other... Friends... Parents... Other relatives... Babysitter in your home... Daycare center... My children will be in school when I am in school... My children will take care of themselves when I am in school... Other (please specify).....

18. Who do you feel is emotionally supportive of your college enrollment? Check all that apply:

Myself... Spouse... Friends... Children... Relatives... Co-workers... Significant other... Instructors... College Staff... Reentry program at your college... Classmates...

19. Of the people checked in Question 12, please circle the individual or group whose support is most helpful to you.

20. Who do you feel is not emotionally supportive of your college enrollment? Check all that apply:

Myself... Spouse... Friends... Children... Relatives... Co-workers... Significant other... Instructors... College Staff... Reentry program at your college... Classmates...

21. Of the people checked in Question 14, please circle the individual or group above whose lack of support presents the most serious difficulties for you.

22. How many years has it been since you were last in school (any level)?...

23. What level was your last school enrollment?  
GED... High school... Two-year college... four-year college... Other (please specify).....
24. What kind of student do you consider yourself to be?  
Honors level... Excellent... Good... Average... Poor...
25. What are your current educational goals? Check all that apply:  
Pima certificate... Pima associate's degree... Transfer to the University of Arizona... College or university four year degree... Other (please specify).....
26. What do you think you are most likely to major in?  
Humanities and Fine Arts (examples: literature, art, music)... Biological and Physical Sciences (examples: astronomy, biology, chemistry)... Mathematics... Social and Behavioral Sciences (examples: sociology, psychology, political science)... Other (please specify).....
27. What is success in college for you? Check all that apply:  
Staying in school... Completing a degree... Graduating with honors... Learning new skills... Passing my classes... Making A's and B's... Other (please specify).....
28. What are the reasons you are returning to college? Check all that apply:  
... I want a career change  
... My job requires further education  
... I lost my job  
... I want to gain a job promotion  
... I am dissatisfied with my current job  
... My marriage ended  
... My spouse died  
... My children are all in school  
... My children are all grown up  
... I want the self-enrichment  
... I want to earn a degree  
... I want to postpone direct employment  
... I want a degree for direct employment  
... I want courses for transfer to a four year college  
... Other (please specify):.....

\* \* \*

Thank you for taking the time to participate in this study.

**APPENDIX C**  
**COVER LETTER**

**IF YOU ARE A WOMAN 25 OR OLDER AND ARE ENTERING PIMA AFTER BEING OUT OF SCHOOL (ANY LEVEL) THREE OR MORE YEARS, PLEASE TAKE A FEW MINUTES TO PARTICIPATE IN THIS STUDY.**

\* \* \*

We want to find out more about factors contributing to the academic success of returning women college students like yourself. Sharing your experience will contribute to what we know and will be helpful in improving services and programs for current and future college women.

I am a University of Arizona graduate student who would like your participation in a research study about these things. You are eligible to participate if you are a woman 25 or older who has been out of school for at least three years before enrolling at Pima Community College for the upcoming semester.

Participation requires taking about fifteen minutes to fill out the enclosed questionnaire in a time and place convenient for you and returning it to me in the enclosed stamped, addressed envelope provided. Nothing further will be required of you. Participation is voluntary and the questionnaire is completely confidential. The questionnaire does not ask for your name, the mailing envelope does not require your return address, and no names will appear in the study.

Should any questions or issues arise for you while participating in this study, please leave a message for me at 722-7616 and I will get back to you as soon as possible.

Thank you for your assistance with this important project.

Sincerely,

Marjorie E. Waterbrook,  
Graduate Student,  
The University of Arizona

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